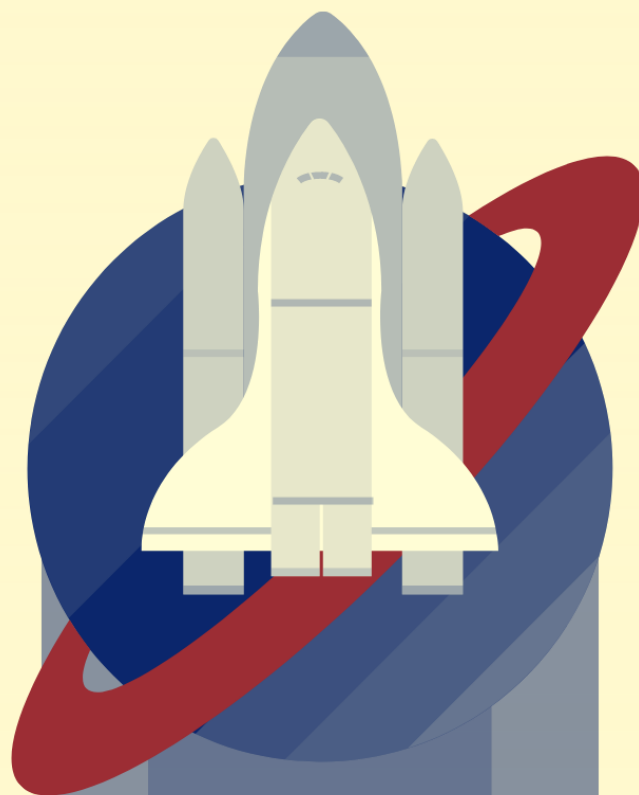


LEE  UNIVERSITY  
MCNAIR SCHOLARS PROGRAM



# MCNAIR RESEARCH JOURNAL

FALL 2020 VOL. III

**TRIO**

RONALD E. MCNAIR  
POST-BACCALAUREATE  
ACHIEVEMENT PROGRAM

## Table of Contents

- 4 Kevin Ung, Director of McNair Scholar's Program  
*Introduction*
- 5 Whit Guthrie, McNair Program Assistant  
*Note from the Editor*

## ARTICLES

- 6 ***Inca Collapse to Spanish Conquest***  
Moriah Auker, *McNair Scholar*  
Dr. Jason Ward, *Faculty Mentor*
- 13 ***The Correlation of Obesity and its Related Diseases in Comparison to Income in Counties in Tennessee***  
Alanis Burton, *McNair Scholar*  
Dr. Ben Christmann, *Faculty Mentor*
- 37 ***Reimagining Figural Interpretation for Contemporary Exegesis: Theory and Practice in the Figure of Rachel Weeping for her Children***  
Grace Anne Cochrane, *McNair Scholar*  
Dr. Rickie Moore, *Faculty Mentor*  
Dr. Chad Shrock, *Faculty Mentor*
- 51 ***Religion and Emotion Regulation: How Does Being Non-Religious Affect Emotion Regulation?***  
Hope Cummings, *McNair Scholar*  
Dr. Bryan D. Poole, *Faculty Mentor*
- 63 ***A Person's a Person, No Matter How Small***  
Laurel Desmarais, *McNair Scholar*  
Dr. Thomas Pope, *Faculty Mentor*
- 82 ***Analyzing Rates of Gas-Phase Reactions Between Hydroxide Radicals and Organic Compounds***  
Alex Gann, *McNair Scholar*  
Dr. John Hearn, *Faculty Mentor*
- 88 ***High School Band and Social-Emotional Health: What Students are Saying***  
Ashley Garner, *McNair Scholar*  
Dr. Susanne Burgess, *Faculty Mentor*
- 111 ***The Rhetorical Presidency's Relationship with the Bureaucracy: Bureaucratic Signaling as a Tool for Policy Making***  
Emily Harris, *McNair Scholar*  
Dr. Mark Scully, *Faculty Mentor*

- 117 ***New World Primates' Response to Native Predator Vocalization in Captive-Raised Individuals***  
Hunter McKenzie Holmes, *McNair Scholar*  
Dr. Thaddeus McRae, *Faculty Mentor*
- 127 ***Effects of Physical and Chemical Factors on HeLa and Melanoma Cell Susceptibility to Irreversible Electroporation (IRE)***  
Alissa Jackson, *McNair Scholar*  
Dr. Jonathan Cornett, *Faculty Mentor*
- 136 ***Dining at a French Table: Federalist and Anti-Federalist Invocations of Montesquieu***  
Brandyn Kirby, *McNair Scholar*  
Dr. Mark Scully, *Faculty Mentor*
- 153 ***"We Were All Kind of By Ourselves." Understanding the Challenges Faced by First-Generation College Students in Fentress County***  
Desiree LaPeer, *McNair Scholar*  
Dr. Ruthie Wienk, *Faculty Mentor*
- 195 ***Gratitude in the Face of Crisis***  
Heather Mellis, *McNair Scholar*  
Dr. Bryan Poole, *Faculty Mentor*
- 205 ***Analysis of the Intrinsic Fluorescence of a Dityrosine Tag in Super-Folder Green Fluorescent Protein (sfGFP)***  
Katherine Moore, *McNair Scholar*  
Dr. Brent Ferrell, *Faculty Mentor*
- 212 ***Written Bodies and Minds in Augustine of Hippo and Rufinus of Aquileia***  
Kait Morrison, *McNair Scholar*  
Dr. Aaron Johnson, *Faculty Mentor*
- 233 ***Democracy and a Transcendent Good***  
Kelsey Osborne, *McNair Scholar*  
Dr. Thomas Pope, *Faculty Mentor*
- 239 ***Uncertain Fermata: Gendered Grieving and Lament During the COVID-19 Pandemic***  
Rivers Owens, *McNair Scholar*  
Dr. Arlie Tagayuna, *Faculty Mentor*
- 257 ***The Correlations of Nonprofit Organization Workers and the Demographics of the Community they Serve***  
Maria Pedro Tomas, *McNair Scholar*  
Dr. Kathy Estes, *Faculty Mentor*  
Dr. Michaelia Black, *Faculty Mentor*

- 281 ***Christ as Intercessor and Mediator: A Non-Sacrificial Exploration of Atonement***  
Tyler Price, *McNair Scholar*  
Dr. Skip Jenkins, *Faculty Mentor*
- 303 ***Literature Review of Deaf Bilingual-Bicultural Educational Approach Literacy Outcomes and Instructional Practices***  
Kaylen Purks, *McNair Scholar*  
Dr. La-Juan Bradford, *Faculty Mentor*
- 312 ***The Effect of COVID-19 on Deaf and Hard of Hearing College Students***  
Kylie Sommer, *McNair Scholar*  
Dr. La-Juan Bradford, *Faculty Mentor*
- 326 ***Coral Communities: A Comparative Case Analysis of Non-Profit Conservation Projects***  
Makayla Stadler, *McNair Scholar*  
Dr. Ruthie Wienk, *Faculty Mentor*
- 340 ***The City that Never Sleeps: Civil Religion and Poetry in Plato and Aristotle***  
Reese Swistek, *McNair Scholar*  
Dr. Thomas Pope, *Faculty Mentor*
- 360 ***PD-L1 Expression of Melanoma Cells Treated with Indole-3-Carbinol (I3C)***  
Hannah Trew, *McNair Scholar*  
Dr. Lori West, *Faculty Mentor*
- 367 ***Monodromy Group Proofs***  
Japheth Varlack, *McNair Scholar*  
Dr. Richard Moy, *Faculty Mentor*
- 375 ***Coping Methods Utilized by Collegiate Athletes Suffering from Season-Ending Injury.***  
Jacob Wagoner, *McNair Scholar*  
Dr. Taz Kicklighter, *Faculty Mentor*

## Introduction

Kevin Ung, Director of the McNair Scholars Program

*Lee University*

The Ronald E. McNair Post-Baccalaureate Achievement Program is one of eight grant-funded TRIO Programs that prepares students for doctoral studies through involvement in research and other scholarly activities. As the Program Director at Lee University, it is an honor and privilege to serve our scholars as they navigate through their educational journey and discover their scholastic abilities. This journal is a representation of our scholars' unwavering commitment, focused dedication, and unrelenting pursuit of academic excellence. Please join us as we honor their amazing work by publishing and publicizing their research studies as undergraduate students. Many of the works you see in this journal have been presented at regional and national conferences, with scholars receiving distinguished awards in their fields.

With every scholastic achievement, it is improbable without the support and advocacy of several contributors. Through their tireless efforts, the program, the scholars, and our campus supporters have enjoyed stability and continuity. I would like to recognize the support of our President Dr. Mark Walker and the executive cabinet for continuing Lee's mission to serve TRIO students. I want to recognize our University Provost, Dr. Debbie Murray, in her faithful dedication and advocacy towards academic excellence and faculty support. Our Director of Grants, Vanessa Hammond, casted the vision for the McNair Program at Lee and is a reminder of Lee's commitment towards excellence. I want to thank each faculty mentor for their dedication to our scholars through the research development, planning, and execution of their studies; the scholars' work appropriately recognizes these faculty mentors' contribution.

Broadly, I would like to recognize the Council for Opportunities in Education's (COE) continued advocacy in Washington on behalf of all TRIO Programs. I want to extend my appreciation to McNair Association of Professionals (MAP) colleagues around the country for their assistance in developing best practices and finding innovative solutions to serve scholars. While we are small in numbers, there is strength in community.

McNair Scholars, this journal is dedicated to your hard work and commitment to scholarly research. I hope this reminds you of your giftedness and talents when you doubt your abilities. I hope this inspires you when you feel discouraged or have a momentary setback. I hope this motivates you to continue pushing forward when you meet the next obstacle in graduate school. You have a lifetime advocator and supporter in the McNair Team.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Ung", with a stylized flourish at the end.

Dr. Kevin Ung

## Word from the Editor

Whit Guthrie, McNair Program Assistant  
Lee University

*When a person can't find a deep sense of meaning, they distract themselves with pleasure.*

**-Viktor E. Frankl**

The quote above is one of my favorite quotes that speaks much to the world we live in. We reside in a world that is filled with distraction and people that are seeking meaning in all the wrong places. After reading the research completed by Lee University McNair Scholars, it is clear that this group is comprised of students that are determined to pursue meaning despite the culture around them. The hard work, time, and effort these students and their faculty mentors put into each research project is evident, and it serves as an encouragement to me that our academic community is one that is calling them to higher standard.

The diversity of research in this journal is another beautiful facet of the journal. There is a diversity of topics as well as the background of each student that shines and reveals their uniquely personal passions and pursuits. Each one of our McNair Scholars is gifted and excels in their respective majors, and I am personally excited to see how their academic pursuits will change the world we live in for the better. Over the years, our scholars have been accepted to top graduate institutions around the nation to pursue further education after their undergraduate degree at Lee.

It has been a pleasure to interact with these students during my time working with the McNair department at Lee, and they have continuously exceeded my expectations for how hard they are willing to work and how determined they are in their academic pursuits. I am thrilled to see that their work will receive the recognition that it deserves, and I hope that each reader is able to appreciate the effort of our students that went into the creation of this journal. Please enjoy the third volume of the McNair Research Journal.

Sincerely,

A handwritten signature in cursive script that reads "Whit Guthrie". The signature is written in black ink and is positioned above the printed name.

Whit Guthrie

Summer 2020

## Inca Collapse to Spanish Conquest

Moriah Auker

*Lee University*

*Under the guidance of Dr. Jason Ward*

## Abstract

*The Inca Empire of the Peruvian Andes once stood as an impressive example of traditional civilization, remarked by European witnesses to having postured itself technologically and intellectually far ahead of its time. The rapid fall of the empire to Spanish inquisition in 1532 with the execution of Atahualpa after a short century of imperial rule presents an inquiry of key factors that led to the collapse. This paper serves as an evaluation of 16th century Inca leaders and their initial response to Spanish inquisition in the Andes as prompted by the organization of their society, the effects of a devastating epidemic, as well as political division concerning the legitimacy of the emperor.*

In consideration of history's greatest empires, that of the Inca is not of the common names, presumably because their influence was limited to the South American continent, a region just being discovered by the rest of the world. Their obscurity to the global sphere, however, cannot be used to detract from the greatness and power this short lived empire achieved. Having only ruled for a century, the Inca accomplished astounding feats that can be collectively recognized by their institution of a state social order of rule. With its thousands of miles of roadways, opaque communication systems, political practices modeled to modern ideals, and complex architecture built into the steep, rocky mountain sides, the Inca exemplified a brilliance of social cooperation and imperial management, one far beyond its days. Despite the raging success and rapid rate of expansion the Inca were achieving, their fall from power reflected a similar rate of progression, ending in a devastating loss to the Spanish Empire. The Inca developed a state social order by which the empire increased at rapid rates with great success. The upset to their rather ideal system of governance stemmed, not with the Spanish inquisition directly, but from division within. Spanish occupation of the empire merely hastened the Inca fall as they took advantage of and manipulated the distraught emperors.

When the Spaniards stumbled upon a society within the territory of contemporary Peru in the mid sixteenth century, they found a socio-political system of rule that would come to resemble the ideologies and theories of socialism and communism as proposed by Karl Marx, three centuries prior. The Inca Empire was divided into social strata, dependent largely on birth identity. The Inca, being the conquerors of the many tribes comprising the unified empire, made up the elite. They functioned as the crown and aristocratic class who oversaw the remainder of the social groups within the empire. The nobility, called the Curacas, comprised the leaders from varying tribes once conquered by the Incas. Strategically, setting the leaders in a rank of nobility led to greater chance of peaceable assimilation to the empire, without the need to obliterate a culture in order to secure its resources. Research provided by Dr. George Peter Murdock, a professor at Yale University, discussed yet another feature of Inca subjugation that provided a strong and attractive motivation for vanquished tribes to assimilate to the empire, "[The Inca] further secured their fidelity by requiring their sons to reside at Cuzco--not only to serve as hostages but also to receive an Inca's education and thereby become imbued with the culture and attitude of the ruling class."<sup>1</sup> Had the Inca chose to annihilate their enemies rather than adopt them as their own, the Inca Empire would

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<sup>1</sup> George Peter Murdock, "The Organization of Inca Society." 224.



not be a topic of discussion. Its existence, as many empires before and after them, not only profited, but depended on its added subjects. The route of assimilation practiced by the Inca, unique as it was, functioned to prevent internal revolt and satisfied the needs and many desires of its subjects.

Modern Andean scholars have proposed the Inca Empire, as described by Spanish witness, to be the first successful demonstration of socialism, or rather, the closest to success any societies have experienced. It is logical to suppose that Inca society reached this level due to high regard for the law and its enforcement, offering decrees of severe punishment to the most menial of crimes, including the failure to speak the language of the Inca.<sup>2</sup> Issuing a state recognized language requirement prevented confusion in regard to communication with the ruling Inca and controlled the temptation for separated cultures to publically conspire against the crown. To satisfy the daily requirements of all people, large storehouses were constructed to harbor annual harvests, among other deemed essentials, with only portions used throughout the off seasons when the ground set in preparation for the next year's crops. Bountiful harvests were celebrated, but the Inca did not waste excess supply. All was prepared for storage and placed in warehouses in anticipation for years that they would yield insufficient food supply. They ensured the empire would prosper, withstanding periods of drought and famine. The storehouses, while harnessing food supply for years of famine also ensured the Inca were prepared for war. As the men gathered in due service to the emperor, the storehouses reopened to provide for the army. Once returned, between the gathered spoils from war and collecting tribute, they immediately restocked the storehouses.<sup>3</sup> This not only enabled the men to report to their military service without haste, but ensured the continuation of the empire's prosperity.

During his study of the Inca Empire, Spanish conquistador Pedro de Cieza de León, recorded many observations regarding the internal structures and lifestyles practiced. Among these, he paid special attention to Inca mythology and how the Inca constructed their history. Because the Inca possessed no written language, using only the khipu to record data, Inca history remains vague and indeterminate to this day. The khipu, though scholars speculate to contain a linguistic code, was the means by which the Inca recorded numerical data, particularly associated with keeping an annual census and record of supplies. Both were used in correlation with the other to limit an appropriate amount of food and supplies to be awarded each family based on their unique need. The census taken each year reported deaths, births, marriages, and relayed the number of able bodied men fit for military service. In tallying the census, each curaca kept track of how many laborers he had to contribute to imperial operations. Every man, woman, and child was required to work for the empire, whether farming or construction.<sup>4</sup> Accurate reports depicted by the khipu ensured the immediate provision of the empire, also allotting for seasons of insufficient harvest and times of war, adding to the people's assurance in the emperor.

Spanish missionary to South America, Bernabe Cobo remarked in statements made concerning Inca social constructs precisely how they assimilated conquered rivals without the fear of mutinies and rebellions being spurred in opposition to the empire. Mass slaughter could not be considered a viable option if the Inca desired to expand the territorial boundaries of the empire. In

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<sup>2</sup> Pedro de Cieza de León, "The Language of Cuzco," *The Incas*. Pg 169-171.

<sup>3</sup> Pedro de Cieza de León, *The Second Part of the Chronicle of Peru*, Clements R Markham, trans & ed., (London: Hakluyt Society, 1883), pp. 36-50. Accessed.

<sup>4</sup> Pedro de Cieza de León, "Of how the Incas of Cuzco ordered..." *The Incas* (Norman: University of Oklahoma Press), 177-178.

order for the empire to continue functioning at the speed and success it was, the Inca needed the additional laborers acquired in their conquest and they needed them without the constant threat of resistance to submission.<sup>5</sup> Cobo identified the Inca as having moved six to seven thousand families along with their supervising nobles to live among the newly acquired labor force. An equal number of families from this labor force then relocated to join a settlement elsewhere in the empire.<sup>6</sup> Intermixing virtually guaranteed a relatively quick and tranquil assimilation to their new life, enabling the remainder of the workforce to continue as before.

While the aforementioned technique of acculturation worked as an immediate solution to preventing rebellions against the Inca, this did not encompass their entire practice of assimilation which extended into a long term progression toward cultural cohesion. The leaders of rival tribes were placed in similar authority over their people in the empire, though remained under the supervision of the Inca nobility and curacas. Sons of rival nobility were forced to attend a school-like program in Cuzco where they became indoctrinated on Inca culture and rituals. With this education, they were then expected to return to their originating settlement and replace their fathers as leaders where their influence would continue a deeper assimilation to the culture and religion of the Inca. This remains a solid indication concerning why the Inca permitted their captors the privilege of practicing their own culture and religion, minus a few exceptions, among those being the worship of the sun god, Inti.<sup>7</sup>

Despite the Inca's lack of written language and therefore, recorded history, as well as dominating Spanish bias that overwhelmed their writings of Inca history and culture, there were yet some who dedicated themselves to creating a history in favor of the Inca themselves. Jeronimo Limaylla, a descendent of both Inca royalty and Spanish blood, aspired to recount Inca history free of Spanish bias, addressing socio-political issues as well. In retribution to the unfolding intentions of the Spanish toward the Inca, Limaylla proposed a method by which both the Inca and the Spanish could be content in the conquest; that is, Spain would profit and the Inca would not face utter annihilation. In his address to Spanish authority, he renders the success the Spanish could easily have in Peru if the Inca were considered well. While imperial conquests have obliterated the culture and often lives of its pursued, Limaylla thought the Inca would respond well to Spanish conquest and become faithful subjects of the king if the Spanish were to offer them a tributary rule in service to the king of Spain, petitioning that this given status would appease the Inca nobility enough to assimilate. Ana Maria Lorandi, ethnohistorian of Inca civilization, equated Spanish and Inca nobility in this way, saying "The Incas as good subjects would contribute to the aggrandizement of the empire 'that His Majesty enjoys today' and that the Order of Knights would be the equivalent of the order of Santiago."<sup>8</sup> If the Spanish assured and intended to follow through on the promise that they would consider the Inca as a part of the Spanish Empire

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<sup>5</sup> Pedro de Cieza de León, "The Incas and Their Governors," *The Incas* (Norman: University of Oklahoma Press), 166.

<sup>6</sup> Taken from Bernabe Cobo, "How the Inca Formed a Nation" in *Latin American Civilization: History & Society, 1492 to the Present*, ed. Benjamin Keen (Boulder: Westview Press, 1996), 18–19.

<sup>7</sup> Pedro de Cieza de León, "How the Incas Made Their Conquest," *The Incas* (Norman: University of Oklahoma Press), 160.

<sup>8</sup> Ana Maria Lorandi, *De quimeras, rebeliones y utopía: La gesta del inca Pedro Bohorques* (Fondo Editorial dela Pontificia Universidad Catolica del Peru), 57.

in a similar manner they inaugurated many other people into their own, it remains within reason to suppose Inca assimilation would have been a largely peaceful one as well, particularly since the alternative option would have been to continue fighting a losing battle over resources.

The Inca Empire's demonstration of great willingness to fully assimilate to Spanish culture during the Spanish conquests can be partially, if not primarily, explained by a devastating outbreak that forever disrupted the fluidity and effectiveness of the empire. Most likely introduced by Francisco Pizarro's forces during their first interaction with the Incas in the 1520's, smallpox quickly and drastically diminished the Inca population, leaving the empire without sufficient manpower to both provide for and protect. Smallpox, a deadly disease introduced by European explorers, already wiped out much of the Incan population, including the emperor, Huayna Capac. Aside from suffering all the effects inflicted by the Smallpox epidemic, the return of Francisco Pizarro met the Empire divided between Huayna Capac's two sons, Atahualpa and Huascar, who were then engaged in a civil war for the Sapa Inca title. Considering both the highly decreased population as well as the political division, the Spanish held an advantage over the Inca, virtually ensuring easy conquest.

Consistent with the evident course of Western conquest during the Age of Exploration, the very prosperous Spanish Empire laid claim to many global landmarks. Among its most valuable conquests located in South and Central America. Having success with the annihilation of the Aztecs to the north in modern day Mexico, the Spaniards continued their progress for capital gain to subdue the Mayans in Central America as well as the Inca Empire in contemporary Peru. A common misconception concerning indigenous people groups, whether intentionally entertained or not, is that a lack of modern technologies and not being well versed in literature by default placed them into lower social order. Spanish exaltation of the indigenous people they met fully rendered the pretense that they could more easily and quickly acquire access to native resources. Karen Spalding, historian of Inca civilization: "The driving force of the rapid Spanish expansion in the Americas was the search for wealth--wealth that could be traded for rank and position in contemporary Spanish society."<sup>9</sup> Plagued by the incentives driven by their ambition for bouillon, the Spanish failed to acknowledge the long term potential that would follow befriending the Inca.

For years following their initial discovery of Inca civilization, the Spanish were unsuccessful at persuading the Inca to reveal their source of wealth, as Cieza recounts: "In view of the great wealth we have seen in these regions, we can well believe that what the Incas were said to possess is true."<sup>10</sup> The buildings of Cuzco bore witness to the existence of the wealth they sought, confirming the legends of gold told to them by the Incas they met, but the Inca chose to conceal the locations of their gold and silver supplies. Upon the capture of Atahualpa, enormous supplies of gold and silver were ordered to be gathered as his ransom, but in fear of Atahualpa's general mobilizing an attack against him, Pizarro issued Atahualpa's execution before the wealth was delivered which drove the Inca to stash it elsewhere.<sup>11</sup> Even as late as the recording of Cieza's observations decades prior to the fall of the last Inca emperor, Atahualpa's wealth and resources

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<sup>9</sup> Karen Spalding, *Huarochiri* (Stanford, CA: Stanford University Press, 1984), 109.

<sup>10</sup> Pedro de Cieza de León, "The Great Wealth of the Incas." *The Incas* (Norman: University of Oklahoma Press), 156.

<sup>11</sup> Francisco Xeres, "Narrative of the Conquest of Peru (1547)," accessed July 14, 2020. <http://media.bloomsbury.com/rep/files/primary-source-57-narrative-of-the-conquest-of-peru.pdf>.

remained a mystery to the Spanish who sought them. The Spanish would continue their exploration for the hidden gold and silver at the cost of many Inca lives, all the while gaining control through seemingly endless cycles of manipulation and betrayal toward Inca leadership.

With Spain's primary goal in the Americas being the building of capital wealth for its empire, Pizarro followed through with his attack on the Incas. Pizarro pursued Atahualpa's forces whom he met with overwhelming victory, notably because his own forces retreated in fear.<sup>12</sup> The Spanish took Atahualpa captive, at first with the intent of bribing the Inca forces into surrender and assimilation. After a rather short period of time, Pizarro grew tired and reckless, eventually leading him to execute Atahualpa, the last legitimate Sapa Inca ruler. In his place, the Spanish installed his and Huascar's brother, Manco Inca, as their puppet king. Having favored the efforts of his brother Huascar, Manco Inca supported the Spanish because of their defeat over Atahualpa, but soon grew to resent the manipulative power administered by the Spanish as they used their power over him to deprive the empire of its riches. Enmity between the Inca and Spanish escalated as the Inca withdrew from their capital of Cuzco to the remote region of Vilcabamba where both the indigenous and renegade Spanish sought asylum from Spanish forces. In preparation for the coming colonial era of the Spanish in Peru, the resistance of those at Vilcabamba featured the grouping of the Incas and rebel Spanish as a uniform group which initiated the progressive assimilation of the Inca as they intermarried and exchanged culture.

By 1572 with the execution of the last Inca emperor, Tupac Amaru II, modern scholarship agrees, the Spanish gained control over Peru and of its remaining inhabitants, officiating the territory as an asset to Spain and opening it to the global economy. The Inca, entangled in the political division that encapsulated the empire, turned a blind eye to Spanish threat as it appeared. Rather than prioritizing the future of the empire by consolidating as a unified people once again, strong and alert to the presenting dangers, they remained divided, with Huascar's military falling prey to the false promises offered by the Spanish and giving them the additional forces needed to combat Atahualpa's troops. All events and circumstances considered, Inca secured their own fall to the Spanish Empire.

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<sup>12</sup> Ibid.

## Bibliography

- Cieza de León, Pedro de. *The Incas*. Edited by Victor Wolfgang von Hagen. Translated by Harriet de Onis. Norman: University of Oklahoma Press, 1959. "Pedro de Cieza de León, *Cronicas* (1553)." *Incan Documents (1500s)*. Last modified April 14, 2015. <https://century.adams12.org/sites/century.d7sb.adams12.org/files/users/bec013147/attachments/Incan%20primary%20source%20Documents.pdf>. *Chronicles of the Incas*, 1540. <https://sourcebooks.fordham.edu/mod/1540cieza.asp>. Cobo, Bernabe. *History of the New World*, 1653. <https://jasoncdyck.files.wordpress.com/2014/09/cobo-bernabc3a9-history-of-the-new-world.pdf>.
- Lorandi, Ana Maria. *De quimeras, rebeliones y utopias: La gesta del inca Pedro Bohorques* [Spanish King of the Incas: The Epic Life of Pedro Bohorques]. Fondo Editorial de la Pontificia Universidad Católica del Perú, 1997.
- Means, Philip Ainsworth. "The Rebellion of Tupac-Amaru II, 1780-1781," *The Hispanic American Historical Review* 2, no. 1 (February 1919): <https://www.jstor.org/stable/2505747>.
- Murdock, George Peter. "The Organization of Inca Society," *The Scientific Monthly* 48, no. 3 (March 1934): 231-239. <https://www.jstor.org/stable/15641>.
- Spalding, Karen. *Huarochiri*. Stanford, CA: Stanford University Press, 1984.
- Stanish, Charles. "Conquest from Outside: The Inca Occupation of the Titicaca Basin." *Ancient Titicaca: The Evolution of Complex Society in Southern Peru and Northern Bolivia*. Berkeley: University of California Press, 2003. <http://www.jstor.com/stable/10.1525/j.ctt1pnmgj.18>.
- Xeres, Francisco. "Narrative of the Conquest of Peru (1547)." Accessed July 14, 2020. <http://media.bloomsbury.com/rep/files/primary-source-57-narrative-of-the-conquest-of-peru.pdf>.

Summer 2020

# The Correlation of Obesity and its Related Diseases in Comparison to Income in Counties in Tennessee

Alanis Burton

*Lee University*

*Under the guidance of Dr. Ben Christmann*

## **Abstract**

*Obesity (measured in BMI) and its comorbidities are prevalent issues that affect individuals as well as surrounding communities. While there are predicated causes and predispositions for obesity, those with lower incomes tend to have higher obesity rates (Ahmad et al., 2018). Using an epidemiological approach, this study evaluated the income, obesity rates, and the rates of obesity related illness of each county within the state of Tennessee to determine if obesity is a social deterrent influenced by income. The data selected indicates significant correlations between income and many of obesity's comorbidities. The data also showed a difference in obesity and its comorbidities rates when comparing rural to urban areas. The obesity epidemic is an issue that is caused by many factors and requires continued study to combat the issue of obesity.*

## **Introduction**

As obesity rates continue to rise, it is necessary to recognize the potential dilemmas that reside. Obesity, commonly measured by Body-Mass Index (BMI), is proven to have negative aspects of the physicality of a person (Apovian, 2016). Obesity has been linked to diseases like diabetes (Powell, 2012), high blood pressure (Hypertension and Obesity: How Weight-Loss Affects Hypertension - Obesity Action Coalition, 2018), heart disease, stroke (Klein et al., 2004), and certain kinds of cancers (Cancers Associated with Overweight and Obesity Make up 40 Percent of Cancers Diagnosed in the United States, 2016). In addition to physical complications, studies have shown obesity has the potential to have negative effects on the psychological health of an individual (Hunger et al., 2015; Tomiyama, 2014). Also, obesity and its associated comorbidities have substantial economic burdens on health care system costs ("Health Effects of Overweight and Obesity in 195 Countries over 25 Years," 2017). Therefore, obesity is an issue that affects the individual as well as the surrounding community. It is difficult to combat obesity because it has many causes and unfortunately the effects of obesity can in-turn cause obesity, which creates a cycle that is difficult to break. In short, the impact of obesity is staggering. The chronic illness will be evaluated for precursors, such as income and geography to better combat the issue and to promote healthier lifestyles through identifying susceptible populations and implementing preventive actions, specifically in the state of Tennessee.

## **Literature Review**

### **History of Obesity**

Obesity is a preventable chronic illness that has increased worldwide over the last century. (Why Is Obesity a Disease? 2017; Eknoyan, 2006) Obesity is first documented 25,000- 30,000 years ago to the sculpture "Venus of Willendorf." (Figure 1) (Kohen, 1946). Due to the extremely realistic details of the sculpture, anthropologists and physicians conclude that the sculpture was created to model an existing obese person; however, experts express that obesity was rare and that it could have been caused by other medical conditions (Colman, 1998) In that time, the sculpture portrayed a representation of health, beauty, and fertility which were idolized. In that time, it would difficult to be obese due to the type of food and the lack of food in the Paleo diet (Jönsson et al., 2009). From then, obesity and overweight individuals had a continued association with wealth and luxury shown in historical art and literature (Figure 2) (Seshadri, 2012; Beauty in Ancient Greek Sculpture, 2014). At the turn of the eighteenth-century obesity rates grew due to innovations in

agriculture and the food industry- there was a gradual increase in food. By the nineteenth century, obesity was recognized as “the cause of ill health.” Early studies of obesity began to explain obesity and introduce questionable treatments, but obesity rates continued to grow (Coombs, 1936). By the twentieth century, obesity and its comorbidities began to be documented at higher rates- almost tripling from 1975 to 2016. (Eknoyan, 2006; Obesity and Cancer Fact Sheet, 2017). Currently, 13% of the world population is obese. The United States ranks 12<sup>th</sup> in international obesity rankings reflected that approximately 40% of the population struggles with obesity (CDC, 2018). Tennessee is similar to national obesity rankings with 40% of the population dealing with obesity (Tennessee Tipping the Scales Against Childhood Obesity, 2019). Obesity rates continue to rise at alarming rates (Ward, 2019) causing complications to those dealing with obesity and for the surrounding community.

Figure 1: Venus Of Willendorf (Seshadri, 2012)

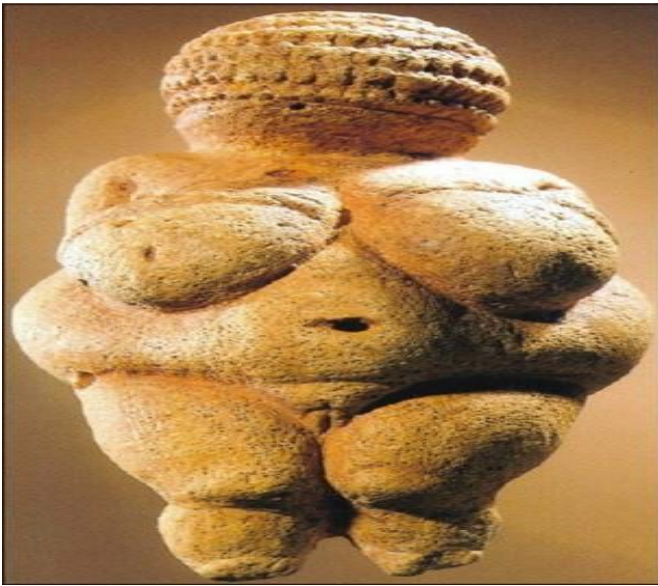


Figure 2: Young Bacchus and Companions (Young Bacchus and Companions, n.d.)



### Research on Obesity

Because of the consequences and rapid rise of obesity, there is a plethora of research offering ways in which the issue could be nearly defeated. According to the NIH (National Institutes



of Health, 2019) 1.1 million dollars were allocated towards obesity research in 2019, and an estimated 1.2 million dollars will be dedicated to obesity research in 2020 (NIH Categorical Spending -NIH Research Portfolio Online Reporting Tools (RePORT), 2014). These research projects range from biochemical concepts of obesity to behavioral and environmental aspects of obesity. It is clear that a well- rounded understanding of the health condition will lead to the best ways to find a solution to the epidemic. Amongst the research, there are common controversies as to whether all contributors and solutions to obesity are common amongst all peoples.

BMI (Body-Mass Index) may not be as accurate in determining health as it once was. Adab asserts that, “BMI cannot distinguish between lean and fat mass and gives no indication of body fat distribution. ” (Adab et al., 2018). This can cause issues in determining if someone has a “healthy” weight. Inaccurate measurements could lead to misinterpretation of individual patient health from a physician standpoint, or misinterpretation of data from an epidemiological standpoint causing incorrect treatment strategies for the individual or the community. Alternative methods other than BMI, for the purpose of measuring body composition may serve as better predictors, but due to limited trials and evidence, the alternative methods cannot be deemed more reliable than BMI measurements” (Adab et al., 2018). Some of such of the alternative methods are as follows:

- Anthropometric measure (a series of quantitative measurements of the muscle, bone, and adipose tissue used to assess the composition of the body (Casadei & Kiel, 2020).
- Waist circumference (WC)
- Waist to hip ratio (WHR)
- Waist to height ratio (WHtR)
- Skin Fold thickness (SFT)
- Bioelectrical impedance (BIA)
- Body Fat Percentage (BF%)

### **Causes and Treatments of Obesity**

Hall (2017) stated that “We want to find the solution to stop obesity, so we look to the problem: too much fat from excessive food intake. An analogy that helps explain the complexity is to imagine the body as a machine that has a disorder of energy balance; too much energy in, and not enough energy expended” (Hall, 2017).

### **Causes of Obesity**

Early understandings of obesity did not quite align with what is accepted today (Coombs, 1936). We now understand obesity to be a complex issue which incorporates cultural influences, individual genetics, and socioeconomic status (Obesity: Definition, Comorbidities, Causes, and Burden, 2016). The most common associated cause of obesity is malnutrition. The malnutrition is influenced by a few intensely studied reasons. Cultural and communal influences play a large role in obesity. An individual’s culture and community influences what, when, and how much someone eats. A culture can also impact the views on obesity (i.e. if it is desirable or acceptable). Environmental Factors of an individual influences weight. Studies have shown that living in food deserts and food swamps greatly increase the likelihood of obesity in individuals (Bader et al., 2010). Food deserts are places with limited access to nutritional food (Wilde et al., 2012). Food swamps are areas that consist of many establishments that sell high-calorie nutritionally inadequate food (Cooksey-Stowers, 2017). Socioeconomic status influences also have a toll on obesity rates

(Ahmad et al., 2018). Those with lower income tend to have higher obesity rates (Ogden et al., 2017). Those with lower income tend to have less money to dedicate to food and opt for cheap food that is fast and convenient (Burton, 2019). Also, those with lower income tend to have lower education status and lower nutritional literacy, or ability to select healthy foods (Pechey & Monsivais, 2016)

Genetics' influences on obesity, such as metabolic rate and appetite regulation, are often overlooked, but studies have shown that genetics play a strong role in an individual's ability to gain or lose weight (Loos & Janssens, 2017). Typically, obesity is a multifactorial issue arising from unhealthy lifestyles such as diet and environment; however, at times obesity is caused by rare genetic abnormalities (Pigeyre, 2016). The genetic evaluation could be more valuable to combat obesity on an individual level. Difficulties can emerge when attempting to defeat the issue on a population level, for you cannot treat a population with a personalized treatment plan. In short, with so many factors contributing to the rise of obesity and with apparent susceptible populations, it is difficult to determine whether obesity is caused by behavioral decisions by the individual or uncontrollable factors imposed on the individual.

### **Treatment for Obesity**

Because malnutrition is the most recognized cause of obesity, the most common treatment is diet and exercise. When considering obesity due to lifestyle and eating habits, diets rich in carbohydrates, alcohols, and lipids are continuously linked to obesity (jiang). Carbohydrates, lipids, and alcohol have been labeled “bad” and are often avoided to prevent weight gain or to encourage weight loss (i.e. Ketogenic diet, fat-free foods, low- carb diets). However, there are varied opinions of which diets are best for the human body and what options are best for maintaining a healthy weight. Some sources argue for a Paleo diet (Brouns, 2018). Some suggest a Ketogenic diet rich in fats and low in carbohydrates while others suggest that Ketogenic diets are good for short term weight loss but not for lifestyle (Masood & Uppaluri, 2019). Intermittent fasting, another popular diet type, consists of restricting eating times which enhances metabolic processes in the body (Mattson et al., 2017). Also, some professionals suggest grazing is a viable method for weight loss (How to Graze All Day to Lose Weight, n.d.). To say the least, there are a wide-range of options when considering what is best for traditional weight loss caused by overconsumption. Nontraditional treatment for obesity, like bariatric surgeries and gene therapy, can also be used for weight loss and weight management; however, these methods are uncommon because they can pose further complications and can be more expensive than altering lifestyle (Gao & Liu, 2014; Lupoli et al., 2017). In addition to individual treatment, population intervention programs are encouraged in schools, workplaces, and communities (Prevention Strategies & Guidelines | Overweight & Obesity | CDC, 2019; Programs | Obesity Interventions | Workplace Health Strategies by Condition | Workplace Health Promotion | CDC, 2019, Yuksel et al., 2020; Majdzadeh et al., 2015). Overall, when approaching obesity, it should be understood that there are alternative causes and predispositions, and that treatment and interventions should be variegated depending on individuals or targeted populations.

### **Diseases Associated with Obesity**

In short, obesity is when the body has too much fat. The excess fat imposes unnecessary stress on the body which leads to health complications. Studies have shown indisputable

correlations with many diseases that affect major organs including, but not limited to the: heart, liver, kidney, lungs, colon, skin, vessels, brain (Jiang et al., 2016). Some comorbidities of obesity include:

### *Hypertension*

Fat accumulates in blood vessels and affects the blood flow to larger arteries and therefore to the rest of the body. Continuous accumulation of fat gradually narrows the vessels creating stenosis of the vascular walls. This leaves less space for the blood to flow through the vessels and leads to high blood pressure, or hypertension. With hypertension, the body functions at a lower capacity. There is less blood flow, therefore less oxygen carrying capacity in the body and with less oxygen flow, the body fatigues more quickly (Jiang et al., 2016). More severe health complications arise when plaque buildup drastically narrows the vessel. This could lead to organ failure and death.

This is the classical understanding of obesity related hypertension; however, other studies show metabolic processes affect health in relation to obesity (Jiang et al., 2016; Kawarazaki & Fujita, 2016; do Carmo et al., 2016)

### *Type 2 Diabetes*

Type 2 diabetes is when there is too much glucose in the bloodstream. This happens when insulin, a hormone made in the pancreas, is low. Insulin typically regulates the blood sugar levels, but when insulin levels are low, glucose accumulates in the blood resulting in high blood sugar levels. The continually high levels contribute to health complications such as organ failure (Dickinson et al., 2017). Obesity is the most significant risk factor in developing Type 2 diabetes (Lin, 2016).

### *Heart Disease*

Heart disease can refer to many types of heart complications; the most common complication being coronary artery disease (CAD) (CDC, 2019). Annually, about a fourth of all deaths are contributed to heart disease. The two most common risk factors are Type 2 diabetes and obesity (CDC, 2019; Eckel & Krauss, 1998).

### *Renal Failure*

Acute renal failure is when the kidneys cannot filter waste from the blood efficiently. (Acute Kidney Failure - Symptoms and Causes, 2018). Obesity serves as a risk factor for kidney disease (Ejerblad et al., 2006).

### *Cancers*

Cancer is the accumulation of abnormal cells in the body. The excess fat, especially visceral fat, leads to inflammations. The body typically recognizes inflammations as injury and the body promotes rapid regeneration of cells to repair the damage. In the case of inflammation caused by obesity, there is no damage but there are now rapidly dividing cells that are more prone to mutation (because higher production means higher chances of error or mutations) (Obesity and Cancer, 2017; Underferth, 2017). According to Cancer.org (2015) obesity has been highly associated with cancers including:

- Meningioma (cancer in the tissue covering brain and spinal cord)
- Adenocarcinoma of the esophagus
- Multiple myeloma (cancer of blood cells)
- Kidneys
- Uterus
- Ovaries
- Thyroid
- Breast (post-menopausal women)
- Liver
- Gallbladder
- Upper stomach
- Pancreas
- Colon and rectum
- Non-Hodgkin Lymphoma (particularly obesity in childhood)
- Cervical
- Prostate

### **Obesity's Effect on Mental Health and Social Acceptance**

Obesity affects the physical body, but it is becoming more apparent that obesity affects mental health as well (Simon et al., 2006). Studies have shown higher rates of anxiety (Amiri & Behnezhad, 2019), depression (Quek et al., 2017; Schachter et al., 2018; Vittengl, 2018), panic disorder or agoraphobia (Menon & Rajan, 2017), bipolar disorder (Saucedo-Urbe et al., 2019), and eating disorders (Wilson, 2010). Interestingly, those who are obese had lower risks of substance abuse (Simon et al., 2006) but more recent studies debate the true meaning of substance abuse and argue whether or not obesity should be considered an addictive behavior. Some studies suggest that obesity due to overconsumption should be considered a substance abuse and a mental disorder when the food is used in a way that can harm oneself, like Overeating Disorder (Barry). This is interesting when considering the current stigmas of obesity in society.

According to Rubino (2020) "Often perceived (without evidence) as lazy, gluttonous, lacking will power and self-discipline, individuals with overweight or obesity are vulnerable to stigma and discrimination in the workplace, education, healthcare settings, and society in general." These are unfair assumptions considering obesity could be due to genetics, unchosen environmental and socioeconomic influences, mental disorders, and addictions (Volkow & Wise, 2005; Barry et al., 2009). Due to the discrimination in the society, especially the workplace, there is question of whether there are economic dispensaries for those struggling with obesity. Studies show that obesity is correlated with lower income, but negative stigmas towards obesity give the impression of a "reversed causality" meaning those who are obese earn lower wages because of their impressions to employers (T. J. Kim & Knesebeck, 2017). This can cause a cycle of obesity where those who are obese earn less because of their appearance and receive lower income causing lower access to nutritious food to maintain healthy diets. The negative perceptions of those who are obese have become so great of an issue that policy development and intervention should be considered to provide equity to those who are obese (Flint et al., 2016).

### **Economic impacts**

Obesity and its comorbidities have great economic impacts for the individual as well the surrounding community (Li et al., 2015). The United States annually dedicates between \$147 and \$210 billion on obesity-related health complications (Spieker & Pyzocha, 2016). On an individual level, obese individuals tend to pay 42% more than healthy-weight individuals on healthcare (Spieker & Pyzocha, 2016). In addition to spending more on healthcare, those who had a 10% increase in BMI, had a decrease in annual pay (T. J. Kim & Knesebeck, 2017). Overall, those who were obese are spending quite a bit more on healthcare costs and are more likely to

receive less pay. As obesity rates continue to rise, we can expect the medical costs to increase as well.

### **Who is most susceptible?**

According to the CDC (CDC: More Obesity in U.S. Rural Counties than in Urban Counties, 2019), certain populations are most susceptible to obesity. When observing obesity rates, studies have correlations between obesity, socioeconomic status (SES), race, and educational status (ES) (Adult Obesity Facts, 2018). Correlations between obesity rates and income differ depending on the economic status of the entire nation (How Obesity Relates to Socioeconomic Status – Population Reference Bureau, 2020). In the United States those with low incomes are more likely to struggle with obesity (Ferreira & Magalhães, 2019; Levasseur, 2019). This can be because those with low incomes have less funds available to nutritious. This can also be because those with lower incomes tend to have lower nutritional literacy, or ability to identify healthy foods. Observing obesity rates by categorizing people by race, obesity is most prevalent in non-Hispanic whites, followed by Hispanics. Non-Hispanic whites and non-Hispanic Asians are least affected by obesity, but that does not eliminate the issue within the two races (CDC, 2018; (Wong et al., 2018). Also, lower educational status has direct correlations with populations that have high percentages of obesity (CDC, 2018; Ogden et al., 2017). This could be because populations of lower educational standards tend to have lower earning wages and lower nutritional literacy levels (Speirs et al., 2012).

Intergenerational obesity has also been a greatly researched topic in considering who is most susceptible. Studies show significant obesity risk for children born from obese parents. (Aiken & Ozanne, 2017; Loos & Janssens, 2017). This could be due to lifestyle choices in the home, but more recent studies show metabolic processes of the mother influences the child while in womb (Bahreynian et al., 2017; Aiken & Ozanne, 20). This means before the child is born, they already have higher risks of being obese.

Research also shows significantly higher obesity prevalence among adult individuals living in rural areas when compared to urban areas (CDC: More Obesity in U.S. Rural Counties than in Urban Counties, 2019; Patterson et al., 2004). The USDA provides the qualifications for whether an area is rural or urban (USDA ERS - Rural Classifications, 2019). According to the CDC (2019) individuals struggle with obesity because they have “less access to healthy foods and fewer opportunities to be physically active.” Prevention programs such as providing access to healthy food through schools and workplaces attempt to resolve the issue, but the disparity still remains for rural counties (CDC: More Obesity in U.S. Rural Counties than in Urban Counties, 2019).

### **Obesity in the State of Tennessee**

In 2019, 34.4% of Tennessee’s population was obese (Explore Obesity in Tennessee | 2019 Annual Report, 2019). Though the rates are lower than the current national average of 42.4% (CDC, 2018), still more than a third of Tennesseans are struggling with obesity. In efforts to prevent obesity, the Tennessee Department of Human Services (TDHS) work in “Tipping the Scales Against Childhood Obesity” by placing nutritional requirements in early education to prevent obesity in early childhood (Tennessee Tipping the Scales Against Childhood Obesity, 2019). There is little evidence found to support additional statewide mandates in obesity

prevention, but the state department of health does suggest proven obesity prevention strategies to practice in local communities (Applying Primary Prevention Principles to Obesity Prevention, 2015)

### Conclusion of Literature Review

Obesity is a growing public health crisis that negatively effects physical, emotional, and economic health of numerous individuals and surrounding communities. The many causes and predispositions of obesity makes it difficult to prevent and reverse. Though some attempts to prevent the issues work, rates continue to rise annually. Obesity is a pressing situation that requires further study to benefit communities as well as individuals who tend to receive unfair prejudices from their physicality. In recognizing the importance and sensitivity of the issue, it should be determined if there is a correlation between income, obesity and obesity related diseases in the 95 counties in Tennessee.

### Methods

This is an epidemiological, exploratory study that attempted to clarify which counties in Tennessee have correlations with obesity and its comorbidities. To evaluate the correlation to income, obesity and obesity-related diseases for each of the 95 counties in Tennessee, a literature review was compiled to determine some comorbidities of obesity. The comorbidities found are listed in Table 1. The study consisted of gathering the average income of each count. Additionally, the rurality of each county was determined by population by using rurality classifications suggested by the USDA (USDA ERS - Rural Classifications, 2019). The classifications suggested that a population of 50, 000 or more individuals was considered urban, so the counties containing cities of 50,000 or more were considered urban counties (Appendix A). Next, mortality rates on each comorbidity were collected from each of the 95 counties in Tennessee from CDC Wonder's database. The rates of each disease were accounted for 10 years (from 2008-2018). The mortality rates obtained from CDC Wonder were then processed in SPSS by utilizing bivariate Pearson correlation to determine significance of income to obesity and its comorbidities.

Table 1 Commonly associated comorbidities of obesity (Apovian, 2016).

Obesity	Type 2 Diabetes	Hypertension Diseases	Circulatory System Disease	Renal Failure	Fatty Liver Disease
Meningioma	Uterine cancer	Renal Cancer	Ovarian Cancer	Breast Cancer	Liver cancer
Gallbladder	Pancreatic Cancer	Cervical cancer	Esophageal cancer	Endometrial Cancer	Non-Hodgkin Lymphoma
Multiple Myeloma	Cerebral Infarction	Thyroid cancer	Colon Cancer	Rectal Cancer	

## Results

The data collected showed that there were significant correlations between income and many of obesity's comorbidities in parametric correlations as presented in its respective table (Table 2). Additional descriptive of the correlations exported directly from SPSS can be found in Appendix B. When considering obesity and its comorbidities in rural and urban counties, the disease rates were higher in rural counties for the majority of the observed diseases (Table 4).

Table 2 Parametric Correlation of income obesity and it's Comorbidities.

Income per county	1
Obesity Deaths	0.12
Type 2 Diabetes Deaths	.235*
Hypertensive Diseases Deaths	.219*
Circulatory System Disease - Deaths	.254*
Renal Failure Deaths	.235*
Fatty Liver Deaths	0.09
Meninges Unspecified Benign Neoplasms Deaths	0.19
Malignant neoplasm of kidney Except Renal Pelvis	.300**
Malignant neoplasm of uterus part unspecified Deaths	0.13
Malignant Neoplasm of ovary Deaths	.270*
Breast unspecified Malignant neoplasms Deaths	.268**
Liver unspecified Malignant neoplasms Deaths	0.13
Malignant neoplasm of gallbladder Deaths	0.05
Pancreas unspecified Malignant neoplasm Deaths	.285**
Cervix uteri unspecified Malignant neoplasms Deaths	0.02
Endometrium Malignant neoplasms Deaths	0.03
Non-Hodgkin lymphoma unspecified type Deaths	0.23
Multiple myeloma Malignant neoplasms Deaths	0.22
Cerebral infarction unspecified Deaths	0.23
Malignant neoplasm of thyroid gland Deaths	0.21
Colon unspecified Malignant neoplasms Deaths	.248*
Malignant neoplasm of rectum Deaths	0.17
Esophagus unspecified Malignant neoplasms Deaths	.247*

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Table 4 Obesity and comorbidity rates in rural vs urban counties

Disease	Urban Counties	Rural Counties
Obesity Deaths	23.88	38.24
Type 2 Diabetes Deaths	211.83	38.24
Hypertensive Diseases Deaths	188.42	227.32
Circulatory System Disease - Deaths	2548.42	2243.24
Renal Failure Deaths	129.50	110.14
Fatty Liver Deaths	19.00	24.13
Meninges Unspecified Benign Neoplasms Deaths	0.00	13.67
Malignant neoplasm of kidney Except Renal Pelvis	41.75	39.96
Malignant neoplasm of uterus Deaths	19.57	28.07
Malignant neoplasm of ovary Deaths	44.36	49.53
Breast unspecified Malignant neoplasms Deaths	113.08	109.35
Liver unspecified Malignant neoplasms Deaths	21.70	28.82
Malignant neoplasm of gallbladder Deaths	10.00	34.00
Pancreas unspecified Malignant neoplasm Deaths	111.25	96.83
Cervix uteri Malignant neoplasms Deaths	17.83	31.74
Endometrium Malignant neoplasms Deaths	21.25	29.21
Non-Hodgkin lymphoma unspecified type Deaths	39.00	39.88
Multiple myeloma Malignant neoplasms Deaths	34.70	42.59
Cerebral infarction unspecified Deaths	23.00	32.06
Malignant neoplasm of thyroid gland Deaths	12.00	23.00
Colon unspecified Malignant neoplasms Deaths	119.17	107.80
Malignant neoplasm of rectum Deaths	28.00	32.94

## Discussion

As expected, there were significant correlations between income, obesity, and obesity related illness. This means that income could be a factor contributing to the issue of obesity. Though the correlations are significant, this does not indicate that income causes obesity and its comorbidities. The correlation does not prove causation, so further study is needed to ensure accurate predictions and to provide a foundation for intervention.

## Limitations

While the results depicted what was expected, there were limitations to the study that could lead to inaccurate results. First, there were suppressed values for some of the diseases in each county. This is why the N value varies for different diseases vary (Appendix B). A perfect scenario would be where all N values for diseases were 95 for the 95 counties in Tennessee. The CDC WONDER suppressed values when the counts were < 11 individuals to protect the privacy of individuals. For example, only 18 of the 95 counties had data on fatty liver disease rates, yet



fatty liver disease had a significant correlation to income and had higher rates in rural counties. There is not enough data rates apply the result to the findings to all counties and to accurately determine if rates are higher in rural or urban counties.

Also, there is limitation in determining what counties were urban and rural. The USDA determines rurality and urbanization in rural and urban areas rather than by counties. Categorizing an entire county as rural or urban could be unreliable for one portion of the county could be urban while another portion is rural. Finally, there could be alternative factors that influence obesity. This is why the study cannot determine that income causes obesity and its comorbidities.

### **Further Research**

This study gives indications that income may have the capacity to influence obesity and its comorbidities, however further research is required before action can be taken to aid in combatting obesity in Tennessee. This could be done by evaluating the correlations in different states or extending the study to national and international studies. This could give insight to if obesity and its comorbidities are influenced by income in many areas or situations. Further research could also include attempting to understand how protocol can be implemented to those with lower incomes to prevent and reverse obesity. These research projects could include providing additional funds for nutritional food and providing education in nutritional literacy in local communities. These interventions could be inspired from prior research in combination with novel research.

## References

- Acute kidney failure - Symptoms and causes. (2018). Mayo Clinic.  
<https://www.mayoclinic.org/diseases-conditions/kidney-failure/symptoms-causes/syc-20369048>
- Adab, P., Pallan, M., & Whincup, P. H. (2018). Is BMI the best measure of obesity? *BMJ*, k1274. <https://doi.org/10.1136/bmj.k1274>
- Adult Obesity Facts. (2018). Centers for Disease Control and Prevention.  
<https://www.cdc.gov/obesity/data/adult.html>
- Adult Obesity Rate Data for McMinn County, TN and Coffee County, TN - Health Behaviors on the Open Data Network. (n.d.). *Www.Opendatanetwork.Com*. Retrieved May 20, 2020, from [https://www.opendatanetwork.com/entity/0500000US47107-0500000US47031/McMinn\\_County\\_TN-Coffee\\_County\\_TN/health.health\\_behaviors.adult\\_obesity\\_value?year=2015](https://www.opendatanetwork.com/entity/0500000US47107-0500000US47031/McMinn_County_TN-Coffee_County_TN/health.health_behaviors.adult_obesity_value?year=2015)
- Ahmad, A., Zulaily, N., Shahril, M. R., Syed Abdullah, E. F. H., & Ahmed, A. (2018). Association between socioeconomic status and obesity among 12-year-old Malaysian adolescents. *PLOS ONE*, 13(7), e0200577.  
<https://doi.org/10.1371/journal.pone.0200577>
- Aiken, C. E., & Ozanne, S. E. (2017). Breaking the cycle of intergenerational obesity. *The Journal of Physiology*, 595(5), 1443–1444. <https://doi.org/10.1113/jp273821>
- Amiri, S., & Behnezhad, S. (2019). Obesity and anxiety symptoms: a systematic review and meta-analysis. *Neuropsychiatrie*, 33(2), 72–89. <https://doi.org/10.1007/s40211-019-0302-9>
- Apovian, C. (2016). Definition and Incidence of Obesity Obesity: Definition, Comorbidities, Causes, and Burden.  
[https://ajmc.s3.amazonaws.com/\\_media/\\_pdf/ACE0042\\_05\\_2016\\_Obesity\\_Article01.pdf](https://ajmc.s3.amazonaws.com/_media/_pdf/ACE0042_05_2016_Obesity_Article01.pdf)
- Applying Primary Prevention Principles to Obesity Prevention. (2015). *Tn.Gov*.  
[https://www.tn.gov/content/dam/tn/health/documents/ObesityPreventionModule\(mattupdate\).pptx](https://www.tn.gov/content/dam/tn/health/documents/ObesityPreventionModule(mattupdate).pptx)
- Aronow, W. S. (2017). Association of obesity with hypertension. *Annals of Translational Medicine*, 5(17), 350–350. <https://doi.org/10.21037/atm.2017.06.69>
- Bader, M. D. M., Purciel, M., Yousefzadeh, P., & Neckerman, K. M. (2010). Disparities in Neighborhood Food Environments: Implications of Measurement Strategies. *Economic Geography*, 86(4), 409–430. <https://doi.org/10.1111/j.1944-8287.2010.01084.x>
- Bahreynian, M., Qorbani, M., Khaniabadi, B. M., Motlagh, M. E., Safari, O., Asayesh, H., & Kelishadi, R. (2017). Association between Obesity and Parental Weight Status in Children and Adolescents. *Journal of Clinical Research in Pediatric Endocrinology*, 9(2), 111–117. <https://doi.org/10.4274/jcrpe.3790>
- Barry, D., Clarke, M., & Petry, N. M. (2009). Obesity and Its Relationship to Addictions: Is Overeating a Form of Addictive Behavior? *American Journal on Addictions*, 18(6), 439–451. <https://doi.org/10.3109/10550490903205579>
- Beauty in Ancient Greek Sculpture. (2014, November 25). *Ancient History et Cetera*.  
<https://etc.ancient.eu/photos/beauty-in-ancient-greek-sculpture/>

- Berry, E. M. (2020). The Obesity Pandemic—Whose Responsibility? No Blame, No Shame, Not More of the Same. *Frontiers in Nutrition*, 7.  
<https://doi.org/10.3389/fnut.2020.00002>
- Berry, J. D., & Lloyd-Jones, D. M. (2007). The Clinical Implications of Obesity for Cardiovascular Disease. *Obesity Management*, 3(2), 64–68.  
<https://doi.org/10.1089/obe.2007.0018>
- Biener, A., Cawley, J., & Meyerhoefer, C. (2017). The High and Rising Costs of Obesity to the US Health Care System. *Journal of General Internal Medicine*, 32(S1), 6–8.  
<https://doi.org/10.1007/s11606-016-3968-8>
- Biener, A., Cawley, J., & Meyerhoefer, C. (2018). The Impact of Obesity on Medical Care Costs and Labor Market Outcomes in the US. *Clinical Chemistry*, 64(1), 108–117.  
<https://doi.org/10.1373/clinchem.2017.272450>
- Boston, 677 Huntington Avenue, & Ma 02115 +1495-1000. (2012, September 18). Obesity Controversy. The Nutrition Source.  
<https://www.hsph.harvard.edu/nutritionsource/obesity-study/>
- Brouns, F. (2018). Overweight and diabetes prevention: is a low-carbohydrate–high-fat diet recommendable? *European Journal of Nutrition*, 57(4), 1301–1312.  
<https://doi.org/10.1007/s00394-018-1636-y>
- Brunello, G., & D’Hombres, B. (2007). Does body weight affect wages? Evidence from Europe. *Economics and Human Biology*, 5(1), 1–19.  
<https://doi.org/10.1016/j.ehb.2006.11.002>
- Burton, A. (2019). Empty or Full: A Survey of McMinn County’s Food Pantries’ and Their Abilities to Meet Nutritional Standards. *McNair Scholars Research Journal*, 3.  
[https://www.researchgate.net/profile/Alanis\\_Burton/publication/336749661\\_Empty\\_or\\_Full\\_A\\_Survey\\_of\\_McMinn\\_County’s\\_Food\\_Pantries’\\_and\\_Their\\_Abilities\\_to\\_Meet\\_Nutritional\\_Standards\\_Empty\\_or\\_Full\\_A\\_Survey\\_of\\_McMinn\\_County’s\\_Food\\_Pantries’\\_and\\_Their\\_Abilities\\_to\\_Meet\\_Nutritio/links/5db0c1de4585155e27f8341e/Empty-or-Full-A-Survey-of-McMinn-Countys-Food-Pantries-and-Their-Abilities-to-Meet-Nutritional-Standards-Empty-or-Full-A-Survey-of-McMinn-Countys-Food-Pantries-and-Their-Abilities-to-Meet-Nutritional.pdf](https://www.researchgate.net/profile/Alanis_Burton/publication/336749661_Empty_or_Full_A_Survey_of_McMinn_County’s_Food_Pantries’_and_Their_Abilities_to_Meet_Nutritional_Standards_Empty_or_Full_A_Survey_of_McMinn_County’s_Food_Pantries’_and_Their_Abilities_to_Meet_Nutritio/links/5db0c1de4585155e27f8341e/Empty-or-Full-A-Survey-of-McMinn-Countys-Food-Pantries-and-Their-Abilities-to-Meet-Nutritional-Standards-Empty-or-Full-A-Survey-of-McMinn-Countys-Food-Pantries-and-Their-Abilities-to-Meet-Nutritional.pdf)
- Calle, E. E., Rodriguez, C., Walker-Thurmond, K., & Thun, M. J. (2003). Overweight, Obesity, and Mortality from Cancer in a Prospectively Studied Cohort of U.S. Adults. *New England Journal of Medicine*, 348(17), 1625–1638.  
<https://doi.org/10.1056/nejmoa021423>
- Cancers Associated with Overweight and Obesity Make up 40 percent of Cancers Diagnosed in the United States. (2016, January 1). CDC.  
<https://www.cdc.gov/media/releases/2017/p1003-vs-cancer-obesity.html>
- Casadei, K., & Kiel, J. (2020). Anthropometric Measurement. PubMed; StatPearls Publishing.  
<https://www.ncbi.nlm.nih.gov/books/NBK537315/#:~:text=Anthropometric%20measurements%20are%20a%20series>
- CDC. (2018). Adult Obesity Facts. Centers for Disease Control and Prevention.  
<https://www.cdc.gov/obesity/data/adult.html>
- CDC. (2019, May 14). Heart Health Information: About Heart Disease. Centers for Disease Control and Prevention. <https://www.cdc.gov/heartdisease/about.htm>

- CDC: More obesity in U.S. rural counties than in urban counties. (2019).  
<https://www.cdc.gov/media/releases/2018/s0614-obesity-rates.html>
- Cohen, J. B. (2017). Hypertension in Obesity and the Impact of Weight Loss. *Current Cardiology Reports*, 19(10). <https://doi.org/10.1007/s11886-017-0912-4>
- Cole, A. (2016, August 4). The Real Value of \$100 in Each State. Tax Foundation.  
<https://taxfoundation.org/real-value-100-each-state-2016/>
- Colman, MD, E. (1998). OBESITY IN THE PALEOLITHIC ERA? THE VENUS OF WILLENDORF. *Endocrine Practice*, 4(1), 58–59. <https://doi.org/10.4158/ep.4.1.58>
- Cooksey-Stowers, K. (2017). Food Swamps Predict Obesity Rates Better Than Food Deserts in the United States. *International Journal of Environmental Research and Public Health*.
- Coombs, H. I. (1936). Obesity: Its Classification And Causation. *The British Medical Journal*, 2(3945), 346–348. <https://www.jstor.org/stable/25353684> (Original work published 1936)
- County Health Rankings & Roadmaps. (2020). County Health Rankings & Roadmaps.  
<https://www.countyhealthrankings.org/app/tennessee/2018/measure/outcomes/60/data>
- Data USA. (2016). Datausa.Io. <https://datausa.io/>
- DeNoon, D. J. (n.d.). State Obesity Rankings: No Winners. WebMD. Retrieved August 13, 2020, from <https://www.webmd.com/diet/news/20120813/state-obesity-rankings-no-winners>
- Dickinson, J. K., Guzman, S. J., Maryniuk, M. D., O'Brian, C. A., Kadohiro, J. K., Jackson, R. A., D'Hondt, N., Montgomery, B., Close, K. L., & Funnell, M. M. (2017). The Use of Language in Diabetes Care and Education. *Diabetes Care*, 40(12), 1790–1799.  
<https://doi.org/10.2337/dci17-0041>
- Do Carmo, J. M., da Silva, A. A., Wang, Z., Fang, T., Aberdeen, N., de Lara Rodriguez, C. E. P., & Hall, J. E. (2016). Obesity-Induced Hypertension: Brain Signaling Pathways. *Current Hypertension Reports*, 18(7). <https://doi.org/10.1007/s11906-016-0658-1>
- East Region. (n.d.). WwW.Tn.Gov. Retrieved May 19, 2020, from <https://www.tn.gov/tema/the-agency/regional-offices/east.html>
- Eaton, S. B. (2006). The ancestral human diet: what was it and should it be a paradigm for contemporary nutrition? *Proceedings of the Nutrition Society*, 65(1), 1–6.  
<https://doi.org/10.1079/pns2005471>
- Eckel, R. H., & Krauss, R. M. (1998). American Heart Association Call to Action: Obesity as a Major Risk Factor for Coronary Heart Disease. *Circulation*, 97(21), 2099–2100.  
<https://doi.org/10.1161/01.cir.97.21.2099>
- Economic Costs. (2016, April 8). Obesity Prevention Source.  
<https://www.hsph.harvard.edu/obesity-prevention-source/obesity-consequences/economic/>
- Ejerblad, E., Foreb, C. M., Lindblad, P., Fryzek, J., McLaughlin, J. K., & Nyrén, O. (2006). Obesity and Risk for Chronic Renal Failure. *Journal of the American Society of Nephrology*, 17(6), 1695–1702. <https://doi.org/10.1681/asn.2005060638>
- Eknoyan, G. (2006). A History of Obesity, or How What Was Good Became Ugly and Then Bad. *Advances in Chronic Kidney Disease*, 13(4), 421–427.  
<https://doi.org/10.1053/j.ackd.2006.07.002>

- Explore Obesity in Tennessee | 2019 Annual Report. (2019). America's Health Rankings.  
<https://www.americashealthrankings.org/explore/annual/measure/Obesity/state/TN>
- Fact 1 Fact 2 Obesity and Stroke Fact Sheet. (n.d.). <https://www.obesityaction.org/wp-content/uploads/Obesity-and-Stroke-Fact-Sheet.pdf>
- Ferreira, V. A., & Magalhães, R. (2019). Social Inequalities, Poverty and Obesity. *Psychology of Health - Biopsychosocial Approach*. <https://doi.org/10.5772/intechopen.80987>
- Flint, S. W., Čadek, M., Codreanu, S. C., Ivić, V., Zomer, C., & Gomoiu, A. (2016). Obesity Discrimination in the Recruitment Process: “You’re Not Hired!” *Frontiers in Psychology*, 7. <https://doi.org/10.3389/fpsyg.2016.00647>
- Gao, M., & Liu, D. (2014). Gene therapy for obesity: progress and prospects. *Discovery Medicine*, 17(96), 319–328.  
<https://pubmed.ncbi.nlm.nih.gov/24979252/#:~:text=Gene%20therapy%20for%20obesity%20aims>
- Global Obesity Levels - Obesity - ProCon.org. (2016). Obesity.  
<https://obesity.procon.org/global-obesity-levels/#oecd>
- GoodTherapy.org. (2016, September 14). The 8 Dimensions of Wellness: Where Do You Fit In? GoodTherapy.Org Therapy Blog. <https://www.goodtherapy.org/blog/8-dimensions-of-wellness-where-do-you-fit-in-0527164>
- Hall, K. D., & Guo, J. (2017). Obesity Energetics: Body Weight Regulation and the Effects of Diet Composition. *Gastroenterology*, 152(7), 1718-1727.e3.  
<https://doi.org/10.1053/j.gastro.2017.01.052>
- Hawwash, D., Pinxten, W., Bonn, N. A., Verstraeten, R., Kolsteren, P., & Lachat, C. (2018). Perspective: Consideration of Values When Setting Priorities in Nutrition Research: Guidance for Transparency. *Advances in Nutrition*, 9(6), 671–687.  
<https://doi.org/10.1093/advances/nmy039>
- Health Effects of Overweight and Obesity in 195 Countries over 25 Years. (2017). *New England Journal of Medicine*, 377(1), 13–27. <https://doi.org/10.1056/nejmoa1614362>
- Heart Disease Mortality Data Among US Adults (35+) by State/ Territory and County- 2016-2018. (n.d.). HealthData.Gov. Retrieved May 20, 2020, from  
<https://healthdata.gov/dataset/heart-disease-mortality-data-among-us-adults-35-stateterritory-and-county-%E2%80%93-2016-2018-0#>
- How Obesity Relates to Socioeconomic Status – Population Reference Bureau. (2020).  
<https://www.prb.org/obesity-socioeconomic-status/#:~:text=They%20found%20that%20obesity%20rose>
- How to Graze All Day to Lose Weight. (n.d.). LIVESTRONG.COM.  
<https://www.livestrong.com/article/204761-how-to-graze-all-day-to-lose-weight/>
- Hunger, J. M., Major, B., Blodorn, A., & Miller, C. T. (2015). Weighed Down by Stigma: How Weight-Based Social Identity Threat Contributes to Weight Gain and Poor Health. *Social and Personality Psychology Compass*, 9(6), 255–268.  
<https://doi.org/10.1111/spc3.12172>
- Hypertension and Obesity: How Weight-loss Affects Hypertension - Obesity Action Coalition. (2018, May 15). Obesity Action Coalition.  
<https://www.obesityaction.org/community/article-library/hypertension-and-obesity-how-weight-loss-affects-hypertension/>

- Jiang, S.-Z., Lu, W., Zong, X.-F., Ruan, H.-Y., & Liu, Y. (2016). Obesity and hypertension. *Experimental and Therapeutic Medicine*, 12(4), 2395–2399. <https://doi.org/10.3892/etm.2016.3667>
- Jönsson, T., Granfeldt, Y., Åhrén, B., Branell, U.-C., Pålsson, G., Hansson, A., Söderström, M., & Lindeberg, S. (2009). Beneficial effects of a Paleolithic diet on cardiovascular risk factors in type 2 diabetes: a randomized cross-over pilot study. *Cardiovascular Diabetology*, 8(1), 35. <https://doi.org/10.1186/1475-2840-8-35>
- Kawarazaki, W., & Fujita, T. (2016). The Role of Aldosterone in Obesity-Related Hypertension. *American Journal of Hypertension*, 29(4), 415–423. <https://doi.org/10.1093/ajh/hpw003>
- Kim, D. D., & Basu, A. (2016). Estimating the Medical Care Costs of Obesity in the United States: Systematic Review, Meta-Analysis, and Empirical Analysis. *Value in Health*, 19(5), 602–613. <https://doi.org/10.1016/j.jval.2016.02.008>
- Kim, T. J., & Knesebeck, O. von dem. (2017). Income and obesity: what is the direction of the relationship? A systematic review and meta-analysis. Tae Jun Kim, Olaf von Dem Knesebeck. <https://bmjopen.bmj.com/content/bmjopen/8/1/e019862.full.pdf>
- Kim, Y., Kim, C. K., Jung, S., Yoon, B.-W., & Lee, S.-H. (2014). Obesity-stroke paradox and initial neurological severity. *Journal of Neurology, Neurosurgery & Psychiatry*, 86(7), 743–747. <https://doi.org/10.1136/jnnp-2014-308664>
- Klein, S., Burke, L. E., Bray, G. A., Blair, S., Allison, D. B., Pi-Sunyer, X., Hong, Y., Eckel, R. H., & American Heart Association Council on Nutrition, Physical Activity, and Metabolism. (2004). Clinical implications of obesity with specific focus on cardiovascular disease: a statement for professionals from the American Heart Association Council on Nutrition, Physical Activity, and Metabolism: endorsed by the American College of Cardiology Foundation. *Circulation*, 110(18), 2952–2967. <https://doi.org/10.1161/01.CIR.0000145546.97738.1E>
- Kohen, M. (1946). THE VENUS OF WILLENDORF. *American Imago*, 3(4), 49–60. <https://www.jstor.org/stable/pdf/26300876.pdf>
- Kolotkin, R. L., Crosby, R. D., & Williams, G. R. (2002). Health-Related Quality of Life Varies among Obese Subgroups. *Obesity Research*, 10(8), 748–756. <https://doi.org/10.1038/oby.2002.102>
- Kolotkin, R. L., Williams, V. S. L., Ervin, C. M., Williams, N., Meincke, H. H., Qin, S., Huth Smith, L., & Fehnel, S. E. (2019). Validation of a new measure of quality of life in obesity trials: Impact of Weight on Quality of Life-Lite Clinical Trials Version. *Clinical Obesity*, 9(3), e12310. <https://doi.org/10.1111/cob.12310>
- Kumanyika, S. K. (2019). A Framework for Increasing Equity Impact in Obesity Prevention. *American Journal of Public Health*, 109(10), 1350–1357. <https://doi.org/10.2105/ajph.2019.305221>
- Lauby-Secretan, B., Scoccianti, C., Loomis, D., Grosse, Y., Bianchini, F., & Straif, K. (2016). Body Fatness and Cancer — Viewpoint of the IARC Working Group. *New England Journal of Medicine*, 375(8), 794–798. <https://doi.org/10.1056/nejmsr1606602>
- Levasseur, P. (2019). Can social programs break the vicious cycle between poverty and obesity? Evidence from urban Mexico. *World Development*, 113, 143–156. <https://doi.org/10.1016/j.worlddev.2018.09.003>

- Li, Q., Blume, S. W., Huang, J. C., Hammer, M., & Ganz, M. L. (2015). Prevalence and healthcare costs of obesity-related comorbidities: evidence from an electronic medical records system in the United States. *Journal of Medical Economics*, 18(12), 1020–1028. <https://doi.org/10.3111/13696998.2015.1067623>
- Lin, S., Naseri, T., Linhart, C., Morrell, S., Taylor, R., McGarvey, S. T., Magliano, D. J., & Zimmet, P. (2016). Trends in diabetes and obesity in Samoa over 35 years, 1978–2013. *Diabetic Medicine*, 34(5), 654–661. <https://doi.org/10.1111/dme.13197>
- Loos, R. J. F., & Janssens, A. C. J. W. (2017). Predicting Polygenic Obesity Using Genetic Information. *Cell Metabolism*, 25(3), 535–543. <https://doi.org/10.1016/j.cmet.2017.02.013>
- Lopez, K. N., & Knudson, J. D. (2012). Obesity: From the Agricultural Revolution to the Contemporary Pediatric Epidemic. *Congenital Heart Disease*, 7(2), 189–199. <https://doi.org/10.1111/j.1747-0803.2011.00618.x>
- Lupoli, R., Lembo, E., Saldamacchia, G., Avola, C. K., Angrisani, L., & Capaldo, B. (2017). Bariatric surgery and long-term nutritional issues. *World Journal of Diabetes*, 8(11), 464. <https://doi.org/10.4239/wjd.v8.i11.464>
- Majdzadeh, R., Taghdisi, M.-H., Jazayeri, S., Amini, M., & Djazayeri, A. (2015). Effect of school-based interventions to control childhood obesity: A review of reviews. *International Journal of Preventive Medicine*, 6(1), 68. <https://doi.org/10.4103/2008-7802.162059>
- Masood, W., & Uppaluri, K. R. (2019, March 21). Ketogenic Diet. Nih.Gov; StatPearls Publishing. <https://www.ncbi.nlm.nih.gov/books/NBK499830/>
- Massé, J. (2013). Strengthening the reporting of observational studies in epidemiology—molecular epidemiology (STROBE-ME): an extension of the STROBE statement. *Journal of Clinical Epidemiology*, 66(1), 113. <https://doi.org/10.1016/j.jclinepi.2012.01.023>
- Mattson, M. P., Longo, V. D., & Harvie, M. (2017). Impact of intermittent fasting on health and disease processes. *Ageing Research Reviews*, 39, 46–58. <https://doi.org/10.1016/j.arr.2016.10.005>
- Menon, V., & Rajan, T. (2017). Psychiatric disorders and obesity: A review of association studies. *Journal of Postgraduate Medicine*, 63(3), 182. [https://doi.org/10.4103/jpgm.jpgm\\_712\\_16](https://doi.org/10.4103/jpgm.jpgm_712_16)
- Middle Region. (n.d.). Wwww.Tn.Gov. <https://www.tn.gov/tema/the-agency/regional-offices/middle.html>
- Mitchell, A. B., Cole, J. W., McArdle, P. F., Cheng, Y.-C., Ryan, K. A., Sparks, M. J., Mitchell, B. D., & Kittner, S. J. (2015). Obesity Increases Risk of Ischemic Stroke in Young Adults. *Stroke*, 46(6), 1690–1692. <https://doi.org/10.1161/strokeaha.115.008940>
- National Institute of Diabetes and Digestive and Kidney Diseases. (2019, October 10). Health Risks of Being Overweight | NIDDK. National Institute of Diabetes and Digestive and Kidney Diseases. <https://www.niddk.nih.gov/health-information/weight-management/health-risks-overweight#problems>
- NIH Categorical Spending -NIH Research Portfolio Online Reporting Tools (RePORT). (2014). Nih.Gov. [https://report.nih.gov/categorical\\_spending.aspx](https://report.nih.gov/categorical_spending.aspx)

- NPR Choice page. (2019). Npr.Org.  
<https://www.npr.org/templates/story/story.php?storyId=106268439>
- Nutritional Epidemiology: Better research and for the right reasons. (2018). [YouTube Video].  
 In YouTube. <https://www.youtube.com/watch?v=ia2eX8ji194>
- Obesity and Cancer. (2017). National Cancer Institute; Cancer.gov.  
<https://www.cancer.gov/about-cancer/causes-prevention/risk/obesity/obesity-fact-sheet>
- Obesity and Cancer Fact Sheet. (2017, February 3). National Cancer Institute.  
<https://www.cancer.gov/about-cancer/causes-prevention/risk/obesity/obesity-fact-sheet#what-is-known-about-the-relationship-between-obesity-and-cancer->
- Obesity and overweight. (2018, February 16). Who.Int; World Health Organization: WHO.  
<https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
- Obesity: Definition, Comorbidities, Causes, and Burden. (2016). AJMC.  
<https://www.ajmc.com/journals/supplement/2016/impact-obesity-interventions-managed-care/obesity-definition-comorbidities-causes-burden>
- Oesch, L., Tatlisumak, T., Arnold, M., & Sarikaya, H. (2017). Obesity paradox in stroke – Myth or reality? A systematic review. PLoS ONE, 12(3).  
<https://doi.org/10.1371/journal.pone.0171334>
- Ogden, C. L., Fakhouri, T. H., Carroll, M. D., Hales, C. M., Fryar, C. D., Li, X., & Freedman, D. S. (2017). Prevalence of Obesity Among Adults, by Household Income and Education — United States, 2011–2014. MMWR. Morbidity and Mortality Weekly Report, 66(50), 1369–1373. <https://doi.org/10.15585/mmwr.mm6650a1>
- Ortega, F. B., Lavie, C. J., & Blair, S. N. (2016). Obesity and Cardiovascular Disease. Circulation Research, 118(11), 1752–1770.  
<https://doi.org/10.1161/circresaha.115.306883>
- Patterson, P. D., Moore, C. G., Probst, J. C., & Shinogle, J. A. (2004). Obesity and Physical Inactivity in Rural America. The Journal of Rural Health, 20(2), 151–159.  
<https://doi.org/10.1111/j.1748-0361.2004.tb00022.x>
- Pechey, R., & Monsivais, P. (2016). Socioeconomic inequalities in the healthiness of food choices: Exploring the contributions of food expenditures. Preventive Medicine, 88, 203–209. <https://doi.org/10.1016/j.ypmed.2016.04.012>
- Pérez Pérez, A., Ybarra Muñoz, J., Blay Cortés, V., & de Pablos Velasco, P. (2007). Obesity and cardiovascular disease. Public Health Nutrition, 10(10A), 1156–1163.  
<https://doi.org/10.1017/s1368980007000651>
- Pickett, K. E. (2005). Wider income gaps, wider waistbands? An ecological study of obesity and income inequality. Journal of Epidemiology & Community Health, 59(8), 670–674. <https://doi.org/10.1136/jech.2004.028795>
- Pigeyre, M., Yazdi, F. T., Kaur, Y., & Meyre, D. (2016). Recent progress in genetics, epigenetics and metagenomics unveils the pathophysiology of human obesity. Clinical Science, 130(12), 943–986. <https://doi.org/10.1042/cs20160136>
- Pi-Sunyer, F. X. (2002). The Obesity Epidemic: Pathophysiology and Consequences of Obesity. Obesity Research, 10(S12), 97S–104S. <https://doi.org/10.1038/oby.2002.202>
- Powell, A. (2012, March 7). Obesity? Diabetes? We’ve been set up. Harvard Gazette; Harvard Gazette. <https://news.harvard.edu/gazette/story/2012/03/the-big-setup/>



- Prevention Strategies & Guidelines | Overweight & Obesity | CDC. (2019, February 5). [Www.Cdc.Gov. https://www.cdc.gov/obesity/resources/strategies-guidelines.html#Obesity](https://www.cdc.gov/obesity/resources/strategies-guidelines.html#Obesity)
- Programs | Obesity Interventions | Workplace Health Strategies by Condition | Workplace Health Promotion | CDC. (2019, August 14). [Www.Cdc.Gov. https://www.cdc.gov/workplacehealthpromotion/health-strategies/obesity/interventions/programs.html](https://www.cdc.gov/workplacehealthpromotion/health-strategies/obesity/interventions/programs.html)
- Quek, Y.-H., Tam, W. W. S., Zhang, M. W. B., & Ho, R. C. M. (2017). Exploring the association between childhood and adolescent obesity and depression: a meta-analysis. *Obesity Reviews*, 18(7), 742–754. <https://doi.org/10.1111/obr.12535>
- QuickFacts: United States. (2019). Census Bureau QuickFacts; United States Census Bureau. <https://www.census.gov/quickfacts/fact/table/US/PST045219>
- Ratcliffe, M., Burd, C., Holder, K., & Fields, A. (2016). Defining Rural at the U.S. Census Bureau. [https://www2.census.gov/geo/pdfs/reference/ua/Defining\\_Rural.pdf](https://www2.census.gov/geo/pdfs/reference/ua/Defining_Rural.pdf)
- Reidpath, D. D., Burns, C., Garrard, J., Mahoney, M., & Townsend, M. (2002). An ecological study of the relationship between social and environmental determinants of obesity. *Health & Place*, 8(2), 141–145. [https://doi.org/10.1016/s1353-8292\(01\)00028-4](https://doi.org/10.1016/s1353-8292(01)00028-4)
- Rubino, F., Puhl, R. M., Cummings, D. E., Eckel, R. H., Ryan, D. H., Mechanick, J. I., Nadglowski, J., Ramos Salas, X., Schauer, P. R., Twenefour, D., Apovian, C. M., Aronne, L. J., Batterham, R. L., Berthoud, H.-R., Boza, C., Busetto, L., Dicker, D., De Groot, M., Eisenberg, D., ... Dixon, J. B. (2020). Joint international consensus statement for ending stigma of obesity. *Nature Medicine*, 26(4), 485–497. <https://doi.org/10.1038/s41591-020-0803-x>
- Saucedo-Uribe, E., Genis-Mendoza, A. D., Díaz-Anzaldúa, A., Martínez-Magaña, J. J., Tovilla-Zarate, C. A., Juárez-Rojop, I., Lanzagorta, N., Escamilla, M., González-Castro, T. B., López Narvaez, M. L., Hernández-Díaz, Y., & Nicolini, H. (2019). Differential effects on neurodevelopment of FTO variants in obesity and bipolar disorder suggested by in silico prediction of functional impact: An analysis in Mexican population. *Brain and Behavior*, e01249. <https://doi.org/10.1002/brb3.1249>
- Schachter, J., Martel, J., Lin, C.-S., Chang, C.-J., Wu, T.-R., Lu, C.-C., Ko, Y.-F., Lai, H.-C., Ojcius, D. M., & Young, J. D. (2018). Effects of obesity on depression: A role for inflammation and the gut microbiota. *Brain, Behavior, and Immunity*, 69, 1–8. <https://doi.org/10.1016/j.bbi.2017.08.026>
- Search | HealthData.gov. (n.d.). [Healthdata.Gov. https://healthdata.gov/dataset/heart-disease-mortality-data-among-us-adults-35-stateterritory-and-county-%E2%80%932016-2018-0#](https://healthdata.gov/dataset/heart-disease-mortality-data-among-us-adults-35-stateterritory-and-county-%E2%80%932016-2018-0#)
- Seshadri, K. (2012). Obesity: A Venusian story of Paleolithic proportions. *Indian Journal of Endocrinology and Metabolism*, 16(1), 134. <https://doi.org/10.4103/2230-8210.91208>
- Simon, G. E., Von Korff, M., Saunders, K., Miglioretti, D. L., Crane, P. K., van Belle, G., & Kessler, R. C. (2006). Association Between Obesity and Psychiatric Disorders in the US Adult Population. *Archives of General Psychiatry*, 63(7), 824. <https://doi.org/10.1001/archpsyc.63.7.824>

- Speirs, K. E., Messina, L. A., Munger, A. L., & Grutzmacher, S. K. (2012). Health Literacy and Nutrition Behaviors among Low-Income Adults. *Journal of Health Care for the Poor and Underserved*, 23(3), 1082–1091. <https://doi.org/10.1353/hpu.2012.0113>
- Spieker, E. A., & Pyzocha, N. (2016). Economic Impact of Obesity. *Primary Care: Clinics in Office Practice*, 43(1), 83–95. <https://doi.org/10.1016/j.pop.2015.08.013>
- TACIR Publication Policy. (2016).  
<https://www.tn.gov/content/dam/tn/tacir/documents/2016JustHowRuralOrUrban.pdf>
- Tennessee State Nutrition, Physical Activity, and Obesity Profile 2016 National Center for Chronic Disease Prevention and Health Promotion Division of Nutrition, Physical Activity, and Obesity. (n.d.). Retrieved July 22, 2020, from  
<https://www.cdc.gov/nccdphp/dnpao/state-local-programs/profiles/pdfs/tennessee-state-profile.pdf>
- Tennessee Tipping the Scales Against Childhood Obesity. (2019). *Www.Tn.Gov*.  
<https://www.tn.gov/humanservices/news/2019/10/4/tennessee-tipping-the-scales-against-childhood-obesity.html>
- The Counties of East Tennessee | East Tennessee Veterans Memorial Association. (n.d.). Retrieved May 18, 2020, from <https://etvma.org/the-memorial/the-counties-of-east-tennessee/>
- Tomiyama, A. J. (2014). Weight stigma is stressful. A review of evidence for the Cyclic Obesity/Weight-Based Stigma model. *Appetite*, 82, 8–15.  
<https://doi.org/10.1016/j.appet.2014.06.108>
- Twells, L. K., Gregory, D. M., Reddigan, J., & Midodzi, W. K. (2014). Current and predicted prevalence of obesity in Canada: a trend analysis. *CMAJ Open*, 2(1), E18–E26.  
<https://doi.org/10.9778/cmajo.20130016>
- Underferth, D. (2017). How does obesity cause cancer? MD Anderson Cancer Center.  
<https://www.mdanderson.org/publications/focused-on-health/how-does-obesity-cause-cancer.h27Z1591413.html>
- USDA ERS - Rural Classifications. (2019). *Www.Ers.Usda.Gov*.  
<https://www.ers.usda.gov/topics/rural-economy-population/rural-classifications/>
- Vgontzas, A. N. (1994). Sleep apnea and sleep disruption in obese patients. *Archives of Internal Medicine*, 154(15), 1705–1711. <https://doi.org/10.1001/archinte.154.15.1705>
- Villareal, D. T., Banks, M., Siener, C., Sinacore, D. R., & Klein, S. (2004). Physical Frailty and Body Composition in Obese Elderly Men and Women. *Obesity Research*, 12(6), 913–920. <https://doi.org/10.1038/oby.2004.111>
- Virani, S. S., Alonso, A., Benjamin, E. J., Bittencourt, M. S., Callaway, C. W., Carson, A. P., Chamberlain, A. M., Chang, A. R., Cheng, S., Delling, F. N., Djousse, L., Elkind, M. S. V., Ferguson, J. F., Fornage, M., Khan, S. S., Kissela, B. M., Knutson, K. L., Kwan, T. W., Lackland, D. T., ... Tsao, C. W. (2020). Heart Disease and Stroke Statistics—2020 Update. *Circulation*. <https://doi.org/10.1161/cir.0000000000000757>
- Vittengl, J. R. (2018). Mediation of the bidirectional relations between obesity and depression among women. *Psychiatry Research*, 264, 254–259.  
<https://doi.org/10.1016/j.psychres.2018.03.023>
- Volkow, N. D., & Wise, R. A. (2005). How can drug addiction help us understand obesity? *Nature Neuroscience*, 8(5), 555–560. <https://doi.org/10.1038/nn1452>

- Ward, Z. J., Bleich, S. N., Craddock, A. L., Barrett, J. L., Giles, C. M., Flax, C., Long, M. W., & Gortmaker, S. L. (2019). Projected U.S. State-Level Prevalence of Adult Obesity and Severe Obesity. *New England Journal of Medicine*, 381(25), 2440–2450. <https://doi.org/10.1056/nejmsa1909301>
- West Region. (n.d.). *Www.Tn.Gov*. Retrieved May 18, 2020, from <https://www.tn.gov/tema/the-agency/regional-offices/weST-region.html>
- What these ancient statuettes of obese people say about Paleo diets. (2016, March 3). *The Washington Post*. <https://www.washingtonpost.com/news/wonk/wp/2016/03/03/what-these-ancient-statuettes-of-obese-people-say-about-paleo-diets/>
- Whiteman, D. C., & Wilson, L. F. (2016). The fractions of cancer attributable to modifiable factors: A global review. *Cancer Epidemiology*, 44, 203–221. <https://doi.org/10.1016/j.canep.2016.06.013>
- Why Is Obesity a Disease? (2017, February 8). *Obesity Medicine Association*. <https://obesitymedicine.org/why-is-obesity-a-disease/#:~:text=Obesity%20is%20a%20chronic%20disease>
- Wilde, P. E., Llobrera, J., & Valpiani, N. (2012). Household Food Expenditures and Obesity Risk. *Current Obesity Reports*, 1(3), 123–133. <https://doi.org/10.1007/s13679-012-0022-y>
- WILK, R. (2018). GLOBAL JUNK: WHO IS TO BLAME FOR THE OBESITY EPIDEMIC? *Revista de Administração de Empresas*, 58(3), 332–336. <https://doi.org/10.1590/s0034-759020180311>
- Wilson, G. T. (2010). Eating disorders, obesity and addiction. *European Eating Disorders Review*, 18(5), 341–351. <https://doi.org/10.1002/erv.1048>
- Wong, M. S., Chan, K. S., Jones-Smith, J. C., Colantuoni, E., Thorpe, R. J., & Bleich, S. N. (2018). The Neighborhood Environment and Obesity: Understanding Variation by Race/Ethnicity. *Preventive Medicine*, 111, 371–377. <https://doi.org/10.1016/j.ypmed.2017.11.029>
- Young Bacchus and Companions. (n.d.). *The Art Institute of Chicago*. Retrieved August 21, 2020, from <https://www.artic.edu/artworks/84153/young-bacchus-and-companions>
- Young, T., Peppard, P. E., & Gottlieb, D. J. (2002). Epidemiology of obstructive sleep apnea: a population health perspective. *American Journal of Respiratory and Critical Care Medicine*, 165(9), 1217–1239. <https://doi.org/10.1164/rccm.2109080>
- Yuksel, Şahin, Maksimovic, Drid, & Bianco. (2020). School-Based Intervention Programs for Preventing Obesity and Promoting Physical Activity and Fitness: A Systematic Review. *International Journal of Environmental Research and Public Health*, 17(1), 347. <https://doi.org/10.3390/ijerph17010347>
- Zhang, W., & si, L. (2012). Obstructive sleep apnea syndrome (OSAS) and hypertension: Pathogenic mechanisms and possible therapeutic approaches. *Upsala Journal of Medical Sciences*, 117(4), 370–382. <https://doi.org/10.3109/03009734.2012.707253>

## Appendix A

### Determined Rural Counties in Tennessee

Anderson County	Greene County	Meigs County
Bedford County	Grundy County	Monroe County
Benton County	Hamblen County	Moore County
Bledsoe County	Hancock County	Morgan County
Blount County	Hardeman County	Obion County
Bradley County	Hardin County	Overton County
Campbell County	Haywood County	Perry County
Cannon County	Henderson County	Pickett County
Carroll County	Henry County	Polk County
Carter County	Hickman County	Putnam County
Cheatham County	Houston County	Rhea County
Chester County	Humphreys County	Roane County
Claiborne County	Jackson County	Robertson County
Clay County	Jefferson County	Scott County
Cocke County	Johnson County	Sequatchie County
Coffee County	Lake County	Sevier County
Crockett County	Lauderdale County	Smith County
Cumberland County	Lawrence County	Stewart County
Decatur County	Lewis County	Tipton County
DeKalb County	Lincoln County	Trousdale County
Dickson County	Loudon County	Unicoi County
Dyer County	Macon County	Union County
Fayette County	Marion County	Van Buren County
Fentress County	Marshall County	Warren County
Franklin County	Maury County	Wayne County
Gibson County	McMinn County	Weakley County
Giles County	McNairy County	White County
Grainger County	Wilson County	

### Determined Urban Counties in Tennessee

Davidson	Montgomery	Washington
Shelby	Rutherford	Sumner
Knox	Williamson	Sullivan
Hamilton	Madison	Hawkins

## Appendix B

Table 4 Parametric Correlation of income obesity related diseases.

		Income	Renal Failure	Ovarian Cancer	Pancreatic Cancer
Income per county	Pearson	1	.300**	.270*	.285**
	Correlation				
	Sig. (2-tailed)		.006	.022	.006
Renal Failure	N	95	84	72	93
	Pearson	.300**	1	.991**	.993**
	Correlation				
	Sig. (2-tailed)	.006		.000	.000
	N	84	84	70	84
Ovarian Cancer	Pearson	.270*	.991**	1	.994**
	Correlation				
	Sig. (2-tailed)	.022	.000		.000
Pancreatic Cancer	N	72	70	72	72
	Pearson	.285**	.993**	.994**	1
	Correlation				
Type 2 Diabetes	Sig. (2-tailed)	.006	.000	.000	
	N	93	84	72	93
	Pearson	.235*	.981**	.984**	.987**
	Correlation				
	Sig. (2-tailed)	.022	.000	.000	.000
	N	95	84	72	93

\*\*. Correlation is significant at the 0.01 level (2-tailed).

\*. Correlation is significant at the 0.05 level (2-tailed).

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# Reimagining Figural Interpretation for Contemporary Exegesis: Theory and Practice in the Figure of Rachel Weeping for her Children

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## Abstract

*This paper seeks to put in conversation the broader fields of biblical and literary studies as well as the more specific periods of medieval and contemporary studies in each field by proposing a theory of biblical exegesis informed by both medieval figural interpretation and contemporary rhetorical criticism, which makes use of in-depth literary analysis of biblical texts by using tools from literary critical theory. While scholars have moved away from the strict historical critical theory of the 20th century, the influence of modernity remains in much of mainline biblical scholarship, which, while having made much progress in the area of literary analysis of the Bible, does not hold the Bible to contain literal revelation or historical particularity, as the medieval exegetes did and as figural interpretation requires. Thus, this paper will defend medieval figural interpretation as a valuable means of exegesis, especially when employed in conjunction with finely tuned literary analysis of the text. Figural interpretation not only provides a key interpretive lens through which we may read the Bible and the relationship therein between the Old and New Testaments but also a key lens through which we may read genuine correspondence between the Bible and the lives of those who read it and believe it. This paper will demonstrate this theory through the figure of Rachel weeping in Genesis (Gen 30-35), who prefigures the weeping of the poetic figure of Rachel that Jeremiah hears in the exile (Jer 31:15-22), which further prefigures the weeping of the mothers in the nativity story in Matthew (Matt 2:17-18). When explicated literally and interpreted figuratively, all three texts can become the figures that transfigure our lives and draw us into the tears of God across all generations.*

Literary analysis of the Bible, its roots existing as far back in time as Antiquity, within figures such as Philo and Josephus, evolved in the Middle Ages to the extent that medieval exegetes believed the Bible to be the source of rhetoric.<sup>1</sup> Medieval Jewish and Christian exegetes alike scoured the text for literary devices such as metaphor, meter, form, style, anaphora, etc.<sup>2</sup> In addition, Christian medieval exegetes employed particular methods of interpretation of scripture based on the assumption, beginning with the church Fathers, that humanity will necessarily and always interpret God's communication "dimly and imperfectly" as a ramification of the Fall; thus, God adapts to humanity's limited understanding.<sup>3</sup> The fourfold sense of scripture demonstrates a common medieval interpretive method containing the literal or historical sense and the spiritual or "higher" sense, composed of the allegorical sense, the tropological or moral sense, and the anagogical sense.<sup>4</sup> Chris Evans writes that, although church Fathers such as Clement of Alexandria and Origen rightly receive credit for the origination of the fourfold sense of scripture, "Augustine was perhaps the principal transmitter to the Middle Ages of the notion that there is more than one 'higher' sense" of scripture.<sup>5</sup> The medievals thus exegeted scripture under the presupposition that scripture was not limited to the literal or historical sense; in fact, medieval exegetes operated with the understanding that there exists an "implicit meaning only understood by a later audience," as

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<sup>1</sup> Phyllis Trible, *Rhetorical Criticism: Context, Method, and the Book of Jonah* (Minneapolis, MN: Fortress Press, 1994), 14-15.

<sup>2</sup> Trible, *Rhetorical Criticism*, 16.

<sup>3</sup> G.R. Evans, *The Language and Logic of the Bible* (Cambridge: Cambridge University Press, 1984), 1.

<sup>4</sup> Evans, *Language and Logic*, 114-119.

<sup>5</sup> Evans, *Language and Logic*, 114.

David Steinmetz explains.<sup>6</sup> Not only is the literal sense not the only option for interpreting scripture, but the fullest meaning of the text may only come to bear in the spiritual sense, which the author of the text may or may not have intended. Indeed, as Steinmetz continues, “Only by confessing the multiple sense of Scripture is it possible for the church to make use of the Hebrew Bible at all or to recapture the various levels of significance in the unfolding story of creation and redemption.”<sup>7</sup> The literal sense remains integral to the historical and visible foundation of the four senses, but as the reader increases in their knowledge of God, they may reach an illuminated understanding of the spiritual sense, which itself illuminates the literal sense, allowing the four senses to work together in perfect unity bonded by the Spirit. The medievals often interpreted architectural structures (Noah’s ark, the Temple, etc.) within scripture as analogous to the unity of the four senses, all of which are necessary for right interpretation.<sup>8</sup> Christian biblical interpretation thus requires a hermeneutical theory that utilizes but moves beyond the literal or historical sense.

The medieval exegetical method that most strongly preserves both the unity of the historical sense and the spiritual sense is that of figural interpretation, a method separate from but related to the fourfold method. In his article “Figura,” Erich Auerbach famously and comprehensively defines figural interpretation:

Figural interpretation establishes a connection between two events or persons, the first of which signifies not only itself but also the second, while the second encompasses or fulfills the first. The two poles of the figure are separate in time, but both, being real events or figures, are within time, within the stream of historical life. Only the understanding of the two persons or events is a spiritual act, but this spiritual act deals with concrete events whether past, present, or future, and not with concepts or abstractions; these are quite secondary, since promise and fulfillment are real historical events, which have either happened in the incarnation of the Word, or will happen in the second coming.<sup>9</sup>

Figural interpretation thus requires two literal events, whose relationship of correspondence illuminates the spiritual sense or “meaning” of both events, not simply one or the other; both events necessarily inform one another. In *Christian Figural Reading and the Fashioning of Identity*, John David Dawson explains Auerbach’s comparison between Origen and Tertullian on the matter of allegory versus figure. While allegory does not allow for a “definite event in its full historicity” but instead represents virtues, passions, or significations more abstractly, figure requires the historical particularity of both events.<sup>10</sup> Origen’s allegorical method “subverted the historical reality of biblical figures.”<sup>11</sup> Origen, like other proponents of the allegorical method, found necessary the task of spiritualizing certain passages whose narrative meaning was not readily apparent. In other

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<sup>6</sup> David C. Steinmetz, “The Superiority of Pre-Critical Exegesis,” *Theology Today* 37 (1980): 32.

<sup>7</sup> Steinmetz, “The Superiority,” 32.

<sup>8</sup> Evans, *Language and Logic*, 120-122.

<sup>9</sup> Erich Auerbach, “Figura,” *Scenes from the Drama of European Literature* (1938): 53.

<sup>10</sup> Auerbach, “Figura,” 54-55.

<sup>11</sup> John David Dawson, *Christian Figural Reading and the Fashioning of Identity*, (Berkley and Los Angeles, CA: University of California Press, 2002), 83.



words, many medieval exegetes reduced to allegory Old Testament texts that were difficult to interpret.<sup>12</sup> On the other hand, church Fathers such as Tertullian who favored a more figural method of interpretation sought not to subvert the historical reality of Old Testament and subsequently dissolve “narrative concreteness into abstract meaning” but instead to demonstrate “the status of things as significant—not in themselves and not in their meanings—but insofar as they are, in all of their concrete reality, the enacted intention of God.”<sup>13</sup> Figural interpretation of the Bible, therefore, does not operate on the assumption that a number of authors write accounts of events for historians to weave together but that the author of history is God, whose authorial intent requires interpretation of the story of creation and redemption as a whole, not in parts removed from one another. During the rise of modernity, however, the perceived correspondence between the “biblical world” and the “historical world” began to break down; the historical critical method began searching for authorial intent not under the assumption that God is the author of history and intends humanity to interpret the biblical text accordingly but under the assumption that the task of interpretation is to recover the “original sense” of the text intended for its “original audience,” and this sense must match “the probable historical sequence to which it referred.”<sup>14</sup> Hans Frei explains that the rise of the historical-critical method lessened the need for or presumption of the unity of the canon, that is, unity between the Old and New Testaments.<sup>15</sup> Perceived unity of the canon received further criticism by those who argued that “Christian proclamation rests on twisted and tendentious misreadings of the Hebrew Scriptures.”<sup>16</sup> Robert Alter addresses this issue with the following statement: “I adhere to the traditional Jewish practice, now widely adopted by biblical scholars, of not using the Christian designation, Old Testament, which implies that the Old is completed only in the new and that together they comprise one continuous work.”<sup>17</sup> Although Alter criticizes the historical-critical method, its influence in this statement is clear, for Alter is rejecting unity between the Testaments. While allegorical interpretation may fall prey to the tendency to remove historical particularity and therefore wrongfully appropriate the ancient Hebrew texts, figural interpretation intentionally preserves Old Testament texts, as Dawson describes Auerbach to illustrate “a rich tradition of Christian figural reading of the Old Testament in which the historical reality of ancient Jews had been preserved rather than superseded.”<sup>18</sup> Further, the historical critical method affected literary analysis of the biblical text such that “grammatical-historical” hermeneutics came to dominate biblical study, as opposed to the study of narrative and its implications for spiritual meaning.<sup>19</sup> Most scholars agree that the age of the strict historical-critical method of the 20<sup>th</sup> century is no longer relevant for contemporary biblical study, as schools such as canonical criticism, form criticism, and rhetorical criticism have entered the field of biblical studies. Robert Alter himself criticizes the historical critical method:

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<sup>12</sup> Steinmetz, “The Superiority,” 29.

<sup>13</sup> Dawson, *Christian Figural Reading*, 49, 85.

<sup>14</sup> Hans W. Frei, *The Eclipse of Biblical Narrative*, (New Haven and London: Yale University Press, 1974,) 5-7.

<sup>15</sup> Frei, *The Eclipse*, 7.

<sup>16</sup> Richard B. Hays, *Reading Backwards*, (Waco, Texas: Baylor University Press, 2014), 3.

<sup>17</sup> Robert Alter, *The Art of Biblical Narrative*, (New York, NY: Basic Books, 2011,) xiii.

<sup>18</sup> Dawson, *Christian Figural Reading*, 84.

<sup>19</sup> Frei, *The Eclipse*, 9-10.

The first several waves of modern biblical criticism, beginning in the nineteenth century, were from one point of view a sustained assault on the supposedly unitary character of the Bible, an attempt to break it up into its constituent sources, then to link those pieces to their original life contexts, thus rescuing for history a body of texts that religious tradition had enshrined in timelessness, beyond precise historical considerations. The momentum of this enterprise continues unabated, so that it still seems to most scholars in the field much more urgent to inquire, say, how a particular psalm might have been used in a hypothetically reconstructed temple ritual than how it works as an achieved piece of poetry. At the same time, the potent residue of the older belief in the Bible as the revelation of ultimate truth is perceptible in the tendency of scholars to ask questions about the biblical view of man, the biblical notion of the soul, the biblical vision of eschatology, while for the most part neglecting phenomena like character, motive, and narrative design as unbecoming for the study of an essentially religious document.<sup>20</sup>

Alter is correct that “phenomena like character, motive, and narrative design” are literary devices worthy of study; scholars such as Alter, Hans Frei, and Phyllis Trible have tremendously advanced the field of rhetorical criticism of the Bible. The criticism, however, of the “older belief in the Bible as the revelation of ultimate truth” again demonstrates the influence of the historical-critical method even on renowned scholars of rhetorical criticism. Is it possible that the Bible simultaneously contains historical particularity, unity between the Testaments, and revelation of ultimate truth, as figural interpretation allows for? Is it possible to interpret the Bible as literature portraying an actual God’s enactment of actual history? Is it possible that this literature, bearing on the lives of the actual figures of Moses and Jesus, bears figurally on our own lives today? I suggest a theory of “figural reader-response,” wherein two or more texts receive literary analysis, such as has been proposed by Alter and others, as well as figural interpretation between the texts themselves as well as between the texts and events in our own lives. In this way the reader participates in the narrative God is continually unfolding and illuminating as we learn to read the story of the Bible and the stories of our lives figurally.

### **Practice: Rachel Weeping for her Children**

The poem that begins with Rachel weeping for her children in Jeremiah 31:15-22 has received much attention in contemporary biblical scholarship for its revolutionary use of female imagery in envisioning God’s revelation of hope for his people.<sup>21</sup> This text has special relevance

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<sup>20</sup> Alter, *The Art*, 17.

<sup>21</sup> Cf. Angela Bauer, “Gender in the Book of Jeremiah,” *Studies in Biblical Literature* 5 (New York: Peter Lang Publishing Inc., 1999), 130-145; Walter Brueggemann, *To Build, To Plant* (Grand Rapids, MI: William B. Eerdmans Publishing Co., 1991), 64-66; Juliana L. Claassens, “The Rhetorical Function of the Woman in Labor Metaphor in Jeremiah 30-31: Trauma, Gender and Postcolonial Perspectives,” *Journal of Theology for Southern Africa* 150 (November 2014): 67-84; Terrence E. Fretheim, *Jeremiah* (Macon, GA: Smyth & Helwys Publishing, 2002), 433-438; Kathleen O’Connor, *Jeremiah: Pain and Promise* (Minneapolis, MN: Fortress Press, 2011), 103-115; Phyllis Trible, *God and the Rhetoric of Sexuality*,

for the way it spans the gender gap in revealing God's regard for, responsiveness to, and identification with the pathos, passions, and longings of women.<sup>22</sup> In all this focus upon how this text spans the gender gap, what seems to have received too little attention is how this text and those texts in the immediate context of Jeremiah's so-called book of hope (Jer. 30-31) also span the generation gap, revealing dimensions and dynamics of the promise of intergenerational healing at the heart of Jeremiah's vision of hope. This section will explore and exposit the ways in which the Rachel text, Rachel's own context found within the book of Genesis, as well as Matthew's quotation of Jeremiah 31:15 may be read figurally. Further, this section will establish biblical precedent for the concept of intergenerational healing, as the Rachel text and its context reveal this promise not only for Rachel but also with relevance for our own contemporary context. This section will first analyze the details of the poem and then draw figural correspondence within the Old Testament itself, between the Old and New Testaments, and between the Bible and our lives.

Cradled within Jeremiah's book of hope, Jeremiah 31:15-22 is a poem wherein the symbolic figure of Rachel is found lamenting for the children she believes to be lost. Biblical scholarship has rightly pointed to YHWH's identification with Rachel's pain. Referring to vv. 18-19, Christopher Wright states, "Here, God seems to weep with Rachel like a mother" as God is stirred by Israel's repentance.<sup>23</sup> Similarly, Walter Brueggemann writes that "God's heart is profoundly torn;" this passion directly counters the simultaneous reality that God may indeed "reject wayward Israel" and leads God instead to respond in mercy.<sup>24</sup> Scholars such as Angela Bauer and Phyllis Tribble in particular have done an exceptional job in explicating the use of female imagery in the poem, specifically noting the ways in which the Hebrew language moves between form and content to illustrate a uniquely female-centered unit. Bauer writes, "Womblike, the form of the poem embodies its content, the movement of surrounding in gendered voices and images."<sup>25</sup> The semantics of the poem, such as the repeated use of feminine singular pronouns and feminine singular imperatives<sup>26</sup> center the poem around Rachel, even as YHWH surrounds Rachel and Rachel surrounds her sons. Womblike imagery is not only found within the form of the poem but also in its content. The passion of God in the text invokes particularly feminine language through the use of the verb "ra-hem" in v. 20b, which is translated by the NRSV as "Therefore I am deeply

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Overtures to Biblical Theology, no. 2 (Philadelphia, PA: Fortress Press, 1980), 38-50; Christopher Wright, *The Message of Jeremiah* (Downers Grove, IL: InterVarsity Press, 2014), 319-322.

<sup>22</sup> Key scholars and publications of women's studies within Pentecostalism include but are not limited to the following: Edith L. Blumhofer (Edith Waldvogel), "Women in Pentecostalism," *Union Seminary Quarterly Review* 57, no. 3-4 (2003): 101-22; Anthea D. Butler, *Women in the Church of God in Christ: Making a Sanctified World* (Chapel Hill, NC: University of North Carolina Press, 2007); Harvey Cox, *Fire from Heaven: The Rise of Pentecostal Spirituality and the Reshaping of Religion in the Twenty-First Century*. (Reading, MA: Addison-Wesley Pub, 1995), 121-128; Carolyn Rowland Dirksen, "Let Your Women Keep Their Silence," in *The Promise and the Power*, ed. Donald N. Bowdle, Cleveland, TN: Pathway Press, 1980; Cheryl Bridges Johns, "Grieving, Brooding, and Transforming: The Spirit, the Bible and Gender," *Society for Pentecostal Studies Annual Meeting Papers* (2014); David G. Roebuck, *Limiting Liberty: The Church of God and Women Ministers, 1886-1996*, Ph.D. dissertation, Vanderbilt University, 1997.

<sup>23</sup> Christopher Wright, *The Message of Jeremiah* (Downers Grove, IL: InterVarsity Press, 2014), 320.

<sup>24</sup> Walter Brueggemann, *To Build, To Plant* (Grand Rapids, MI: William B. Eerdmans Publishing Co., 1991), 65.

<sup>25</sup> Angela Bauer, "Gender in the Book of Jeremiah", *Studies in Biblical Literature* 5 (New York: Peter Lang Publishing Inc., 1999), 132.

<sup>26</sup> *Ibid.*, 134, 137.

moved for him; I will surely have mercy on him.” Tribble points to the use of this root word in Song of Songs, wherein the word is translated as “inner parts;” she then further shows the association of “inner parts” with the womb. Thus, Tribble introduces her own translation of the text, which reads as follows: “Therefore, my womb trembles for him; I will truly show motherly-compassion on him.”<sup>27</sup> Both Bauer and Tribble suggest YHWH functions in this text as divine mother,<sup>28</sup> an image we will expand upon later as it connects to the broader contexts of Rachel’s story, the story of the Old Testament, and the eschatological promise of intergenerational healing.

The final lines in the text have also received unique attention within biblical scholarship. Jeremiah 31:22 reads, “How long will you waver, O faithless daughter? For the Lord has created a new thing on the earth: a woman encompasses a man” (NRSV). The latter phrase, “a woman encompasses a man,” has especially puzzled scholars. Tribble draws a comparison between this phrase and the style and subject matter of the entire poem in that as the poem “embodies a womb,” “woman encloses man,”<sup>29</sup> again as Rachel embraces her sons and as God consoles Rachel.<sup>30</sup> Thus the phrase functions as a literary representation of the overarching thrust of the entire poem. Christopher Wright suggests the phrase is a hyperbolic expression meant to denote something entirely “unimaginable.”<sup>31</sup> For Wright, the stunning novelty of the phrase refers to the extent to which God’s “new thing on the earth” is beyond belief. Terrence Fretheim posits that the “new thing” is Israel’s repopulation, guaranteed through the “embrace of man and woman.”<sup>32</sup> Lacy Anderson uniquely points out the connotation of the Hebrew word for “man” in this line: *geber*. *Geber* refers not simply to “man” but to a particular sort of warrior-type masculinity. Anderson thus proposes that the phrase, “a woman encompasses a man,” functions as a critique against machismo and as an affirmation of true strength found within lament and grief, a proposal we will address later.<sup>33</sup>

The role of the Rachel passage in using feminine imagery in these theologically groundbreaking ways is further enhanced by supporting details in the surrounding context of this text. This is seen in the context of the book of Jeremiah as a whole and also more particularly in the context of Jeremiah’s book of hope, chapters 30-31, wherein the Rachel text is situated. Jeremiah as a whole, referring either to the scroll or to the prophet himself, is known for expressing God’s grief, God’s weeping over Israel’s sin and its ultimate consequence: exile. Thus, the majority of the scroll demonstrates disaster. However, situated in the center of the scroll, chapters 30-31 demonstrate a powerful inbreaking of hope in the midst of darkness on all sides. Jeremiah’s book of hope promises restoration beyond the exile as well as beyond the division between the northern and southern nations of Israel and Judah.<sup>34</sup> Gendered dimensions exist within the unit as well as the manners in

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<sup>27</sup> Phyllis Tribble, *God and the Rhetoric of Sexuality*, Overtures to Biblical Theology, no. 2 (Philadelphia, PA: Fortress Press, 1980), 45.

<sup>28</sup> Angela Bauer, *Gender in the Book of Jeremiah*, Studies in Biblical Literature 5 (New York: Peter Lang Publishing Inc., 1999), 136; Phyllis Tribble, *God and the Rhetoric of Sexuality*, Overtures to Biblical Theology, no. 2 (Philadelphia, PA: Fortress Press, 1980), 45.

Phyllis Tribble, *God and the Rhetoric of Sexuality*, Overtures to Biblical Theology, no. 2 (Philadelphia, PA: Fortress Press, 1980), 50.

<sup>30</sup> *Ibid.*, 49.

<sup>31</sup> Christopher Wright, *The Message of Jeremiah* (Downers Grove, IL: InterVarsity Press, 2014), 320.

<sup>32</sup> Terrence E. Fretheim, *Jeremiah* (Macon, GA: Smyth & Helwys Publishing, 2002), 438.

<sup>33</sup> Lacy Anderson, “‘A Sound of Battle is Heard’: Jeremiah 31:15-22 as a Model for Spiritual Warfare.” *Society for Pentecostal Studies Annual Meeting Paper* (2017): 9-10.

<sup>34</sup> Note that the division between the north and south has its origins in a generational division. See 1 Kings

which women in particular will function as facilitators of the restoration promised in the book of hope. Yet before the promise of healing comes a graphic image of despair: “Thus says the Lord: We have heard a cry of panic, of terror, and no peace. Ask now, and see, can a man bear a child? Why then do I see every man with his hands on his loins like a woman in labor?” (Jer 30:5-6 NRSV). Juliana Claassens suggests that the metaphor of a woman in labor, which appears several times throughout Jeremiah and twice in the book of hope<sup>35</sup> functions to dramatically emphasize the trauma of exile. The text’s association between the aforementioned Hebrew word *geber* and the image of a woman in labor “vividly captures the utter panic and desperation experienced by the people.”<sup>36</sup> This introductory verse further highlights the impact of the final verse in the passage, Jeremiah 31:22b: “A woman encompasses a man.” If 30:6 reveals profound trauma, 31:22b reveals even more profound healing, which we will expound upon in greater detail below.

Additionally, the unit is addressed to female Zion, whose “hurt is incurable,” whose “wound is grievous,” and whose “lovers have forgotten” her (Jer 30:12-14 NRSV). Thus, new life will be born out of what is broken.<sup>37</sup> That the book of hope is initially addressed to broken female Zion makes even more significant the reversal from son Ephraim to restored daughter Israel at the end of Rachel’s poem. Further, Jeremiah 30:20 reveals an Abrahamic promise that “their children shall be as of old” (NRSV). How will such a destitute community be restored? Through none other than the survivors of exile, the vulnerable and the lowly.<sup>38</sup> The promise that their children shall be as of old implies that there will be children born again. Where before there were “birth pangs but no birth,”<sup>39</sup> this inbreaking of hope dictates that “among them the blind and the lame, those with child and those in labor, together; a great company, they shall return here” (Jer 31:8 NRSV). That “those in labor” are grouped with the blind and lame demonstrates the view this society has about pregnant women as incapacitated and the subsequent implications of this promise. O’Connor writes, “Pregnant women are of low public stature and holders of little political power, but together these people have the astonishing capacity to give birth to new life.”<sup>40</sup>

The above survey of previous scholarship demonstrates the focus on gender dynamics in the text as well as Rachel’s poetic function as a meta-mother, signifying the possibility of new life for Israel. Further, biblical scholars have hinted at the prospect of YHWH’s own role in the text as Divine Mother. This idea deserves expansion as it connects to the theme of intergenerational healing throughout the Old Testament, which intersects with Rachel’s story found in the book of Genesis. Intergenerational healing is a theme that can be traced from the opening chapters of Genesis to the final verses in the Old Testament. In fact, the final verses of Malachi function as an explicit promise of intergenerational healing, serving as an interpretive lens through which we will view Rachel’s background and her appearance in Jeremiah’s book of hope. Malachi 4:5-6 states, “Lo, I will send the prophet Elijah before the great and terrible day of the Lord comes. He will turn

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12, wherein King Rehoboam regarded the counsel of the young men over the old, to the detriment of the nation.

<sup>35</sup> Juliana L. Claassens, “The Rhetorical Function of the Woman in Labor Metaphor in Jeremiah 30-31: Trauma, Gender and Postcolonial Perspectives,” 68.

<sup>36</sup> Ibid.

<sup>37</sup> O’Connor, Kathleen, *Jeremiah: Pain and Promise* (Minneapolis, MN: Fortress Press, 2011), 104.

<sup>38</sup> Ibid.

<sup>39</sup> Brueggemann, Walter, *To Build, To Plant* (Grand Rapids, MI: William B. Eerdmans Publishing Co., 1991), 48.

<sup>40</sup> Kathleen O’Connor, *Jeremiah: Pain and Promise* (Minneapolis, MN: Fortress Press, 2011), 106.

the hearts of parents to their children and the hearts of children to their parents, so that I will not come and strike the land with a curse” (NSRV). Being that the final words in the Old Testament speak of hearts turning between parents and children, and that the alternative is a curse, we may suggest both simply and profoundly that familial healing matters to God; and not only familial healing but intergenerational healing, the turning of hearts between the elder and younger generations. As previously mentioned, this theme runs throughout the entirety of the Old Testament. This paper will examine in particular its function within Jeremiah 31:15-22, both in context and content.

The beginning of the poem immediately invokes the poetic image of Rachel weeping for her children: “Thus says the Lord: A voice is heard in Ramah, lamentation and bitter weeping. Rachel is weeping for her children; she refuses to be comforted for her children, because they are no more” (Jer 31:15 NRSV). Before we go on to the details of the text, we will examine Rachel herself. Her story holds a special bearing on generational divisions, especially when understood within the broader context of scripture. Rachel’s story, albeit similar to other narratives in Genesis, is one of motherly loss and sorrow, culminating in this poem that is both harrowing and hopeful.

The book of Genesis, a recounting of Israel’s earliest families, follows a long line of both blessing and curse. These stories are full of generational divisions which are continually undergirded by promises. In Genesis chapter one, humanity begins with a blessing and imperative to “be fruitful and multiply, and fill the earth” (Gen 1:28), followed by a curse of division between Adam and Eve as a result of sin. We see that this curse bears on their children as Cain commits the first murder against his own brother. A similar theme continues within the family of Noah: God blesses and charges Noah and his family to “be fruitful and multiply, and fill the earth” (Gen 9:1). Within the same chapter, Ham’s sin results in a curse, the consequence of which is division between brothers: “Cursed be Canaan; lowest of slaves he shall be to his brothers” (Gen 9:25). Soon after is our first Abrahamic blessing: “I will make of you a great nation, and I will bless you, and make your name great, so that you will be a blessing. I will bless those who bless you, and the one who curses you I will curse; and in you all the families of the earth shall be blessed” (Gen 12:2-3). The Abrahamic blessing becomes a formula which repeats numerous times throughout the Old Testament; one of these places, as previously mentioned, is that of Jeremiah’s book of hope.

Throughout the rest of the book of Genesis are numerous points of intergenerational division, between Hagar and Sarah, Sarah and Ishmael, between Issac and Jacob, Jacob and Esau, Jacob and his wives, Leah and Rachel. Thus the discord within this family comes as no surprise, considering the long line of division it comes from. Within all this division, however, there exists hope within the parallel promises. According to Genesis 30, after Jacob works for seven years in order that he may marry Rachel, Laban deceives him by providing Leah instead. Upon another seven years, Jacob is able to marry Rachel, whom he loves more than Leah. Seven more years pass, and Rachel has not yet borne Jacob a child, while Leah bears him four sons. Rachel and Leah essentially enter into a child-bearing battle, both through their maids, as Rachel is still barren. Finally, “God remembered Rachel, and God heeded her and opened her womb” (Gen 30:22 NRSV). The narrative continues: “She conceived and bore a son, and said, “God has taken away my reproach; and she named him Joseph, saying, ‘May the Lord add to me another son!’” (Gen 30:23-24 NRSV). On the surface Rachel’s response does not seem to be out of the ordinary, yet the latter statement requires a closer look. Perhaps her request for another son is simply a statement of hope for future fertility. Admittedly, however, after having been barren and pining for a son for years,

her immediate wish for a second son is quite surprising. Is Joseph not enough for her? Yet her wish is granted; Rachel indeed bears another son. Genesis 35:16-18 states,

“Then they journeyed from Bethel; and when they were still some distance from Ephrath, Rachel was in childbirth, and she had hard labor. When she was in her hard labor, the midwife said to her, ‘Do not be afraid; for now you will have another son.’ As her soul was departing (for she died), she named him ben-oni; but his father called him Benjamin” (NRSV).

The midwife’s statement here eerily echoes Rachel’s previous wish. It is almost as though the midwife is imploring, “Isn’t this what you asked for?” Yet Rachel’s name for her son, ben-oni, translates into “son of my sorrow.” Rachel is barren for years, finally has a son, immediately asks for another, yet her second-born is a son of sorrow and the cause of Rachel’s death. Further, Ben-oni’s father renames him Benjamin, which translates into “son of the right hand” or “son of the south.” The sorrow of this birth is thus buried with Rachel. The pain of Rachel’s past is a necessary element in understanding her reappearance in Jeremiah’s book of hope. Tribble writes, “Now, centuries later, from her grave Rachel laments the subsequent death of her children.”<sup>41</sup> Jeremiah 31:15-22 does not achieve the fullest extent of meaning unless interpreted figurally with her story in Genesis. Although Rachel in the book of Jeremiah exists not as a literal figure but as a metaphor for God’s grief over the Israelites’ exile, the literal figure of Rachel in Genesis prefigures the literal historical event of exile, and, to use the language of Richard Hays, we may read backwards from this event in Jeremiah to further understand the implications of the division in Rachel’s family.

This portion of Jeremiah’s Book of Hope therefore begins with profound pain reaching back centuries, pain woven into the history of humanity, the generations of Israel, and the heart of Rachel. The poem serves as a model for intergenerational healing in that it teaches us how immeasurable pain can be transformed into inconceivable reconciliation and restoration. The text reveals to us several dimensions of the healing, which we will handle one at a time as they appear throughout the text:

1. The destructiveness of sin
2. The necessity yet insufficiency of human lament
  - a. God’s response
3. The need to turn from sin
  - a. God’s forgiveness
4. Relational reconciliation

God initiates Rachel’s lament through the destructive consequences of sin. Rachel’s history as well as the beginning of Jeremiah’s book of hope reveal that this suffering does not exist in a vacuum and did not appear out of nowhere; rather, these divisions are a direct result of sin. The previously cited examples in Genesis show that God initiates not only blessing but also curses through the natural consequences of sin. In the book of hope, Jeremiah 30:15 states, “Why do you cry out over your hurt? Your pain is incurable. Because your guilt is great, because your sins are so numerous, I have done all these things to you” (NRSV). Sin breeds division, and division breeds more sin. Lament as a form of breaking this cycle requires an unearthing of past hurts. Rachel and

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<sup>41</sup> Phyllis Tribble, *God and the Rhetoric of Sexuality*, Overtures to Biblical Theology, no. 2 (Philadelphia, PA: Fortress Press, 1980), 40.

her sorrow have been buried for centuries, but Jeremiah 31 unearths this pain and finds her weeping over her lost children.

Lament is in fact essential for healing and reconciliation to take place, for the text continues: “Thus says the Lord: Keep your voice from weeping, and your eyes from tears; for there is a reward for your work, says the Lord: they shall come back from the land of the enemy” (Jer 31:16 NRSV). What is Rachel’s work? I suggest the work is the lament itself. Lament is a profound confrontation with brokenness and requires the bitter labor of reconciliation. Where Rachel’s labor, indeed her “hard labor,” was her sorrow in birthing her second son, her labor again is her sorrow, this time sorrow for losing her children rather than gaining them. Yet God assures here there is a reward for her work. What is Rachel’s reward? The reward is the return of her children. While the text poetically symbolizes the return of the children of Israel from exile and perhaps the later reunification of the northern and southern nations of Israel, the reward metaphorically functions as reconciliation between Rachel and her children. Thus, when we read the texts in Genesis and Jeremiah figurally, we see that not only does Rachel prefigure God’s pain over Israel’s exile, but Jeremiah’s poem functions to fulfill Rachel’s pain in Genesis by here providing her hope and healing. The story of Rachel in Genesis would therefore be incomplete without its promise for resolution in Jeremiah.

Rachel’s lament is an essential aspect of this reconciliation, yet human lament is insufficient to save. Lament without God’s response is futile. Indeed, Rachel “refuses to be comforted,” according to the text (Jer 31:15). When Rachel remembers her children, she weeps. When God remembers her children, he restores and redeems. Her lament unearths the division and makes room for healing to take place, but Rachel alone cannot even comfort herself, let alone bring her children home. God’s redemption of the children is tied to Rachel’s own consolation; v. 17 states, “there is hope for your future, says the Lord: your children shall come back to their own country” (Jer 31:17 NRSV). Thus the children’s return is not only hope for their future, but also hope for Rachel’s. As previously mentioned, scholars have suggested YHWH as Divine Mother based upon the feminine imagery within the text. As a mother comforts her children, YHWH comforts Rachel, who is also a child of YHWH. Thus YHWH becomes Divine Mother to both Rachel and her children in order to seal the generational divisions between them. In Genesis, the children’s birth meant Rachel’s death. Now, the children’s new life means Rachel’s consolation, which comes from YHWH alone.

As lament alone is insufficient in the work of reconciliation, the hard work of grief must also be met with a turn from sin. Vv. 18-19 read,

“Indeed I heard Ephraim pleading: “You disciplined me, and I took the discipline; I was like a calf untrained. Bring me back, let me come back, for you are the Lord my God. For after I had turned away I repented; and after I was discovered I struck my thigh; I was ashamed, and I was dismayed because I bore the disgrace of my youth.”

If brokenness is a result of sin, turning from sin results in healing of the brokenness. In the same way that human lament must be met with God’s response, this turning from sin is also met by God’s forgiveness. In verse 20, the voice of God responds, “Is Ephraim my dear son? Is he the child I delight in? As often as I speak against him, I still remember him. Therefore I am deeply moved for him; I will surely have mercy on him.” God here redeems Ephraim’s identity. Though Rachel’s firstborn was not enough, and her second born was a sorrowful son, God uses these rhetorical



questions to rename the children, “my dear son, the child I delight in.” The pathos of God here proves God’s faithfulness to redeem. Not only is God deeply moved, but God also has mercy. We know that YHWH is as YHWH does. God is moved to act on behalf of the children, and this is the heart of God in bringing about healing.

In the final two verses, the passage culminates in a powerful image of healing. Not only is the “Virgin Israel” a profound reversal of Israel’s own harlotry in her sin, the final phrase, “a woman encompasses a man” viewed through an intergenerational lens, invokes the startling image of a mother cradling her adult child. In the poem’s immediate context, this image may be understood as Rachel cradling her adult sons, despite the literal Rachel never having lived long enough to see her sons grow up, let alone cradle them, demonstrating the point that one dimension of the poem is that healing exists for families long since past. Indeed, there exists healing for an “incurable wound” (Jer 30:12 NRSV). Further, this depiction emphasizes the intensity of Rachel’s passion by reversing our expectations of the typical image of mother cradling a baby child. Another dimension of this interpretation calls into account the fact that the Hebrew word for “man” in this line is *geber*, a word associated with warrior-type machismo. If Rachel’s hard work is indeed her lament, then perhaps in this case Rachel herself is the *geber*, warring in lament for her lost children. Because her lament is insufficient to save, however, YHWH as Divine Mother encompasses the hard labor of the human mother. YHWH descends, not only to match Rachel in her lament, but to transcend her insufficiency and truly create a new thing in the land, sealing and healing these intergenerational gaps.

Not only does there exist figural correspondence within these texts in the Old Testament itself, but figural unity also exists between the Old and New Testaments, for Matthew 2:16-18 states,

When Herod saw that he had been tricked by the wise men, he was infuriated, and he sent and killed all the children in and around Bethlehem who were two years old or under, according to the time that he had learned from the wise men. Then was fulfilled what had been spoken through the prophet Jeremiah: “A voice was heard in Ramah, wailing and loud lamentation, Rachel weeping for her children; she refused to be consoled, because they are no more. (NRSV)”

As aforementioned in Jeremiah’s poem, Rachel here functions not as a literal figure but as a metaphor for God’s response to a literal event. In this case the historical event in question is that of King Herod’s slaughter of the innocents. While Jeremiah’s poem requires a close eye to understand the correspondence between the poetic figure of Rachel and her literal counterpart in Genesis, here Matthew makes clear that “then was fulfilled what had been spoken through the prophet Jeremiah.” This qualification makes clear that we are not to read Jeremiah’s poem only with an eye backward toward Genesis but also with an eye forward toward the time of Jesus. Thus, when we read these verses figurally, we may more fully understand both Jeremiah’s poem and this event during the time of King Herod, for the slaughter of the children exists in a long-standing historical context of intergenerational division as well as within the context of God’s promise to comfort Rachel in her weeping and reward her for the work of her lament. These three texts invite us to participate in Rachel’s lament, Jeremiah’s lament, and God’s lament over generational gaps that have existed for centuries. God seals these generational gaps by tying together these texts

through their figural correspondence and invites us to participate not only in the lament but also in the promise of redemption and reconciliation. God not only weeps for Joseph and Benjamin, the Israelites in exile, and the children of Herod's slaughter, not to mention the parents thereof who weep for them, but God weeps also for the generational divisions in our own lives, and only by interpreting these texts figurally, by recognizing the concreteness of the pain in these historical families, may we rightly lament the pain in our own families while trusting that God will console, restore, and redeem.

## Bibliography

- Alter, Robert. *The Art of Biblical Narrative*. New York: Basic Books, 1981.
- Anderson, Lacy. "“A Sound of Battle is Heard’: Jeremiah 31:15-22 as a Model for Spiritual Warfare.” Society for Pentecostal Studies Annual Meeting Paper. 2017.
- Auerbach, Erich. “Figura.” *Scenes from the Drama of European Literature*. University of Minnesota Press, 1938.
- Bauer, Angela. *Gender in the Book of Jeremiah*. Studies in Biblical Literature 5. New York: Peter Lang Publishing Inc., 1999.
- Brueggemann, Walter. *To Build, To Plant*. Grand Rapids, MI: William B. Eerdmans Publishing Co., 1991.
- Claassens, Juliana L. “The Rhetorical Function of the Woman in Labor Metaphor in Jeremiah 30-31: Trauma, Gender and Postcolonial Perspectives,” *Journal of Theology for Southern Africa* 150. November 2014.
- Dawson, David. *Christian Figural Reading and the Fashioning of Identity*. University of California Press, 2001.
- Evans, G. R. *The Language and Logic of the Bible: The Earlier Middle Ages*. Cambridge University Press, 1984.
- Frei, Hans W. *The Eclipse of Biblical Narrative: A Study of Eighteenth and Nineteenth Century Hermeneutics*. Yale University Press, 1974.
- Fretheim, Terrence E. *Jeremiah*. Macon, GA: Smyth & Helwys Publishing, 2002.
- Hays, Richard B. *Reading Backwards: Figural Christology and the Fourfold Gospel Witness*. Baylor University Press, 2014.
- O’Connor, Kathleen. *Jeremiah: Pain and Promise* Minneapolis, MN: Fortress Press, 2011.
- Steinmetz, David C. "The Superiority of Pre-critical Exegesis," *Theology Today* 37 (April 1980): 27-38.
- Trible, Phyllis. *God and the Rhetoric of Sexuality*. Overtures to Biblical Theology, no. 2. Philadelphia, PA: Fortress Press, 1980.
- Trible, Phyllis, *Rhetorical Criticism: Context, Method and the Book of Jonah*. Fortress Press, 1994, Minneapolis, MN: Fortress Press, 1994.
- Wright, Christopher. *The Message of Jeremiah*. Downers Grove, IL: InterVarsity Press, 2014.

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## Religion and Emotion Regulation: How Does Being Non-Religious Affect Emotion Regulation?

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## Abstract

*This study was primarily conducted to investigate the possible difference between religious and non-religious individuals, and how they emotionally regulate. This was done by surveying 101 participants gathered through Prolific (prolific.co) by measuring their centrality of religiosity, emotional intelligence, emotion regulation techniques, and coping strategies. It was hypothesized that religious individuals would use cognitive reappraisal to emotionally regulate and would be less likely to use expressive suppression, and that non-religious individuals would use substances to cope more than religious individuals. Analyses revealed that there was no difference between religious and non-religious participants and their use of emotion regulation strategies. Additionally, there was no significant difference between the use of substance to cope or humor and religiosity. However, there were significant relationships between religiosity and coping styles such as: acceptance, denial, and finding comfort in their religion or spiritual beliefs.*

**Keywords:** religion, emotion regulation, non-religious, atheist, agnostic, young adults

In life there are plenty of emotional situations that young adults face daily in order to achieve their goal of having a successful and happy life. Some are just beginning college, moving out on their own for the first time, getting their first job, getting into relationships, getting married, or starting a family. These new life experiences can often be overwhelming and have the ability to cause high emotional stress that may be hard to regulate. As a researcher, one could not help but wonder how young adults who consider themselves to be not affiliated with a religion, or consider themselves atheist, emotionally regulate and cope without using what many religious people rely on: their faith. Literature, although scarce on this specific topic, allowed some clarity while still opening up the door for a study that would hopefully lead to more research on the topic of not just religious individuals, but those who are not affiliated with a religion.

## Literature Review

Previous research has addressed relationships between religion and emotional regulation studies about religiosity and cognitive reappraisal (Vishkin et al., 2016); the role of emotion regulation and participation in both religious and non-religious activities and social ties in a university setting (Semplonius, Good, & Willoughby, 2014); how the relationship between religiosity and emotional regulation influences well-being (Vishkin, Bigman, & Tamir, 2014); and many other variations of this topic. It has also explored a multitude of demographics including high school students (Rachel & Gundanna, 2018), the transition of adolescence into young adulthood (Hardy, Baldwin, Herd, & Kim-Spoon, 2019), and the similarities and differences in American women and men when it came to how religious they are (Schnabel, 2015). The research, done by Schnabel, on this last topic specifically presented some interesting findings that showed women are indeed not more religious than men in all religions. In Protestant and Christian groups, women are in general more religious than men, but some religions such as those of the Catholic and Jewish faith are gender balanced (Schnabel, 2015). This topic has also been covered throughout different religious identities such as Jewish, Christian (Vishkin, Bloom, Tamir, 2018), and Muslim (Vishkin et al., 2016). Regardless of this topic being studied on religious individuals in many variations, very little research has been done on those who identify as non-religious, agnostic, or atheist. However, one article that was found did explore the relationship between older atheistic, agnostic, and religious individuals and their well-being and coping behavior (Horning,

Davis, Stirrat, & Cornwell, 2011), while another article explored a similar topic with coping in old age, but on a smaller scale only covering atheistic and religious individuals (Wilkinson & Coleman, 2010).

Overall, research on the relationship between religion and emotion regulation has been fairly consistent in its findings. One theme that was found popular amongst research was that emotional regulation was reported as used more frequently in the daily lives of more religious individuals. In one study, religiosity was correlated with emotional regulation, specifically cognitive appraisal, and replicated over three different religions as mentioned above (Vishkin et al., 2016). This was further supported in a study done with Christian adolescents where results showed religiosity predicted increased emotion regulation (Rachel & Gundanna, 2018). Results in a developmental study that was done from the participants' adolescence into the participants' young adulthood demonstrated slightly different results (Hardy et al., 2019). Even though religiosity decreased over time, self-regulation, outside of behavioral self-regulation, increased over time (Hardy et al., 2019). However, this study also found that those who decreased less in religiousness (or increased more) tended to increase more in self-regulation (or decrease less), which still suggests that religion plays a role in the practice of self-regulation, and furthermore emotional regulation (Hardy et al., 2019).

Although cognitive reappraisal was one of the most effective and commonly mentioned emotion regulation technique through out literature, that was not the only area of emotion regulation that was demonstrated to be effective. Religion influences the process of emotion regulation by shaping two types of emotion regulation: extrinsic and intrinsic. Extrinsic emotion regulation is the process that originates outside the individual (Gross & Thompson, 2007). An example of this would be the network of social support you would find within religious communities that are commonly found or established in church on Sundays, mosques on Fridays, and synagogues on Saturdays. It helps to have a community around you when going through a rough time and that was demonstrated in parents who had lost their child. Perceived social support among religious practitioners positively correlated with adaptive coping (McIntosh, Silver, & Wortman 1993). Additionally, it has also been found that greater involvement in religious activities predicted less difficulty with emotion regulation overtime, controlling for previous difficulty with emotion regulation (Semplonius et al., 2014). Intrinsic emotion regulation is the process that originates within the individual (Gross & Thompson, 2007). An example of this is cognitive reappraisal which enables people to change the meaning that is assigned to a situation and replace it with a more positive outlook that is more valued or goal consistent (Vishkin et al., 2018). Vishkin et al. (2014) argued that religion is a powerful emotion regulator by setting emotional goals, influencing intrinsic processes in emotion regulation (i.e., developing self-regulation skills, fostering beliefs about the ability to regulate emotions, and teaching specific emotion regulation strategies), and influencing extrinsic processes in emotional regulation (i.e., forming religious communities and dictating religious rituals). For example, religions often offer positive reappraisals to do with human suffering (McIntosh et al., 1993). The idea that suffering is connected to salvation is common in both ancient Jewish sources, as well as Christian sources. This emotion regulation strategy specifically can be exercised through prayer. It has been found in past research that the more religious the parents were who lost an infant, the greater meaning they found in the loss (McIntosh et al., 1993). Additionally, well-being was reported greater a year and a half after the loss. By exercising an action of cognitive reappraisal, they found comfort making negative events easier to

bare. Prayer can also be used in the emotional regulation strategy of distraction. An example of this is held in the Talmud in a story about Rabbi Akiva following the revolt of the Jews against the Roman Empire. When Rabbi Akiva was taken to be executed, it was time for his ritual of nighttime prayer, and he prayed as they were torturing him. He was able to use his religious obligations to distract himself from the physical pain he was enduring (McIntosh et al., 1993).

Broadly, past research on how atheistic, agnostic, or non-religious individuals compared to religious individuals on emotion regulation was surprisingly scarce and only covered a specific age group. Two articles that were found during the research for this study were found, but only surveyed older individuals and did not have any statistics on younger participants. Horning et al. (2011) conducted a study comparing 134 religious and non-religious older adults who completed an online questionnaire that assessed religiosity, well-being, social support, coping mechanisms, and meaning in life. The religious groups included atheists, agnostics, and those who identified as being high or low on religious beliefs. There were not any significant differences when comparing these religious groups, except when comparing meaning of life and social support, where the high religiosity group were statistically higher in those categories (Horning et al., 2011). Another difference was demonstrated in coping mechanisms. The more religious groups used religious-oriented coping methods at greater rates while the atheists used more humor and substances compared to the other religious groups (Horning et al., 2011). It was also shown that atheists find comfort in logic and science, while those who have religious beliefs find comfort in their beliefs, and a very little in logic and science (Horning et al., 2011).

Wilkinson and Coleman (2010) addressed coping in old age through a case-study based comparison of those who identify with atheism and those who identify with a religious faith. The results showed that all study participants, regardless of their beliefs, were coping well and suggests that a strong atheistic belief can fulfill the same role as a religious belief system in providing support, explanation, consolation, and inspiration. The authors also presented case evidence that atheistic belief-based coping in helping individuals adapt to various issues that come with old age (Wilkinson & Coleman, 2010). Although neither of these studies presented any specifics on emotion regulation, they did provide an interesting look into how individuals with no or low belief systems cope with things that every type of person has to deal with at some point, such as grief and loss, and provided further insight on information that is so limited. Additionally, the fact that, overall, participants were coping pretty well regardless of their religious beliefs sparked an interest that provided a nice addition to this study. It would be interesting as well as beneficial to conduct a study that assesses these same concepts, but for younger participants. Even though younger participants may not have experienced as much loss or hardships as older individuals, it would be interesting to see the similarities and differences between the different places in life, and how that may affect how people cope and their emotions throughout that moment in time.

### **Hypothesis**

After reviewing past research on non-religious individuals' (i.e., not affiliated with a religion, an atheist, or agnostic), young adults', and emotion regulation, a hypothesis was developed for how non-religious young adults emotionally regulate and cope without having a faith or religion to cling onto. The hypothesis for this study is that those who are more religious will use cognitive reappraisal more than those who do not affiliate themselves with a religion, and that they will be less likely to use suppression. An additional hypothesis for this study is that those who have no

religious beliefs may turn to more scientific or controllable ways of emotional regulation through substances such as drugs or alcohol.

## **Methods**

### **Participants**

In this study the target population was a mixture of both male and female participants between the ages of 18 and 35 that would be obtained through Prolific (prolific.co). These participants were split into two groups of 50 and fell either into a “religious” or “non-religious” category based off how the participants answered their religion demographics and what their prescreening profile says that is used by Prolific. These participants were given paid compensation through Prolific of \$6.50 an hour for the time they took participating in this study.

Through Prolific this study gathered 101 participants. Three of the participants’ data were excluded either because they had stated they had a reason that they needed to be excluded or because they exited out of the study before answering all the questions. Fourteen more participants were excluded shortly after because of inconsistent data between what the participants answered on the survey and what their Prolific profile stated which resulted in the final number of participants being 84. Out of those 84 participants, non-religious participants made up of 51 participants, and religious participants made up the other 33 participants. Twenty-six of the non-religious participants were female, the other 25 non-religious participants were male). Nineteen of the religious participants were female, and 14 religious participants were male. Overall, there were a total of 39 males and 45 females.

### **Procedure**

The participants who qualified for this study through the prescreening of their age and religious affiliation based on their Prolific profile were able to find our survey through Prolific. Once the participants signed up for an account with Prolific, they were automatically asked to answer screening questions, so any who fit the religiosity criteria set by the researcher could access our study. They received compensation from payment of a minimum of \$6.50 per hour.

When participants selected our study, they began with reading an informed consent form, followed by a brief demographic questionnaire and a series of questions regarding how they have been affected by COVID-19 to measure for any third-party variables that may occur. After those questionnaires they were given the 20 question, interreligious version of the Centrality of Religiosity Scale (CRSi-20; Huber & Huber, 2012). The CRSi-20 consists of five dimensions: intellectual dimension, ideology, public practice, private practice, and the dimension of religious experience. The intellectual dimension refers to the social expectation that those who are considered religious have some knowledge of religion, and that they can explain their views on transcendence, religion, and religiosity (Huber & Huber, 2012). The next dimension, ideology, refers to the social expectation that those who are considered religious individuals have beliefs regarding the existence and the essence of a transcendent and human (Huber & Huber, 2012). Public practice refers to the social expectation that those who are considered religious individuals belong to religious communities which is manifested in the public participation in religious in religious rituals and in communal activities (Huber & Huber, 2012). Private practice refers to the social expectation that those who are considered religious individuals devote themselves to the transcendence in individualized activities and rituals in private space (Huber & Huber, 2012).



Lastly, the dimension of religious experience refers to the social expectation that those who are considered religious individuals have “some kind of direct contact to an ultimate reality” which affects them emotionally (Huber & Huber, 2012, p. 714).

Next, participants were given the Brief Emotional Intelligence Scale (BEIS) to assess their emotional intelligence since that can be important for emotion regulation (Davies, Lane, Davenport, & Scott, 2010). Following the BEIS, participants took the Emotion Regulation Questionnaire (ERQ) to measure whether they tend to regulate their emotions by cognitive reappraisal or expressive suppression (EMOTION REGULATION QUESTIONNAIRE (ERQ), n.d.). The last survey taken was the Brief COPE Survey that instructions were slightly altered to assess how they cope with stressful situations in general, rather than the stress of being told they were going to have surgery (Carver, n.d.). After they completed the Brief COPE participants were asked to respond with a short paragraph that describes a time when they regulated their emotions and how they did so in order to have qualitative data to compare between the religious or non-religious individuals. Lastly, they were asked if they for any reason felt they needed to be excluded from this study. The participants then ended this study with a debriefing page that had all of the contact information they may have need if they had questions or needed clarification about the study.

## Results

First, a series of independent-samples *t*-tests were run on the CRSi-20 to seek whether or not there was indeed a difference in religiosity between these two groups deemed “non-religious” and “religious” and to ensure that they were grouped appropriately. In the CRSi-20 all scales are listed from one to five and scoring is done as follows: 1.0 to 2.0 is considered not religious, 2.1 to 3.9 is considered religious, and 4.0 to 5.0 is considered highly religious.

Analyses done on the average of the five dimensions of the CRSi-20 revealed that there was a significant difference between participants’ religiosity and whether they were grouped as religious or non-religious (see Table 1), which confirmed that the two groups were split correctly into religious and non-religious groups. Additionally, independent samples *t*-tests were run on all five dimensions of the CRSi-20 individually. All five dimension’s analyses came back showing there were statistically significant ( $p < .001$ ) differences between the religious and non-religious groups means and that all dimensions’, except ideology, scores matched up with their grouping (see Table 1).

The independent *t*-test results presented on intellectual dimension tells us that those in the religious group, whose intellectual dimension mean score was 2.83, show presence of this religious construct and have some knowledge of their religion, and being able explain their views on transcendence, religion, and religiosity. In contrast, those in the non-religious group, whose intellectual mean score was 1.96, demonstrate that this religious construct is barely present. The results of the same analyses run on the religious experience dimension showed that those in the religious group, whose religious experience mean score was 2.59, show presence of this religious construct and have “some kind of direct contact to an ultimate reality” (Huber & Huber, 2012, p. 714). In contrast, those in the non-religious group, whose religious experience mean score was 1.53, demonstrate that this religious construct is barely present. The analyses result on public practice presented that those in the religious group, whose public practice mean score was 2.73 in public practice, show presence of this religious construct and belong to religious communities

through public participation in religious rituals and communal activities. In contrast, those in the non-religious group, whose public practice mean score was 1.20, demonstrate that this religious construct is barely present. The results on the independent *t*-test run on private practice showed that those in the religious group, whose private practice mean score was 2.47, shows presence of this religious construct and that they devote themselves to the transcendence in individualized activities and rituals in a private space. In contrast, those in the non-religious group, whose private practice mean score was 1.52, show that this religious construct is barely present.

Lastly, the only dimension that presented results that slightly differed from the others was in ideology. The independent *t*-test run on ideology showed that those in the religious group, whose ideology mean score was 3.69, showed a stronger presence than the others and that these individuals have beliefs regarding the existence and the essence of a transcendent reality and the relation between the transcendence and human. Additionally, unlike the other five dimensions, the non-religious group also showed a presence of this religious construct with an ideology mean score of 2.05. This result tells us that regardless of being apart the non-religious group, according to the scoring given by the CRSi-20, these participants also have beliefs regarding the existence and essence of a transcendent reality and the relation between the transcendence and human.

Another independent-samples *t*-test was run to see if there was a difference in the means between religious or non-religious participants and using substances such as drugs or alcohol to cope with stressful life situations. As shown in Table 2, the hypothesis that those who did not affiliate themselves with religion would turn more likely turn toward controllable ways to cope such as using substances, like drugs or alcohol, or humor ended with a null result. However, also shown in Table 2, it can be confidently stated that there is a significant difference between the group's means with using religious methods, such as prayer or meditation, and finding comfort in religion or spiritual beliefs. Additionally, there was a significant difference between means in religious grouping and using acceptance and denial to cope. Religious individuals had a higher mean in using denial to cope which implies, based on the significant result, that religious individuals use the coping method of denial more than those in the non-religious group. In addition, the mean of non-religious individuals was higher in using acceptance to cope compared to religious individuals. This implies that non-religious individuals use the coping method of acceptance more than those in the religious group. All other coping styles were tested against the participants' religious grouping such as: self-distraction, active coping, emotional support, instrumental support, behavioral disengagement, venting, positive reframing, planning, and humor. None of these tests presented a significant difference between these other coping styles and religious grouping.

To further answer questions about the relationship between religion and emotion regulation, an independent-samples *t*-test was run on the participants' religious grouping and the ERQ. The ERQ is separated into questions that cover the use of cognitive reappraisal and expressive suppression. Results revealed no significant difference between emotion regulation strategies of cognitive reappraisal or expressive suppression and religious grouping. Furthermore, we also analyzed the BEIS and religious grouping and also found no significant difference between religious grouping and emotional intelligence.

Finally, the participants' short answer responses were analyzed by labeling emotion regulation strategies that were gathered from their responses on a time when they needed to regulate their emotions and how they did so. These were categorized based on the definitions given on the five emotion regulation strategies stated by Gross (2008): situation selection, situation

modification, attentional deployment, cognitive change, and response modulation. In order to be as objective as possible these statements were not only looked at and categorized by the main researcher of this study, but two other individuals who are knowledgeable on the subject of the psychology of emotions and the five emotion regulation strategies. An example of a response that was labeled and analyzed was as follows: “My girlfriend was cheating on me with her best friend, I was 19, so I decided to drink a lot, but it wasn’t a good idea, later I felt worst.” This response was labeled as attentional deployment because drinking a lot can be looked at as withdrawal of attention, internal redirection of attention, or responding to external redirection of attention, which was labeled as attentional deployment.

Furthermore, a chi square association test found no significant relationship between religious grouping and the emotion regulation strategies that the participants used in situations they felt they needed to emotionally regulate, showing that a strategy is not used more than the other based on religion alone using this strategy of measuring.

### **Discussion**

This study showed that there was a significant difference between the centrality of their religion and which religious grouping they were a part of. Additionally, a significant difference was found between the non-religious and religious groups with different styles of coping such as: religion, acceptance, and denial. The finding that the coping methods of acceptance and denial showed a significant difference between the means of religious and non-religious individuals was a new addition to research, considering no past research had found whether they differ between those two groups. However, the relationship between using religious oriented coping methods and religious grouping corresponded with past research that stated participants found comfort in their beliefs (Horning et al., 2011). Results from this study also showed that there should be further investigation into finding if there is truly a difference in means between religious and non-religious groups and using substances as a way to cope in stressful situations since this study contradicted past research that said there was a significant difference (Horning et al., 2011). This study additionally contradicted past research by finding no significant difference between the religious and non-religious groups and using humor to cope (Horning et al., 2011). Past research was contradicted in this study further by showing that there were no significant results between the use of cognitive reappraisal, or any other emotion regulation strategy, and religious grouping, while past research stated religiosity correlated with emotional regulation, specifically cognitive reappraisal (Vishkin et al., 2016). Regardless, this study is still significant to current literature on this topic because it opens the door to more studies hopefully being done on young adults, and non-religious individuals as well, to do with emotion regulation.

Some limitations in this study begins with the fact Prolific uses a self-report system in their prescreening methods and provides a difficult process to change one’s answers to prescreening questions. This caused the current study to have uneven religious and non-religious groups, making data inconsistent and causing participants to be excluded from the study because their data was not clear and could not be trusted. Future research should either use a different program than Prolific to get participants or ensure that each participant’s prescreen profile matches their demographics before approving them. It would also be beneficial to clearly define the word “religious” because that also caused participants to have inconsistent data which resulted in their data being excluded because their religious affiliation was not clear and consistent, therefore could not be trusted.

In conclusion, this topic of research should be continued in order to provide clarity on the contradictions that were found in this study and to see if any results differ when fixing the limitations that were presented in this study. Another reason why this topic of research should continue to be studied is because new information was found in this study on coping methods acceptance and denial. This shows that there is still more to learn and be retested on this subject and that should be explored. Lastly, more research needs to be done on the young adults and non-religious demographics specifically since there is so little research out there on these demographics. It is important we expand research on these demographics to attempt to understand how we may or may not differ from one another in how we emotionally regulate.

## References

- Carver, C. S. (n.d.). Brief COPE. Retrieved April 29, 2020, from <https://local.psy.miami.edu/faculty/ccarver/scBrCOPE.phtml>
- Davies, K.A., Lane, A.M., Devonport, T.J., & Scott, J.A. (2010). Validity and Reliability of a Brief Emotional Intelligence Scale (BEIS-10). *Journal of Individual Differences*, 31, 198-208.
- EMOTION REGULATION QUESTIONNAIRE (ERQ). (n.d.). Retrieved April 29, 2020, from [https://fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/Self\\_Measures\\_for\\_Personal\\_Growth\\_and\\_Positive\\_Emotions\\_EMOTION\\_REGULATION.pdf](https://fetzer.org/sites/default/files/images/stories/pdf/selfmeasures/Self_Measures_for_Personal_Growth_and_Positive_Emotions_EMOTION_REGULATION.pdf)
- Gross, J. (2008). Chapter 31: Emotion Regulation (J. M. Haviland-Jones & L. F. Barrett, Eds.). In M. Lewis (Ed.), *Handbook of Emotions* (3rd ed., pp. 497-512). New York, NY: The Guilford Press, A Division of Guilford Publications.
- Hardy, S. A., Baldwin, C. R., Herd, T., & Kim-Spoon, J. (2019, October 31). Dynamic Associations Between Religiousness and Self-Regulation Across Adolescence Into Young Adulthood. *Developmental Psychology*. Advance online publication. <http://dx.doi.org/10.1037/dev0000841>
- Horning, S. M., Davis, H. P., Stirrat, M., & Cornwell, R. E. (2011). Atheistic, agnostic, and religious older adults on well-being and coping behaviors. *Journal of Aging Studies*, 25(2), 177-188.
- Huber, S., & Huber, O. W. (2012). The centrality of religiosity scale (CRS). *Religions*, 3(3), 710-724.
- McIntosh, D. N., Silver, R. C., & Wortman, C. B. (1993). Religion's role in adjustment to a negative life event: Coping with the loss of a child. *Journal of Personality and Social Psychology*, 65, 812-821.
- Rachel, D. & Gundanna, S. (2018). The Relationship Between Religiosity and Emotion Regulation among Christian High School Students in Bangalore. *12th PARIS International Conference on Marketing, Education, Humanities & Social Sciences (MEHSS-18) Sept. 17-19, 2018 Paris (France)* <https://doi.org/10.17758/EIRAI4.F0918413>
- Schnabel, L. (2015). How Religious are American Women and Men? Gender Differences and Similarities. *Journal for the Scientific Study of Religion*, 54(3), 616-622. doi: 10.1111/jssr.12214
- Semplonius, T., Good, M., & Willoughby, T. (2014). Religious and Non-religious Activity Engagement as Assets in Promoting Social Ties Throughout University: The Role of Emotion Regulation. *Journal of Youth and Adolescence*, 44(8), 1592-1606. doi: 10.1007/s10964-014-0200-1
- Vishkin A., Bigman Y., & Tamir M. (2014) Religion, Emotion Regulation, and Well-Being. In: Kim-Prieto C. (eds) *Religion and Spirituality Across Cultures. Cross-Cultural Advancements in Positive Psychology*, vol 9. Springer, Dordrecht [https://doi.org/10.1007/978-94-017-8950-9\\_13](https://doi.org/10.1007/978-94-017-8950-9_13)
- Vishkin, A., Bigman, Y. E., Porat, R., Solak, N., Halperin, E., & Tamir, M. (2016). God rest our hearts: Religiosity and cognitive reappraisal. *Emotion*, 16(2), 252-262. <https://doi.org/10.1037/emo0000108>

- Vishkin, A., Bloom, P. B.-N., & Tamir, M. (2018). Always Look on the Bright Side of Life: Religiosity, Emotion Regulation and Well-Being in a Jewish and Christian Sample. *Journal of Happiness Studies*, 20(2), 427–447. <https://doi.org/10.1007/s10902-017-9956-9>
- Wilkinson, P.J., & Coleman, P.G.. (2010). Strong beliefs and coping in old age: a case-based comparison of atheism and religious faith. *Ageing and Society*, 30(2), 337–361. Cambridge University Press. : <https://doi.org/10.1017/S0144686X09990353>

### Appendix:

**Table 1.**

*T-test: CRSi-20's Mean & 5 Dimensions and Religious & Non-Religious Participants*

CRSi-20 Variable	Religion	N	Mean	SD	Cohen's d	df	t value	p value
Mean	Non-Relig.	51	1.61	0.488	1.83	82.0	8.17	<.001
	Relig.	33	2.79	0.832				
Intellect	Non-Relig.	51	1.96	0.665	1.12	82.0	-5.00	< .001
	Relig.	33	2.83	.925				
Ideology	Non-Relig.	51	2.05	1.067	1.50	82.0	-6.70	< .001
	Relig.	33	3.69	1.130				
Experience	Non-Relig.	51	1.53	0.636	1.41	82.0	-6.33	< .001
	Relig.	33	2.59	.905				
Public Practice	Non-Relig.	51	1.20	0.327	2.07	82.0	-9.28	< .001
	Relig.	33	2.73	1.104				
Private Practice	Non-Relig.	51	1.52	0.589	1.21	82.0	-5.43	< .001
	Relig.	33	2.47	1.015				

**Table 2.**

*T-test: Brief COPE Substance Use, Religion, Denial, Acceptance and Religious & Non-Religious Participants*

Brief COPE Variable	Religion	N	Mean	SD	Cohen's d	df	t value	p value
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Substance Use	Non-Relig.	51	1.75	0.913				
	Relig.	33	1.39	0.704				
Religion	Non-Relig.	51	1.38	0.752	1.094	82.0	- 4.90	< .001
	Relig.	33	2.27	0.902				
Denial	Non-Relig.	51	1.40	0.575	.768	82.0	3.44	< .001
	Relig.	33	1.91	.775				
Acceptance	Non-Relig.	51	3.12	0.327	.497	82.0	2.23	.029
	Relig.	33	2.82	1.104				

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Volume 3

Article 5

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## A Person's a Person, No Matter How Small

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## Abstract

*Liberty rights are rights that refer to the liberty possessed by a person in regards to their autonomy and individuality. Liberty rights are typically grounded in the 14th Amendment of the U.S. Constitution. In the case of parental rights, liberty rights refer to the liberty of parents to raise their children with little to no government interference. However, parental liberty can and does result in harm done to children because the threshold for maltreatment of children that warrants government intervention is too high. In other words, the state is very limited in its capacity to intervene in abusive situations due to the extensiveness of parental liberty. Parental liberty particularly results in harm to the child when a parent or guardian either does not know what is good for the child, or refuses to do what is good. It is for this reason that the Supreme Court must enable States to return to what is known as the best-interest of the child standard concerning matters of child custody.*

## Introduction

In 1959, at the General Assembly meeting of the United Nations, a resolution entitled *The Declaration of the Rights of the Child*, hereafter CRC, established a guideline for what the rights of children ought to entail.<sup>1</sup> Every nation in the world adopted this resolution with the exception of two, The United States being the only developed country not to adopt the CRC. Not only has the United States not adopted the CRC, but there seems to be a hesitancy in America to adopt any written document that details the rights of children in full. However, we exhibit no hesitancy to detail the rights of adults in a full and complete way, and we do this through the Bill of Rights. The Bill of Rights is assumed to be all encompassing of the rights of adults, who are seen as having full citizenship, while children are left out of the language of the Bill of Rights and are frequently viewed as incomplete or partial citizens. Due to this perspective on children, they are seen as not yet possessing the rights guaranteed to full citizens through the Bill of Rights. The enumeration of the rights that are guaranteed to full citizens is dangerous, and is ultimately what leads to the lack of explicit children's rights in America.<sup>2</sup> Just as Alexander Hamilton predicted in *Federalist 84*, the complete enumeration of rights takes away from the rights that ought to be guaranteed to all.<sup>3</sup> By writing down rights and making them explicit, we ensure that any rights left unwritten are not guaranteed. Although Alexander Hamilton lost this battle, he was correct about the dangers of enumerating rights leading to the usurpation of anything not guaranteed, and this is precisely what the Bill of Rights has done to children's rights. Adult citizens are guaranteed certain specific rights because they have been written down in a detailed way. Children, on the other hand, while being seen as not having grown into the enumerated rights guaranteed to adults, also do not have their own set of enumerated rights. The modern world that we live in is a world in which rights are enumerated, and thus declining to enumerate certain rights for children should be incomprehensible. However, because children are viewed as only a fraction of what they will grow

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<sup>1</sup> *The Declaration of the Rights of the Child*, Resolution 14, 1386. November 20, 1959.

<sup>2</sup> *Federalist 84*, Alexander Hamilton (1788).

<sup>3</sup> *Ibid.*

to be, the rights of children are viewed through the lens of the adults exercising their own guaranteed rights on the behalf of children. We must then, view the rights of children within the context of their current framework, which has contributed to the rights of children being an ambiguous, moving-target throughout the course of American history.

Not only does the Bill of Rights guarantee certain rights to adults, but the evolving interpretation of the Constitution as a whole has continually expanded the rights of parents. Parental rights are embraced and are constantly being expanded, but often times are seen as running contrary to the rights of children. Parental rights are more complex than the rights guaranteed through the Bill of Rights, but are enumerated through the inclusion of parental rights in what is often referred to as liberty rights, grounded in the Due Process and Equal Protection clause of the Fourteenth Amendment. Section one of the Fourteenth Amendment reads as follows:

“All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the state wherein they reside. No state shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any state deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.”<sup>4</sup>

Liberty rights refer to the rights possessed by a person in regards to their autonomy and individuality.<sup>5</sup> In the case of parental rights, liberty rights refer to the liberty to raise their children with little to no government interference. However, parental liberty can and does result in harm done to children because the threshold for maltreatment of children that warrants government intervention is too high. Parental liberty particularly results in harm to the child when a parent or guardian either does not know what is good for the child, or refuses to do what is good.

The U.S. has no issue with defining what is considered harmful to a child. The laws that have been established as an attempt to protect children explicitly define what is considered harmful to a child, and this combined with federalism results in the delegation of the protection of children to a state level. While we have a decent understanding of what is harmful to a child, there is no standing definition of what is good for the child. This is because we always defer to parental discretion, and assume that parents will do what they believe to be best for their child. Because the protection of children is delegated to the State level, the Federal government declines to create one standard definition of harm.

The dichotomy between parental liberty and the best interests of the child seems to be constantly growing, with parental liberty being expanded in a way that completely dominates children. The rights of parents and the rights of children do not have to be viewed as two differing interests, however. Both parental interests and children’s interests are best served and insulated when we grant parental rights in a much more narrow and explicit sense. The liberty rights of parents have grown far too broad, leaving them susceptible to frequently being called into question. In narrowly and explicitly defining the rights of parents, we better protect the rights of parents,

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<sup>4</sup> U.S. Constitution, Amend. XIV § 1.

<sup>5</sup> Archard, David. *Children: Rights and Childhood*. New York, NY: Routledge, 2015.

while at the same time granting certain liberty rights to children. Our understanding of liberty rights demands diligence on the part of the state to protect the lives of children.

### **Jurisprudence**

All of the jurisprudence of the Court, early on, builds to a case called *Santosky v. Kramer*. The cases pre-*Santosky* attempt to define what parental liberty ought to look like, and where they are grounded in the Constitution. The majority of these cases drastically expand parental rights, while also declining to set appropriate limits. Only a few cases detail the power that the states possess to protect children from maltreatment at the hands of their guardians.

*Santosky v. Kramer* is what I consider to be a turning-point in the jurisprudence regarding parental rights. In *Santosky*, the Court defines the appropriate level of evidence that is required on behalf of the State in order to terminate parental rights. It is in the ruling of this case that the Court errs so drastically that children are left susceptible to and unprotected from abuse at the hands of their parents.

Post-*Santosky* jurisprudence attempts to undo the damage done by the *Santosky* ruling, and reign-in the rights of parents that *Santosky* drastically expands. The Court is consistent in attempting to limit parental liberty, post-*Santosky*, until a case called *Troxel v. Granville*. The *Troxel* ruling limits the standard that states are allowed to use in cases involving children and their custody. This case is often considered the nail-in-the-coffin for children's rights, and the erroneous ruling in *Santosky* is what ultimately leads to the *Troxel* ruling.

### **Pre-Santosky Jurisprudence**

The first cluster of cases that expand parental rights are mainly focused around the liberty rights of parents to direct the education of their child. The first case dealing with this issue is *Meyer v. Nebraska*, which was decided in 1923. In this case, the state of Nebraska had enacted a law which prohibited teaching grade-school children any language besides English. Meyer, a teacher at a Lutheran school, taught German and as a result was convicted under this law. Justice McReynolds delivered the opinion of the Court, in which he was joined by Taft, McKenna, Van Devanter, Brandeis, Butler, and Sanford.

The court ruled that the Nebraska law was in violation of the Fourteenth Amendment's Due Process clause, because the vision of liberty presented in the Fourteenth Amendment includes the right of parents to control the upbringing of their children. In addition to this, the Court explained that liberty refers to "not merely freedom from bodily restraint, but also the right of the individual to contract, to engage in any of the common occupations of life, to acquire useful knowledge, to marry, establish a home and bring up children, to worship God according to the dictates of his own conscience, and generally to enjoy those privileges long recognized at common law as essential to the orderly pursuit of happiness by free men."<sup>6</sup> This liberty standard is only

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<sup>6</sup> *Meyer v. Nebraska* 262 U.S. 390 (1923).

applied to adults, but it is significant that the Court defined what liberty includes while leaving room for the definition to continue expanding. Justice Holmes wrote a dissent, which was joined by Justice Sutherland. The dissent states that it is a legitimate government interest for the State to want all of its citizens to speak the same language.<sup>7</sup> Justice Holmes also wrote that the law was not in violation of the Fourteenth Amendment right to liberty because teachers are often forbidden from teaching any number of different subjects in school.<sup>8</sup>

Shortly after the *Meyer* decision, the federal government passed a law called The Compulsory Education Act of 1922, hereafter CEA, which required parents and guardians to send children between the ages of 8 and 16 to a public school within the district where that child resided. Failing to do so would result in a misdemeanor charge on the parent or guardian. Subsequently, the 1925 case *Pierce v. Society of Sisters* challenged the validity of the CEA. The Society of Sisters was a corporation in Oregon which cared for orphans, and taught the orphans in the Society of Sisters' religious schools and academies. The majority opinion was written by Justice McReynolds, the same Justice who authored the opinion of the Court in *Meyer*. The opinion of the Court is a unanimous opinion, and the justices that make up the Court are nearly identical to the Court in *Meyer*.

The Court ruled that the CEA was a violation of the rights of parents, due to unreasonable interference with parental liberty. Furthermore, the Court upheld *Meyer v. Nebraska*, and expanded the definition of liberty found there to include, "the liberty of parents and guardians to direct the upbringing and education of children under their control."<sup>9</sup> The Court also recognizes the duty that goes hand-in-hand with the liberty rights of parents, stating, "The child is not the mere creature of the State; those who nurture him and direct his destiny have the right, coupled with the high duty, to recognize and prepare him for additional obligations."<sup>10</sup> This seems to indicate that while the liberty rights of parents are comprehensive, this does not mean that they can be allowed to go unchecked. Seemingly, under the *Pierce* standard, if parents fail in their duty to their children, then there is a shift in guardianship duties owed to that child from the parents to the State. However, the Court here does not establish what action or inaction on the behalf of parents would warrant state involvement.

We do not see another case that deals with parental liberty until the 1944 case, *Prince v. Massachusetts*, which attempts to reign in some of the power that has been granted to parents through previous cases. Mrs. Prince, a mother of two young sons and an aunt with legal custody of her niece, was allowing her children to work with her in the evenings by having them sell booklets about their religious beliefs. A Massachusetts statute which sought to prevent child labor,

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<sup>7</sup> *Bartels v. Iowa* 262 U.S. 404 (1923). This case includes the only dissent for *Meyer v. Nebraska*. *Bartels* is a case that reviews several state laws in light of the new *Meyer* ruling. The dissent is for *Meyer*, but was technically penned under *Bartels*.

<sup>8</sup> *Ibid.*

<sup>9</sup> *Pierce v. Society of Sisters* 268 U.S. 510 (1925).

<sup>10</sup> *Ibid.*

prohibited the sale of or the attempt to sell any type of merchandise by children. It is under this statute that Mrs. Prince was made to take her children home and stop allowing them to hand out religious readings with her. The question in this case asks if parental rights as secured by the Due Process clause of the Fourteenth Amendment prohibit Massachusetts from enforcing their child labor law. Justice Rutledge authored the majority opinion, which was joined by Stone, Black, Reed, and Douglas. Chief Justice Stone also rules with the majority opinion in *Pierce*, years before *Prince*. Justice Murphy authored his own dissent, as did Jackson, who was joined by Frankfurter and Roberts.

The majority ruled that even parental liberty is not beyond the realm of state control, stating, “Acting to guard the general interest in youth's wellbeing, the state, as *parens patriae*, may restrict the parent's control by requiring school attendance, regulating or prohibiting the child's labor, and in many other ways.”<sup>11</sup> The Court declines to detail the “many other ways” that State intervention on the behalf of children can be legitimate.<sup>12</sup> This is because in the case at hand, the State has a general interest in protecting children from labor and this interest clearly outweighs the parental interest in this case. Furthermore, *Prince* sets what I will refer to as a three-realm standard for what parental rights ought to look like, establishing that there are three realms in which both parental freedom and duty exists. These three realms are “the custody, care, and nurture of the child...”<sup>13</sup> In other words, parents have the liberty and duty to be in control of the custody, care, and nurture of their children. These three realms on their face are expansive for the liberty rights of parents. However, a closer interpretation of the three-realm standard appears to leave room for the rights of children, while declining to specifically define what children's rights should look like.

Post 1944, Supreme Court cases regarding parental rights, and particularly the expansion of parental rights, continued to operate according to the precedent set forth in *Prince*. It is quite some time before we see another cornerstone parental rights case presented before the Court. In 1972, the Court heard and decided a case entitled *Stanley v. Illinois*. Joan and Peter Stanley, an unmarried couple residing in Illinois, had three children together and lived together intermittently over the course of 18 years. When Joan Stanley died, Illinois assumed custody of the children and took away the custody rights of Peter Stanley, without any sort of hearing regarding his parental fitness. Illinois was able to do this because under Illinois law, unwed fathers were always automatically considered to be unfit parents, regardless of their actual fitness. This resulted in children in Illinois with unwed parents eventually becoming wards of state. Peter Stanley argued that the Illinois law was a violation of the Equal Protection clause of the Fourteenth Amendment, because the law only applied to unwed fathers, while the children of unwed mothers were allowed to remain within her custody. Justice White authored the majority opinion, and was joined by Brennan, Stewart, Marshall, Douglas. Justice Burger authored a dissent, which was joined by Blackmun. Justices Powell and Rhenquist did not hear this case or join in either of the opinions.

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<sup>11</sup> *Prince v. Massachusetts* (1944), Section 26.10.160(3).

<sup>12</sup> *Ibid.*

<sup>13</sup> *Ibid.*

The majority ruled that the Illinois law was in violation of the Fourteenth Amendment Equal Protection clause, as well as the Due Process clause. The law violated the Equal Protection clause in that some parents were granted a hearing regarding their fitness as a parent prior to any custody decisions being made by the State, while other parents were denied this protection of their parenthood. Similarly, the law violated the Due Process clause of the Fourteenth Amendment because Peter Stanley was stripped of his parental rights without a hearing. The Court established through this case that parental unfitness must be established on the basis of individualized proof. Not only does the Due Process clause demand the individualized proof standard, says the Court, but it was, “designed to protect the fragile values of a vulnerable citizenry from the overbearing concern for efficiency and efficacy that may characterize praiseworthy government officials no less, and perhaps more, than mediocre ones.”<sup>14</sup>

Continuing the progression of Due Process and Equal Protection cases that apply to parental rights is a 1978 case called *Quilloin v. Walcott*. Under Georgia law at the time, a child that was born in wedlock could not be adopted without the consent of each living parent, unless that parent had voluntarily surrendered their rights or had been found to be unfit.<sup>15</sup> Under the same law, in order for an illegitimate child to be adopted, only the consent of the mother was needed.<sup>16</sup> When a mother’s new husband sought to legally adopt her illegitimate child, the child’s estranged biological father claimed that the Georgia law requiring only the mother’s consent was a violation of his Fourteenth Amendment Equal Protection and Due Process rights. He claimed that his Fourteenth Amendment rights had been violated because his parental rights were effectively revoked without a hearing regarding his fitness. The Georgia courts in this case determined that the adoption of the child is what was in the child’s best interest, particularly so because the child’s biological father had not shown any interest in exercising his parental rights for over eleven years.<sup>17</sup> Courts assessing the facts at hand and determining what would be best for the child in the situation is known as the best-interest standard, and the child’s biological father attempted to claim that this standard was a violation of his Fourteenth Amendment rights. The opinion of the Court was authored by Justice Marshall, and joined by a unanimous Court. Interestingly, the Court is nearly identical in makeup in this case as the Court in *Stanley*. The only exception to this is Justice Douglas, who had left the Court by the time *Quilloin* was decided. He was replaced by Justice Stevens.

The Supreme Court ruled that the Georgia law, and more significantly the best-interest standard, was not in violation of either the Equal Protection or Due Process clause of the Fourteenth Amendment.<sup>18</sup> It was decided by the Court that the best-interest standard was a completely rational way to assess child custody in terms of adoption cases, although I believe that the best-interest

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<sup>14</sup> *Stanley v. Illinois*, 405 U.S. 645 (1972).

<sup>15</sup> *Quilloin v. Walcott*, 434 U.S. 246 (1978).

<sup>16</sup> *Ibid.*

<sup>17</sup> *Ibid.*

<sup>18</sup> *Ibid.*

standard ought to be expanded to include all child-custody cases. Interestingly, both Justice Burger and Justice Blackmun joined in the majority opinion on this case, while dissenting in *Stanley*.

### *Santosky v. Kramer*

We once again see the question of which standard ought to be used in regards to the rights of parents in *Santosky v. Kramer*, a 1982 case. At the time, the law of New York allowed for the State to terminate the rights of parents in their natural children, despite parental objection, based on the finding of permanent neglect.<sup>19</sup> The New York Family Court Act required only “a fair preponderance of the evidence” standard in cases of abuse and neglect.<sup>20</sup> Neglect proceedings were brought in Family Court against Santosky, in order to permanently terminate Santosky’s rights to her three children. Santosky claimed that the “fair preponderance of the evidence” standard was in violation of her Fourteenth Amendment Due Process rights. The opinion of the Court was authored by Justice Blackmun, and joined by Brennan, Marshall, Powell, and Stevens. A dissenting opinion was written by Justice Rhenquist, and joined by Chief Justice Burger, and Justices White and O’Connor.

The Supreme Court ruled that the fair preponderance of the evidence standard did violate the Fourteenth Amendment Due Process clause. Process is constitutionally due parents in state-initiated custody proceedings. The process due in parental rights termination proceedings must balance three separate factors. The first factor that must be balanced is the private interests affected by the proceedings.<sup>21</sup> The second factor is the risk of error created by the State’s chosen procedure.<sup>22</sup> The third factor is countervailing governmental interest.<sup>23</sup> The Due Process clause demands that the burden of proof used must reflect the weighing of all three of the factors listed. Because in custody proceedings, “the private interest affected is commanding, and the threatened loss is permanent,” the fair preponderance of evidence standard is not strict enough scrutiny to be considered constitutional.<sup>24</sup>

The Court goes on to elaborate on the appropriate level of scrutiny to be used in custody proceedings, saying that before a state can ever completely sever the rights of parents to their children, a “clear and convincing evidence” standard must be used.<sup>25</sup> This standard is a more strict level of scrutiny than the “fair preponderance of evidence” standard that the State had previously

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<sup>19</sup> *Santosky v. Kramer*, 455 U.S. 745 (1982).

<sup>20</sup> *Ibid.*

<sup>21</sup> *Ibid.*

<sup>22</sup> *Ibid.*

<sup>23</sup> *Ibid.*

<sup>24</sup> *Ibid.*

<sup>25</sup> *Ibid.*

been using. A fair preponderance of evidence is a very low burden of proof for the state to meet in order to permanently revoke the rights of parents. Clear and convincing evidence, on the other hand, is a higher burden of proof that the state must meet before they are allowed to revoke the rights of parents. Additionally, the *Santosky* case is responsible for a shift in the three realms of parental freedom and duty that were established in *Prince*. In *Prince*, these three realms are “the care, custody, and nurture of the child...”<sup>26</sup> The Court in *Santosky* changes these realms, first by referring to it as, “the fundamental liberty interests of natural parents,” as opposed to the idea of parental freedom coupled with duty that we see in *Prince*.<sup>27</sup> The Court in *Santosky* also shifts the three realms from care, custody, and nurture, to care, custody, and management of the child. It is the removal of the parents’ duty combined with the shift to a more authoritarian view of parental rights that contributes to the prolonged neglect of children.

In the dissenting opinion, Justice Rehnquist vocalizes that matters of family law should be left to the state’s to decide. He goes on to state that the majority opinion in this case leaves matters of state family law subject to federal intrusion. Furthermore, Rehnquist believes that the preponderance of evidence standard that New York had adopted was a, “good faith effort to balance the interests of parents against the legitimate interests of the child and the State.”<sup>28</sup>

### **Post-Santosky Jurisprudence**

The same year that *Santosky* was decided, another parental rights case, *Lehman v. Lycoming County Children’s Protective Services*, was also decided. Lehman, a mother, voluntarily placed all of her children into state custody, which resulted in the children being placed into the foster care system. As a result, the state of Pennsylvania permanently terminated Lehman’s parental rights due to the voluntary surrender of her children to the State. Lehman then made the claim that she ought to be able to invoke federal habeas corpus jurisdiction in order to challenge the Pennsylvania state statute under which her parental rights had been terminated.<sup>29</sup> The opinion of the Court was delivered by Justice Powell, and joined by Chief Justice Burger, and Justices White, Rehnquist, Stevens, and O’Connor. Justice Blackmun authored a dissenting opinion, which was joined by Justices Brennan and Marshall.

The Supreme Court ruled that federal habeas corpus jurisdiction cannot be invoked to challenge a state statute under which the custody of children has been taken and parental rights have been terminated. This is because of concerns regarding federalism. Matters of child custody and protecting children are typically left to states, and in our federalist system, the Court is nervous to overstep that boundary. On the state level, there is a strong need for finality in child custody

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<sup>26</sup> *Prince v. Massachusetts*.

<sup>27</sup> *Santosky v. Kramer*.

<sup>28</sup> *Santosky v. Kramer*, dissenting opinion.

<sup>29</sup> *Lehman v. Lycoming County Child Protective Services*, 458 U.S. 502 (1982).



matters. Granting federal habeas corpus would only prolong the uncertainty that children caught in custody proceedings already face.<sup>30</sup> This clearly stated desire to allow states' to take whatever course of action is best for the child mirrors the rationale of the Court that we see in *Quilloin*. In *Quilloin*, the Court rules that the best-interest standard is an acceptable measuring-rod by which states' can determine what is best for children involved in custody hearings.<sup>31</sup> *Lehman* reveals to us, years after *Quilloin*, a similar desire to insulate children from the trauma that can be associated with legal hearings. This seems indicative of children having some form of rights, although the Court has not yet defined where the rights of children are grounded in the Constitution.

The dissenting opinion, authored by Justice Blackmun and joined by Justices Brennan and Marshall, argues that the majority is reading the definition of "state custody" to be much more narrow than common law precedent actually says it is. The majority in *Lehman* changes the precedent of custody to mean unusual restraint not imposed on others.<sup>32</sup> By this definition then, foster children are not within the custody of the State, and this is what Justice Blackmun takes issue with. Additionally, Blackmun argues that in this case, the petitioner had not shown enough evidence to prove that she was capable of caring for her children. If she had been able to successfully prove this, then she would have been able to invoke the writ of habeas corpus to attempt to regain custody of her children. The dissenting opinion feels that the majority has overgeneralized, and that the writ of habeas corpus is allowable in matters of child custody, granted that the parent has satisfactorily demonstrated their fitness.<sup>33</sup>

In 1983, we see a case that is very similar to and upholds *Quilloin*. In *Lehr v. Robertson*, an unwed man fathered a child, but never had any sort of relationship with her or supported her financially in any way. When the biological mother of the child remarried, and her new husband filed to adopt the child, the biological father claimed that because he was never notified of the adoption, his Due Process and Equal Protection rights of the Fourteenth Amendment had been violated.<sup>34</sup> The opinion of the Court was authored by Justice Stevens, and joined by Justices Burger, Brennan, Powell, Rhenquist, and O'Connor. Justice White authored a dissenting opinion, which was joined by Justices Marshall Blackmun.

The Court ruled that neither Due Process nor Equal Protection had been violated. While parents do possess fairly extensive Due Process rights, there has to be some form of a relationship with the child in order for the parent to have Due Process rights. The Court stated that a biological connection to a child is not enough to invoke Due Process rights as they apply to parents.<sup>35</sup> It is for the same reason that the biological father's Equal Protection rights were not violated. If he had

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<sup>30</sup> *Ibid.*

<sup>31</sup> *Quilloin v. Walcott*.

<sup>32</sup> *Lehman v. Lycoming County*.

<sup>33</sup> *Lehman v. Lycoming County*, dissenting opinion.

<sup>34</sup> *Lehr v. Robertson*, 463 U.S. 248 (1983).

<sup>35</sup> *Ibid.*

demonstrated any sort of relationship with the child besides a biological relationship, then he would be able to make an Equal Protection claim. However, since he never gave the State of New York any reason to consider him a father under the State definition, his rights have not been violated and he cannot make Due Process or Equal Protection claims. Through *Lehr*, we learn that a biological connection alone does not automatically grant parental rights to the adults in the situation.<sup>36</sup> This echoes the ruling in *Quilloin*, reiterating the constitutionality of the best-interest standard, and adding to it the need for more than a biological claim to a child.

The dissenting opinion, however, says that a biological claim to a child is enough to warrant Due Process rights before any parental rights are terminated. By this logic then, *Lehr*'s Due Process rights had been violated, because he was never granted any opportunity to present his side of the case.<sup>37</sup>

It is not until seven years after *Lehr* is decided, in 1990, that the Court rules on another significant parental rights case. Nancy Cruzan, a young woman, was very severely injured in a terrible automobile accident. The accident left her in a vegetative state, meaning that although she still retained some motor functioning, she did not have any significant cognitive functioning.<sup>38</sup> Cruzan remained in a Missouri hospital after the accident, because she needed artificial nutrition and hydration to sustain her life. The state of Missouri was paying for her care, so Cruzan's parents were not incurring any costs due to the ongoing treatment of their daughter. However, Cruzan's parents requested that the hospital remove the artificial nutrition and hydration which was keeping their daughter alive. The hospital refused to do so, because it would guarantee the death of Nancy Cruzan. Cruzan's parents then brought suit against the state of Missouri, claiming that the Due Process clause of the Fourteenth Amendment ought to permit them to refuse life-sustaining treatment on their daughter's behalf.<sup>39</sup> The opinion of the Court for *Cruzan v. Director, Missouri Dept. of Health* was authored by Justice Rhenquist, and joined by Justices White, O'Connor, Scalia, and Kennedy. O'Connor and Scalia also wrote separate concurring opinions. Justice Brennan authored a dissent, which was joined by Justices Marshall and Blackmun. Justice Stevens wrote a separate dissenting opinion.

The Supreme Court ruled that Missouri's attempts to preserve human life by refusing to allow the Cruzan's to withdraw Nancy's medical care were constitutional, due to a lack of "clear and convincing evidence".<sup>40</sup> There was a lack of clear and convincing evidence, which would need to prove that Nancy Cruzan would not want life-saving measures to be taken if she were rendered incapacitated. In other words, because Nancy's loss of life would be irreversible, the clear and convincing evidence standard must be met in order to take away Nancy's right to life. While it does fall under Fourteenth Amendment Due Process rights for individuals to refuse medical treatment,

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<sup>36</sup> *Ibid.*

<sup>37</sup> *Lehr v. Robertson*, dissenting opinion.

<sup>38</sup> *Cruzan v. Director, Missouri Dept. of Health*, 497 U.S. 261 (1990).

<sup>39</sup> *Ibid.*

<sup>40</sup> *Ibid.*

the circumstances of the situation play a role in whether or not medical treatment can be refused. Persons who are rendered incapacitated and unable to make their own decisions, by nature of their situation, cannot refuse their own medical treatment. This right to refuse medical treatment then shifts to others involved in the situation, who can exercise that right on the behalf of the patient. However, the Court acknowledges that family members do not always act in the best interests of incompetent patients. Due to the irreversibility of these types of decisions, the Court ruled in favor of Missouri's heightened evidentiary requirements.

Justice O'Connor writes a concurring opinion in order to emphasize that the ruling of the Court only determines that the State's attempted preservation of Cruzan's life is not in violation of the Constitution. However, it is to be left to the individual State's to decide how to best preserve the liberty interests of incompetent people moving forward.<sup>41</sup> Justice Scalia also highlights this point in his concurring opinion, and elaborates by stating that the State's possess the power to prevent any form suicide, but that how to best handle cases such as the one at hand should be determined by local representatives rather than federal judges.<sup>42</sup>

Justice Brennan writes a dissent which is joined by Justice Marshall and Justice Blackmun. Justice Brennan dissents due to his belief that Nancy Cruzan still retains her right to refuse medical treatment, even if the decision will be irreversible.<sup>43</sup> He emphasizes that her incompetence does not deprive her of this right. Additionally, Justice Brennan believes that the State interest claimed by Missouri in this case is too broad.<sup>44</sup> The State has no legitimate interest in preserving the life of Nancy Cruzan outside of a general interest in the preservation of human life. The State may act as *parens patriae* for Nancy Cruzan, as they do in other cases of abuse, neglect, and incompetence. However, they may only do so to the extent of exercising her rights and honoring to the best of their ability what her wishes would be, if she were able to make the decision for herself.<sup>45</sup> Because the State cannot fully know what the wishes of every incompetent patient would be, the best basis for "clear and convincing evidence" is often the testimony of family members and friends. In this case, says Brennan, there has been no dispute over what Nancy Cruzan's wishes would have been, and so the State must respect her fundamental liberty right to refuse treatment as exercised by her parents.<sup>46</sup> Justice Stevens also writes a dissenting opinion, in which he reiterates this point, stating that "the Constitution requires the State to care for Nancy Cruzan's life in a way that gives appropriate respect to her own best wishes."<sup>47</sup>

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<sup>41</sup> *Cruzan v. Director, Missouri Dept. of Health*, Justice O'Connor, Concurring.

<sup>42</sup> *Cruzan v. Director, Missouri Dept. of Health*, Justice Scalia, Concurring.

<sup>43</sup> *Cruzan v. Director, Missouri Dept. of Health*, Justice Brennan, Dissenting.

<sup>44</sup> *Ibid.*

<sup>45</sup> *Ibid.*

<sup>46</sup> *Ibid.*

<sup>47</sup> *Cruzan v. Director, Missouri Dept. of Health*, Justice Stevens, Dissenting.

The decision in *Cruzan*, as well as the dissenting opinions, is particularly interesting in light of the *Santosky* decision in 1982. In *Santosky*, the Court established that the clear and convincing evidence standard must be met by the State in order to negate the rights of parents, because the interest of parents is commanding and the threatened loss is permanent.<sup>48</sup> This is also the argument made in the dissenting opinions of *Cruzan*.<sup>49</sup> The loss of rights for Nancy Cruzan's parents outweighs Nancy's loss of rights if her life is prematurely taken, say the dissenting Justices.

Alternatively, in the majority opinion of *Cruzan*, we see the Court apply the *Santosky*-era logic to the rights of children. Although Nancy Cruzan was no longer a minor, her incapacitation granted rights to her parents to direct her care, as though she were still a child. Rather than using the clear and convincing evidence standard to defend the Cruzan's choice to end their child's life, the Court uses the standard to defend Nancy's rights. The Court states that the Cruzan's bear the burden of proof, and must present clear and convincing evidence that Nancy would wish for them to withdraw her care.<sup>50</sup> Because the threatened loss of life is permanent, just as the threatened loss of rights is permanent in *Santosky*, the clear and convincing evidence standard must be met. *Cruzan* presents to us the same logic used to expand parental rights in *Santosky*, but applies it to the child. It is in this that *Cruzan* attempts to correct where *Santosky* fails to protect the rights of children. The necessity of a higher burden of proof gives us a glimpse of what rights children possess, and utilizes the same school-of-thought that is used to grant rights to parents. This ruling seems to hint towards the rights of parents and the rights of children not running counter to each other, but parallel.

### *Troxel v. Granville*

The final case in the line of jurisprudence regarding parental rights is *Troxel v. Granville*, which was decided in 2000. A Washington State law at the time permitted any person to petition for visitation rights to a child at any time, over parental objection, and the Washington courts were to grant visitation based solely on what would best serve the child's interests.<sup>51</sup> When Tommie Granville's husband passed away, her mother and father-in law petitioned for visitation rights with their granddaughters.<sup>52</sup> Tommie Granville did not object to the Troxel's having visitation rights, but she did object to the amount of visitation that was sought. It is also notable that Granville's parental fitness was never called into question, and the assertion that she was not a fit parent was never made. Despite Granville's objection, the superior court ordered more visitation than Tommie Granville wished for her children to have, and she appealed the ruling, claiming that the

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<sup>48</sup> *Santosky v. Kramer*.

<sup>49</sup> *Cruzan v. Director, Missouri Dept. of Health*, All Dissenting Opinions rely on the same argument originally presented by the Court in *Santosky*.

<sup>50</sup> *Cruzan v. Director, Missouri Dept. of Health*.

<sup>51</sup> *Troxel v. Granville*, 530 U.S. 57 (2000).

<sup>52</sup> *Ibid*.

Washington law was in violation of her Fourteenth Amendment right to rear her children as she saw fit.<sup>53</sup> The opinion of the Court was written by Justice O'Connor, and joined by Justices Rhenquist, Ginsburg, and Breyer. Justices Souter and Thomas both concurred in the judgement, and wrote separate opinions to express this. Justices Stevens, Scalia, and Kennedy all authored separate dissenting opinions.

The Supreme Court ruled that the Washington statute was in violation of the Fourteenth Amendment liberty rights of parents. The statute was determined to be far too sweeping, as it left no room at all for deference to parental discretion.<sup>54</sup> The Troxel's did not allege that Granville was an unfit mother, and no investigation or court ruling ever determined her to be an unfit parent. State involvement in parental decisions is only warranted upon the finding that a parent is unfit, and Justice O'Connor cites *Meyer*, *Pierce*, and *Prince* in order to support this claim.<sup>55</sup> Additionally, *Troxel* presents us with another shift in the three-realm standard that is first explained in *Prince*, and later modified in *Santosky*. *Prince* is responsible for the shift from parental liberty existing in the care, custody, and nurture of children to parental liberty existing in the care, custody, and management of children. *Troxel* changes the direction of the realms of parental liberty yet again, by making the claim that parents have a "fundamental right to make decisions concerning the care, custody, and control," of their children.<sup>56</sup> It is this shift from nurture, to management, to control, that gives parents far too much wiggle-room to completely dominate their children in a way that can lead to prolonged abuse before State intervention is seen as necessary.

Justice Souter writes a concurring opinion, claiming that the Supreme Court of Washington, who had invalidated the Washington law, were correct in their decision, thus leaving no need for the Supreme Court to expound upon this case.<sup>57</sup> Justice Thomas also concurs, due to the fact that he believes the standard of review to be too low.<sup>58</sup> Thomas states that strict scrutiny must be the standard of review in parental rights cases, since parental rights are fundamental rights. If strict scrutiny is applied to the Washington statute, it becomes clear that the statute is unconstitutional on its face.<sup>59</sup>

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<sup>53</sup> *Ibid.*

<sup>54</sup> *Ibid.*

<sup>55</sup> *Troxel v. Granville*. O'Connor uses these cases in order to reiterate the emphasis placed on parental liberty that the Court has recognized as Constitutional.

<sup>56</sup> *Ibid.*

<sup>57</sup> *Troxel v. Granville*, Justice Souter, Concurring.

<sup>58</sup> *Troxel v. Granville*, Justice Thomas, Concurring.

<sup>59</sup> *Ibid.*

Justice Scalia writes a dissenting opinion, expressing concern over the judicial branch determining what parental rights consist of and what constitutes harm to a child, when our Constitution mentions neither of these subjects.<sup>60</sup>

The dissenting opinions of Justices Stevens and Kennedy line up more closely with the concept of expanding children's rights that we see hinted at in previous cases. Justice Stevens writes a dissent, claiming that the Fourteenth Amendment does not prohibit States from considering how children will be impacted by the decisions of the adults charged with their care.<sup>61</sup> Parents, says Stevens, are sometimes responsible for arbitrary decisions that, regardless of intention, do not serve and are not motivated by the desire to do what is in the best interest of the child.<sup>62</sup> Justice Kennedy, in his own dissent, expresses similar concern that parents do not always do what is in the best interest for their children.<sup>63</sup> Kennedy believes that the best-interest standard does not always come into conflict with the Constitution, and is sometimes considered appropriate. Due to this belief, Kennedy believes that *Troxel* ought to be remanded to the State court for further proceedings, while allowing the best interest of the child standard to remain intact.<sup>64</sup>

### **Scholarship**

Among top scholars in the field of parental rights is Martin Guggenheim, a professor of Clinical Law at New York University. Guggenheim is the author of *What's Wrong with Children's Rights*, a controversial book that explores, in-depth, how children's rights are meant only to serve the interests of the adults around them.<sup>65</sup> He is also notorious for representing the petitioner in *Lehman v. Lycoming County Children's Services*.

Guggenheim is an outspoken scholar for the parental rights movement, and spearheads the argument that children do not need rights separate from their parents. This is because parents possess full-rights and practice them on behalf of their children, according to Guggenheim. He represents the push for parents to have complete freedom from the intrusion of the government, stating that a "minimum degree of care" is all that is required for parents to be considered fit.<sup>66</sup>

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<sup>60</sup> *Troxel v. Granville*, Justice Scalia, Dissenting.

<sup>61</sup> *Troxel v. Granville*, Justice Stevens, Dissenting.

<sup>62</sup> *Ibid.*

<sup>63</sup> *Troxel v. Granville*, Justice Kennedy, Dissenting.

<sup>64</sup> *Ibid.*

<sup>65</sup> Guggenheim, Martin. *What's Wrong with Children's Rights*. Cambridge, MA: Harvard University Press, 2005.

<sup>66</sup> Guggenheim, Martin. *What's Wrong with Children's Rights*. Cambridge, MA: Harvard University Press, 2005.

Absent the finding of unfitness, “parental childrearing decisions are virtually immune from state oversight.”<sup>67</sup>

Guggenheim centrally discusses the rights of children through the lens of positive and negative rights. Negative rights refer to freedom from government oppression, while positive rights refer to the freedom that is owed to citizens by the government. Guggenheim notes that while many, if not most, nations of the world operate based upon positive rights, the United States operates generally within the realm of negative rights. Guggenheim argues that while children do not have rights outside of their parents, if they did, there is only one right that would be significant for children to have. Children should possess the negative right to be free from government intervention within the family sphere, because this gives parents the freedom to raise their children without any restrictions.<sup>68</sup> Granting children this so-called right is actually an inadvertent way of granting parents the right to do as they please. Parents who are granted the freedom to raise their children without any government intrusion are more likely to do what is right for their child, claims Guggenheim, because the government cannot fully understand what is in the best interest of children in the way that parents can.<sup>69</sup> Guggenheim conflates children’s rights and parental rights in an attempt to reconcile the growing dichotomy between the two, without actually addressing the tension.

In addition to this, Guggenheim stands staunchly in opposition to the best-interests of the child standard. He claims that this standard only serves to create an invitation for government intrusion into the family, and leaves the family unit susceptible to court battles over differing views of what would be best for the child.<sup>70</sup> Guggenheim goes on to explain that the minimum degree of care required for parents to retain their custody rights is a better standard than the best-interest standard.<sup>71</sup> The best-interest standard grants the state too much power to declare a parent unfit just because the state disagrees with a parental decision.<sup>72</sup> The best-interest standard also fails to serve the purpose of protecting children, because children ought to feel secure in their parental relationships, and not fear that state intervention could remove them from the home.<sup>73</sup>

Justine Dunlap, a legal professor for the University of Massachusetts Law, is critical of Guggenheim’s interpretation of the state’s role in the family sphere. Guggenheim asserts that

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<sup>67</sup> *Ibid.*

<sup>68</sup> *Ibid.*

<sup>69</sup> *Ibid.*

<sup>70</sup> *Ibid.*

<sup>71</sup> Guggenheim, Martin. *What's Wrong with Children's Rights*. Cambridge, MA: Harvard University Press, 2005. Page 37.

<sup>72</sup> *Ibid.*

<sup>73</sup> *Ibid.*

absent a finding of parental unfitness, the state may not become involved with the family.<sup>74</sup> In other words, for Guggenheim, only a finding of parental unfitness warrants state intervention.

Dunlap correctly highlights that this assertion from Guggenheim is inconsistent with many years of jurisprudence.<sup>75</sup> Dunlap points out that both *Stanley* and *Santosky* are frequently used as support for the claim that a finding of parental unfitness is required before children come into state custody.<sup>76</sup> Dunlap then goes on to explain that neither of these cases actually hold that parental unfitness is a requirement that must be met in order for children to come into state custody. Rather, *Stanley* and *Santosky* address the procedural issues involved in child custody disputes, and ensure that parents are afforded Due Process rights prior to the termination of their parental rights.<sup>77</sup> Neither of these cases, says Dunlap, “decide what substantive allegations must be established.”<sup>78</sup>

## **Discussion**

Martin Guggenheim, in his claims defending parents, leaves children susceptible to abuse. Just as Dunlap suggests, Guggenheim interprets the *Santosky* ruling in an inherently flawed way. Guggenheim makes the claim that *Santosky* limits the State in its capacity to protect children, by prohibiting state involvement in the family sphere unless parental unfitness is determined. This simply is not true to the language of the case. *Santosky* does not forbid state intervention if the state has not demonstrated parental unfitness. The actual effect of *Santosky* is that it shifts the evidentiary standard that is required for the determination of parental unfitness.

As previously explained, *Santosky* is responsible for the determination that the fair preponderance of the evidence standard regarding parental fitness is unconstitutional. The fair preponderance of the evidence standard required only that the State reasonably be able to prove that the child was not being cared for by their parent. No one would deny that this is a very low bar which allows for the state removal of children from the home. However, rather than the Court simply invalidating the fair preponderance of the evidence standard, they go on to state that the standard that should be accepted is “clear and convincing evidence”.<sup>79</sup> This new standard raises the bar and imposes a more strenuous burden of proof on the state, and makes it more difficult to remove children from the custody of their parents.

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<sup>74</sup> Guggenheim, Martin. *What's Wrong with Children's Rights*. Cambridge, MA: Harvard University Press, 2005. Page 36.

<sup>75</sup> Dunlap, Justine A. “A Review of What's Wrong with Children's Rights: Still a 'Slogan in Search of Definition'.” *SSRN Electronic Journal*, 2007. <https://doi.org/10.2139/ssrn.2455811>. Page 190.

<sup>76</sup> Dunlap, Justine A. “A Review of What's Wrong with Children's Rights: Still a 'Slogan in Search of Definition'.” *SSRN Electronic Journal*, 2007. <https://doi.org/10.2139/ssrn.2455811>. Page 200.

<sup>77</sup> Dunlap, Justine A. “A Review of What's Wrong with Children's Rights: Still a 'Slogan in Search of Definition'.” *SSRN Electronic Journal*, 2007. <https://doi.org/10.2139/ssrn.2455811>. Page 201.

<sup>78</sup> *Ibid.*

<sup>79</sup> *Santosky v. Kramer*.



The clear and convincing evidence standard alone is a high enough standard to safeguard the rights of parents from state intrusion. Where *Santosky* goes too far is in the conflation of the fair preponderance of evidence standard and the best-interest of the child standard. The best interest of the child standard is the topic of the ruling in *Quilloin v. Walcott*, which was decided just four years earlier than *Santosky*.<sup>80</sup> The *Quilloin* opinion was unanimous, and determined that the best-interest standard was an acceptable means to an end.<sup>81</sup> In other words, the best-interest standard is a reasonable way for a state to attempt to determine what would be best for a child, and aids in the duty of the state to protect children from abusive situations.

While the *Quilloin* Court held the best-interest standard to be constitutional, the *Santosky* Court undoes this by ruling that the fair preponderance standard is unconstitutional. There is an assumption made by the *Santosky* Court that the best-interest standard and the fair preponderance standard are essentially the same, in that the best-interest standard does not meet the heightened evidentiary requirements that *Santosky* imposes. It is notable, however, that *Santosky*, unlike *Quilloin*, was not unanimous.

The dissenting opinion in *Santosky*, which was written by Justice Rhenquist and joined by Justices White, Burger, and O'Connor, is wary of invalidating the fair preponderance standard. Rhenquist views the fair preponderance standard as a type of iteration of the best-interest standard, which was deemed constitutional in *Quilloin*.<sup>82</sup> Rhenquist is adamant that the fair preponderance standard is a legitimate way for a state to assess parental fitness, and determine when state intervention on the behalf of the child is warranted.<sup>83</sup> Both standards are the result of the state attempting to protect children in a more full and effective way, and at one time, one of those standards was deemed constitutional and an appropriate exercise of state power. Neither should be seen as encroaching upon the rights of parents. This is why several Justices join in the dissent of *Santosky*, while they were in the majority of *Quilloin*.

The shift to the necessity of the clear and convincing evidence standard is what allows for later cases, such as *Troxel v. Granville*, to severely limit the capacity in which the state is able to intervene in the family unit. *Santosky* marks a shift in jurisprudence that has proven itself to be devastating for defending the rights of children. This is why *Santosky* must be overturned. We must return to a pre-*Santosky* vision of the evidence required for state intervention. *Quilloin* should be the cornerstone for all future cases concerning the rights of children, which would leave the best-interest standard intact. The only way to safeguard children from abuse while also protecting families is by allowing the state to consider what is best for each individual child, and involve the best-interest standard in the determination of parental fitness.

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<sup>80</sup> *Quilloin v. Walcott*.

<sup>81</sup> *Ibid.*

<sup>82</sup> *Santosky v. Kramer*, Justice Rhenquist, Dissenting.

<sup>83</sup> *Ibid.*

## **Conclusion**

The U.S. has a long and complicated history in regards to parental rights cases. The state still retains the ability to determine parental fitness and become involved in the family unit. However, hundreds of years of jurisprudence have severely limited their ability to do so, and I believe that the first case to severely limit the ability of the state is *Santosky v. Kramer*. *Santosky* places an undue burden of proof on the state in order for intervention on behalf of the child to be considered constitutional. However, the *Santosky* framework leaves children susceptible to prolonged neglect, abuse, and years of state proceedings prior to removal. It is for the protection of our children that *Santosky* must be overturned, and we must revert to a *Quilloin* vision of the standard required to be used in cases regarding matters of child custody.

Summer 2020

# Analyzing Rates of Gas-Phase Reactions Between Hydroxide Radicals and Organic Compounds

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## Abstract

*Hydroxyl radicals play an important role in the atmosphere. They function as a detergent for the chemicals in the atmosphere by reacting with harmful compounds to make them harmless. This is a preliminary experiment in which the desired outcome is to determine the methodology that yields desired results when compared to previous published data. Determining this methodology gives the potential to conduct future experiments. Gas-phase compounds were injected into a Teflon bag which is inside a wooden chamber with UV light bulbs inside. Samples taken from this reaction chamber were collected with a Tenax sorbent and injected and analyzed with a Gas Chromatograph (GC) with a Flame Ionization Detector (FID). The Tenax was heated or cooled to a range of temperatures in multiple combinations to determine a collection and injection temperature which produced desirable results. Hexane and heptane were the organic gases used. These two compounds were used because a linearity of collected sample present associated with an increase of amount of sample, signifying that all of the sample was being collected on the Tenax without a significant amount escaping. Urea-H<sub>2</sub>O<sub>2</sub> was decomposed and the dissociated H<sub>2</sub>O<sub>2</sub> was injected into the reaction chamber. Hydroxyl radicals were produced when the H<sub>2</sub>O<sub>2</sub> was exposed to the UV light inside the chamber. The reaction between the hydroxyl radicals and the organic gases were measured with the GC. Using the Relative Rates Method of reactions, the ratio of the rates of hydroxyl radicals with heptane and hexane produced was an average of 1.338. The ratio in comparison was 1.3. With this comparison, the methodology used produced a result within a desired range of precision.*

**Introduction:** Hydroxyl (OH) radicals play an important role in the atmosphere and the human body. OH radicals are primarily created from hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>). In the atmosphere, these radicals act as a detergent, meaning they react with harmful compounds and cleanse the atmosphere.<sup>1</sup> The purpose of this experiment is to determine the rates of the reactions between OH radicals and organic compounds in the gas phase by first measuring the rate of the reaction using the Relative Rates method. This experiment is the initial step in analyzing the mechanism of OH radical reactions.

**Procedures:** The organic compounds used were phenol, isopropanol, 1-butanol, hexane, and heptane. These compounds were injected into a heated joint to cause evaporation and injected into a reaction chamber via compressed air flow. The reaction chamber consists of a Teflon bag which is enclosed in a wooden chamber with UV light bulbs inside. The reaction chamber is connected to a Gas Chromatograph FID (GC) via Teflon tubing. Samples were obtained by a pump and collected on a tenax sorbent. The tenax was kept at the desired temperature during collection and heated during injection into the GC. The desired temperature of the collection/injection process was determined by a linearity shown by a positive correlation when graphing an integration of the signal produced on the chromatogram versus a corresponding time increment. Once this linearity was shown, the effects of the reaction could be measured properly. Linearity was only achieved with hexane and heptane. Phenol, isopropanol, and 1-butanol did not provide linearity and were not used for further experimentation.

Urea H<sub>2</sub>O<sub>2</sub> was added to a bubbler which was inside a heating block. As the urea H<sub>2</sub>O<sub>2</sub> was heated, H<sub>2</sub>O<sub>2</sub> gas was created and injected into the reaction chamber via air flow. OH radicals

were produced by turning on the UV light bulbs inside the reaction chamber from the severing of the O-O bond in H<sub>2</sub>O<sub>2</sub>. The UV light was turned on for varying time increments (a longer time meaning more OH radicals were created). All samples after the OH radical creation were taken at a total collection time of 4min (4min provided enough signal to show decreases in the organic gasses for data measurement). Prior to the addition of H<sub>2</sub>O<sub>2</sub>,

The Relative Rates method of reactions was used to determine the rate of the OH radical reactions with hexane and heptane. The formula for the Relative Rates method is shown in Equations 1-7.

Equation 1: The ratio of rate of the reaction (r) divided by the product of the rate constant (k) and the initial concentration of the corresponding compound [A0] or [B0]

$$\frac{(ra)}{(k1)[A0]} = \frac{(rb)}{(k2)[B0]}$$

Equation 2: The rate of a reaction is defined as the change in concentration divided by the change in time

$$(ra) = \frac{d[At]}{dt} \quad \text{and} \quad (rb) = \frac{d[Bt]}{dt}$$

Equation 3: The substitution of the expression of rate

$$\frac{\frac{d[At]}{dt}}{(k1)[A0]} = \frac{\frac{d[Bt]}{dt}}{(k2)[B0]}$$

Equation 4: The value for change in time (dt) is the same in both equations since the reactions for each compound occur simultaneously. Thus, the ratio of time variables is 1.

$$\frac{d[At]}{(k1)[A0]} = \frac{d[Bt]}{(k2)[B0]}$$

Equation 5: Integration of Equation 4

$$\frac{1}{(k1)} \{ \ln [At] - \ln [A0] \} = \frac{1}{(k2)} \{ \ln [Bt] - \ln [B0] \}$$

Equation 6: Equation 5 simplified

$$\frac{1}{(k1)} \left( \ln \frac{[At]}{[A0]} \right) = \frac{1}{(k2)} \left( \ln \frac{[Bt]}{[B0]} \right)$$

Equation 7: The desired ratio of the two rate constants expressed in terms of the experimental values

$$\frac{(k2)}{(k1)} = \frac{\left(\ln \frac{[Bt]}{[B0]}\right)}{\left(\ln \frac{[At]}{[A0]}\right)}$$

The natural logs of the values of the final concentration with respect to the initial concentration ( $\ln[At]/[A0]$  and  $\ln[Bt]/[B0]$ ) were taken. These values were then plotted against each other with the ratio of the values being the slope.

**Results:** Samples of hexane and heptane were collected at increasing time increments. In order to determine if the tenax sorbent was absorbing all of the collected sample or if some sample was pushing through the tenax, a plot of the integrated area of the peaks referring to the specific compound versus the corresponding time increment for that sample. The collection temperature and injection temperature had to be determined by trial-and-error. These linear relationships are shown in Figure 1 and Figure 2. The most preferable collection temperature was 30°C and the most preferable injection temperature was 70°C. The linearity was supported with the  $R^2$  value for hexane samples and heptane samples being 0.9988 and 0.9977 respectively. Other collection and injection temperatures were deemed undesirable due to the lack of linearity.

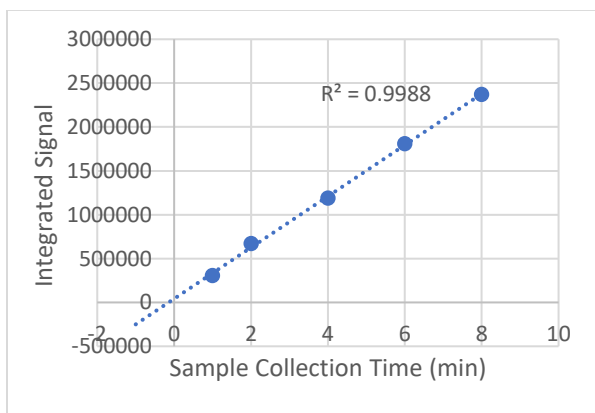


Figure 1: Signal amount vs. Sample time graph for hexane

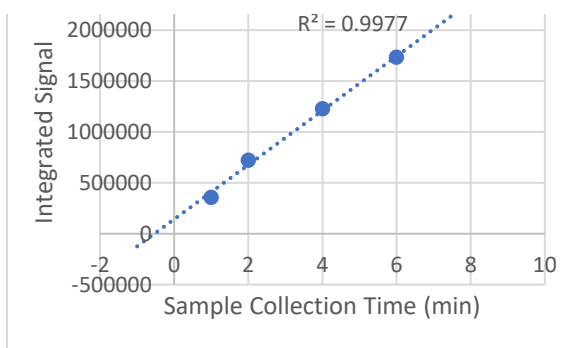


Figure 2: Signal amount vs. Sample time graph for heptane

The sample after the reaction of the OH radicals was collected at a constant sample time of 4min in duplicate. The natural logs of the values of the final concentration with respect to the initial concentration ( $\ln[A_t]/[A_0]$  and  $\ln[B_t]/[B_0]$ ) were plotted against each other as shown in Figure 3. The value of the slope shown in the graph in Figure 3 is the ratio of the rate constant of heptane (2, B) to hexane (1, A) as defined in Equation 7. The ratio of the rate constants, slope of the line, was 1.3255. This same procedure was repeated two additional times with the slopes of those lines being 1.3979 and 1.3606.

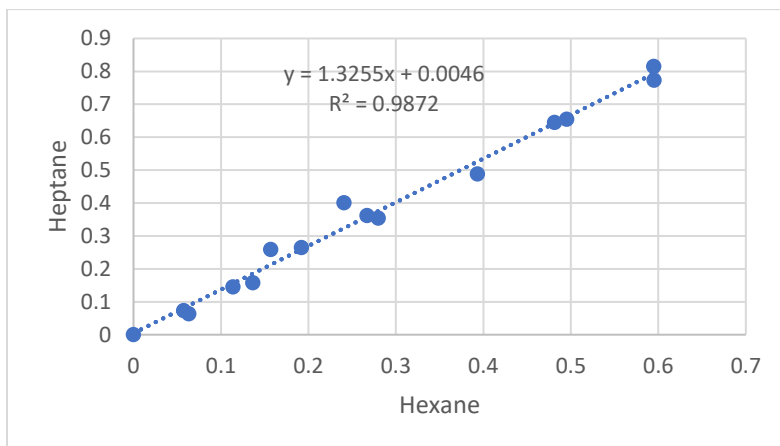


Figure 3: Natural logs of the values of the final concentration with respect to the initial concentration for hexane vs. heptane. The slope of 1.3255 indicated in the line equation corresponds to the ratio of heptane to hexane.

**Discussion:** This experiment was key to determining the correct procedure to use for the OH radical reactions for additional use of this experiment for future research. The linearity shown in Figure 1 and Figure 2 provided support for the 30°C collection and 70°C injection temperatures. The previously mentioned phenol, isopropanol, and 1-butanol did not provide linearity and thus were not used for OH radical reactions. The results from the graph representation in Figure 3 were encouraging when compared to the theoretical ratio of the hydroxyl radical rate constants. The rate constant for hexane + OH, obtained from Nist Kinetics, is  $5.38 \times 10^{-12}$ .<sup>2</sup> The rate constant for heptane + OH, also obtained from Nist Kinetics, is  $6.73 \times 10^{-12}$ .<sup>2</sup> Therefore, the ratio ( $k_2/k_1$ ) of rate constant of heptane to that of hexane is 1.250. The average of the three ratios of the experimental data (1.3255, 1.3279, 1.3606), represented in Figure 3, is 1.338 with a calculated average of  $\pm 0.02546$  standard error. This data comparison provides support for the experiment, but still shows that some changes may be necessary to shorten the discrepancy between the two ratios. This research provides a good foundation for future research using these methods for analyzing the mechanism of OH radical reactions in the gas phase.

## References

1. <https://pubs.acs.org/doi/pdf/10.1021/cr500310b>
2. <https://kinetics.nist.gov/kinetics/ReactionSearch?r0=110543&r1=3352576&r2=0&r3=0&r4=0&p0=-10&p1=0&p2=0&p3=0&p4=0&expandResults=true&>



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Volume 3

Article 7

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## High School Band and Social-Emotional Health: What Students are Saying

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## Table of Contents

<i>Abstract</i> .....	<b>90</b>
<i>Introduction</i> .....	<b>90</b>
<i>Literature Review</i> .....	<b>90</b>
<b>Music Learning Benefits</b> .....	<b>91</b>
<b>Psychosocial Benefits</b> .....	<b>92</b>
<b>Conclusion</b> .....	<b>94</b>
<i>Methodology</i> .....	<b>94</b>
<b>Limitations</b> .....	<b>95</b>
<i>Results</i> .....	<b>96</b>
<b>Quantitative Data</b> .....	<b>96</b>
Coping Mechanisms .....	96
Community .....	97
Social Development.....	99
Self-Efficacy.....	100
<b>Qualitative Data</b> .....	<b>101</b>
Coping Mechanisms.....	102
Social Development.....	102
Identity .....	102
Self-Efficacy.....	103
Memorable Experiences .....	104
<b>Conclusion</b> .....	<b>104</b>

## Abstract

*Music education across America has been federally supported in public school systems since 1963 for the benefit of students (K12academics.com, July 6, 2020). Increased academic achievements are researched synonymously in music students, but there is a lack of research into the social and emotional development benefitting students specifically in public high school band. This study is a self-assessment of participating local Tennessee public high school band students in order to help researchers determine if there are social and emotional health benefits gained by students participating in school band class. A total of 81 high school band students completed a self-reporting survey that evaluated their experiences in high school band. Students filled out a 16-question survey, which entailed Likert-scale questions and 5 open-response questions. Results indicate that most students reported experiencing social and emotional development during their time in band by developing close friends, increased self-confidence, and a variety of other experiences expressed by students.*

## Introduction

The purpose of this study is to investigate students' self-perception of their social and emotional wellbeing as a result of participation in band. The intent of this research was to use students' self-reported data to examine possible effects as a result of participating in high school band, and what those effects may have on students' social and emotional health. This study is a self-assessment of local band students in order to determine if there are social and emotional health benefits which students gain by participating in school band. The 81 band students surveyed are participants in four local high school band programs who are in their first through eighth or more semester(s) of band class. This project utilizes a researcher-developed survey in order to examine student participation in high school band. The research tool was designed to assess potential findings of social and emotional benefits that the band students report to have experienced from their participation in band. It is commonly accepted that students' participation in band increases their academic success. However, this research study intends to investigate students' self-reported experiences in social and emotional development.

## Literature Review

The research that supports the US Congressional statement that music belongs in the curriculum of American students has been primarily based in the research findings suggesting that participation in school band enhances students' academic achievements, attendance, and their social behaviors (Trandahl, 2004). In the past few decades, researchers have come to discover other findings outside the scope of how academics are improved and have considered additional benefits that music classrooms can have on students (Trusty & Oliva, 1994). Benefits unrelated to test scores or reading skill improvements include the development of students' coping mechanisms, self-concepts, self-confidence, and self-efficacy; to mention a few. An intentionally unbiased

representation of research in the music field, specifically affective and academic, is provided within this literature review. The primary focus is on the assertion that participation in learning music can potentially benefit students' social and emotional wellbeing.

The literature review examines pre-existing studies pertaining to music education and identifies research studies that measure to what degree that it is or is not beneficial to students' ability to cope, gain efficacy, and manage their emotions to list a few. The literature addressing music education and academic achievement is plentiful; however, there appears to be a lack of research on the matter of interpersonal skills (i.e. coping, cognitive behavior) and social development of students participating in high school band.

### **Music Learning Benefits**

The relationship between music education and academic achievement historically stems back as far as the Ancient Greeks (Seaton, 2017). In recent years, members of the American education system looked to pillars such as Horace Mann, who pushed for the inclusion of music in the core curriculum. One argument for music education is supported by evidence that inferred increased SAT scores (Vaughn & Winner, 2000), and another study with evidence of increased math and reading standardized test scores in comparison to data sets of varying students' socioeconomic status, parent participation, and music involvement (Southgate & Roscigno, 2009). Additionally, Catterall, Dumais, and Hampden-Thompson (2012) conducted a study that evaluated similar criteria, socioeconomic status (SES) and compared it to academic data and student success in college. The afore-mentioned study revealed findings which were statistically significant; concluding that students who had met the defined criteria of music participation had overall better test scores. These students' scores improved in writing and science, higher-level math, and overall grade point averages had increased. Lastly, the students were more likely to complete college than students who did not participate in music engagement (Catterall et al., 2012). Catterall et al., (2012) asserted, that "Arts engaged high-school students enrolled in competitive colleges and in four-year colleges...at higher rates than did low-engaged art students" (p. 15). Figure 1 displays such results

with graphs from two different data sources, adapted from Catterall et al.'s findings.

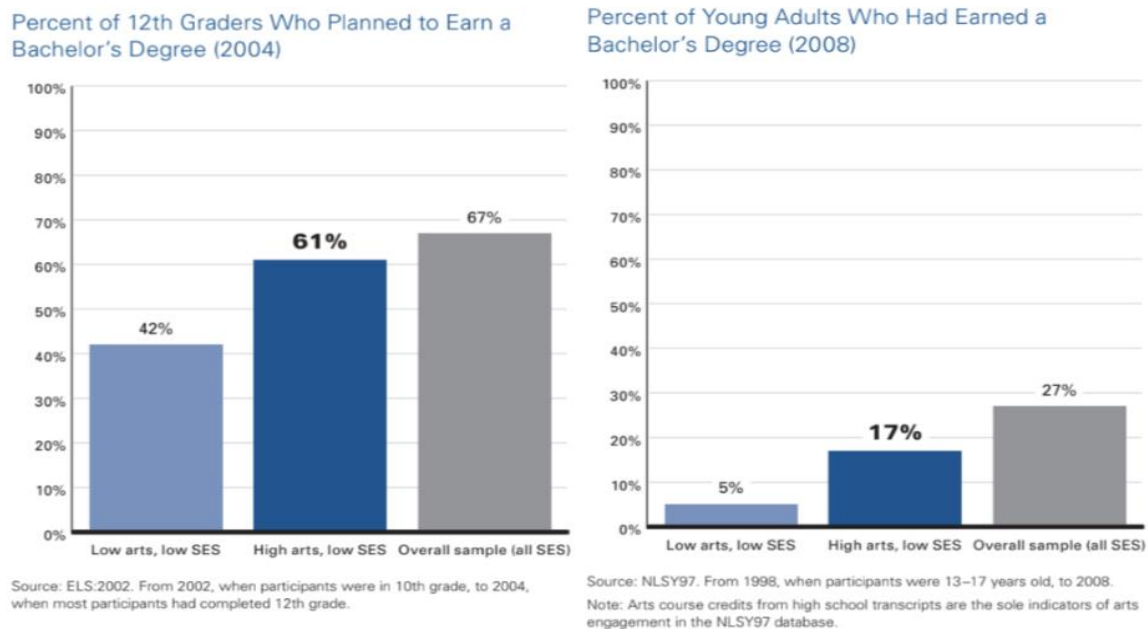


Figure 2 - Catterll et al. Findings (2012)

Moreover, their research found that 94% of the groups that were highly engaged in the arts went on to obtain higher-education degrees compared to 76% in the low-arts with high SES category. These data support the theory that there is an association between music education and academic achievement. However, Catterall et al. (2012) also suggested that the impact is more than academics, stating that “...children and teenagers who participated in arts education programs have shown more positive academic and social outcomes in comparison to students who did not participate in those programs” (p. 8). In the Catterall et al. (2012) study, the psychosocial implications are also recognized.

### Psychosocial Benefits

Although the assertion that music is beneficial in academic, social, and cognitive aspects, studies have supported the idea that music can have an impact, and others have suggested no impact. Miranda and Claes (2009) stated that, “In terms of music listening as problem-focused coping, it is conceivable that music listening can be used deliberately by adolescents in order to reflect upon the resolution of stressful situations they confront” (p. 218).

The concept of using music as a tool to utilize in the developing of students' emotional wellbeing is well supported by music researchers Duerksen and Darrow (1991). Their article in *Music Educators Journal* specifically argues for the benefits of music class for “at-risk” students. These students are classified as students who are not handicapped, but are frequently truant, lack self-confidence, and have no sense of belonging in school among many other symptoms. This team argues that, “Students are more likely to attend school if they perceive it as a positive place to be. ...Music classes can provide a positive setting in which students can learn and practice self-discipline” (p. 47). A further assertion from this study declares that music class is a place students

can learn consistent attendance, conformity, obtain a sense of belonging, and gain confidence to achieve nonmusical goals. Students have reasons they struggle in school; however, many of them are due to negative emotional and physical wellbeing. Duerksen and Darrow charge the teacher here, giving them responsibility to help relieve students of these anxieties, “Music teachers can again help alleviate these problems...For them (the students) music performance can function as a vehicle for the personal expression of moods, attitudes, and feelings” (p. 48).

Contrastingly, a school-based music instruction study was conducted with students aged ten to thirteen revealed no significant findings of non-music benefits, specifically psychosocial or cognitive benefits. The study also presented a decline in motivation for these classes, the authors suggesting that participation in any extra-curricular activities are beneficial to students; thereby, not limiting the benefits to musical learning (Rickard, Bambrick, & Gill, 2012). According to Rickard et al. (2012), “In contrast to previous research . . . no convincing benefits of school music classes were apparent” (p. 57). Another study (Dosseville, Laborde, & Scelles, 2012) includes individual music lessons, and background music for classroom study concluded that music had no reliable results for the Mozart effect. By definition, the Mozart effect is an effect caused by playing background music in the classroom to improve students’ spatial abilities. Study findings determined that music lessons also had no impact on academic benefits but a slight increase in spatiotemporal reasoning. The study led the researchers to conclude that music was beneficial for cultural awareness but not for academic growth (Reimer, 1999). Zillmann and Gan (2003) contend that, “The fact that a cultural product, music, can serve as the defining, central condition in the formation and organization of interactive groups has led to the idea of . . . youth cultures that are rather independent of social-class standing” (pp.171-172). This represents the concept that music is beneficial in that people from different social backgrounds can experience bonding through a song they both enjoy listening to.

Research supports the benefits of music in other aspects than academics. Students involved in music have peer groups that are academically oriented and can lead to other extracurricular participation. Within the studies represented in this literature review, students demonstrated a “safe space” experience and social bonding through the shared goal of creating music (Parker, 2010). A student interviewed by Parker (2010) describes their perception as, “...a good place to come and say, ‘oh good I have chorus’...it is a good place to let things go.” (p. 348). According to Parker, these “social club” member benefits do not stop with student to student interaction but cause teens to have more parental involvement in their school life, and are more likely to talk to their parents, teachers, and peers. These activities lead to students with a better developed self-esteem and ability to focus (Southgate & Roscigno, 2009). Przybylska-Zielin’ska (2018) supports research by Nowak (2014), stating that,

...her data analysis confirmed a strong impact of music on children’s emotional and social development: the children became more courageous, perceived other people’s needs, were more independent, learned perseverance as well as responsibility for themselves and others (p. 73).

A study dissecting the social-emotional impact of instrumental music on students completed by Devroop (2012) asserts that, “The results from this study provide evidence that self-esteem,

optimism, happiness and perseverance increased after participation in the instrumental programme” (p. 414).

## Conclusion

Research on music education has revealed possible benefits to students’ emotional and social wellbeing. When referring to the research of music, the sample sizes, Social Economic Status (SES), defining the levels of students’ participation in music, and duration of the studies conducted each play a role in determining the outcome of the research. The social interaction a student gains from participating in music groups and/or listening to music has been identified as beneficial for coping, cognitive development, and social development (Miranda, Catteral et al). Participation in music improves students’ probabilities of more consistent school attendance, going on to higher-education, and completing a bachelor’s degree in comparison to students who have not engaged in music participation (Duerkson and Darrow, Catteral et al). These significant developments to the congenial characteristics of students could potentially improve students’ academic performance as well. The literature published on the matter of music enhancing academics with students is plentiful; however, there is minimal recently published literature regarding the impact of students’ social and/or psychological benefits when participating in school band. Therefore, there is a noticeable need for future research on music education and students’ emotional wellbeing. Additionally, researchers can include research into students’ testing scores potentially being a direct result of their increased self-confidence and self-efficacy.

## Methodology

This study examines students’ responses addressing the following research questions:

1. How do students describe their ability to navigate social interactions required through participation in school band?
2. Do students agree or disagree that school band is a personal coping mechanism?
3. Does participation in school band contribute to students’ self-efficacy?
4. How does the ensemble experience of school band impact the students’ perception of community at school?

In order to answer the aforementioned research questions, a mixed method survey was created. The population for this study is high school students participating in their school band program. A purposive sample of 25 band directors in the Cleveland and Chattanooga area of East Tennessee were recruited through email for consent to implement surveys and interviews of their students. The population of student responses totaled 118 students; with 81 students fully completed responses representing a 70% response rate. The 37 incomplete survey responses were not used in analyzed results. A link to the survey was emailed to participating band directors for distribution to their band students via SurveyMonkey. Students took approximately 5-10 minutes to complete it online. The survey included a demographic section, Likert scale prompts, and open response questions. The demographic section was multiple choice with the option of ‘prefer not to say’. The Likert scale prompts were a repeated question four times in a row, with four different subheadings each time. This was to make sure each of the four individual research questions had four representative questions in the prompt. For example, this graph below is taken directly from the

survey. Question number nine attempts to answer the research question, “Does participation in school band contribute to students’ self-efficacy.” Four supportive questions were asked in order to answer the research question.

\* 9. I believe participation in school band has resulted in my...

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
...developing perseverance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...understanding myself better	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...feeling a sense of progress	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...often makes me feel more confident	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 10. I believe participation in school band has resulted in my...

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
...feeling closer to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...able to be more cooperative with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...having a sense of belonging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...makes me feel safe at school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Likert responses data were collected to see the average response, as were open-response questions were also analyzed in order to find shared themes from students comments about band. To analyze the data, Likert scale responses were collected in pie charts of student responses. Students’ open responses were printed out, common themes highlighted, and then grouped to separate individual anonymous responses. Then responses were sorted by their corresponding question in order to make sure no responses were accidentally mixed up from a different question. Once organized, the responses were physically separated into groups of commonly themed answers.

### Limitations

The study was to include randomly selected band students for focus group interviews in person. Due preventative measures in response to the Covid-19 virus, school closings prevented in person interviews with the students. The lack of in person interviews has limited students’ response ability, instant feedback, and student interaction with one another in conversation about band. Covid-19



school closures have likely also affected overall response rates as all surveys were to be distributed and collected in person as paper copies. Not all students have access to internet or electronic devices at home, which could have restricted student responses. The lack of focus group interviews also prevented in depth study of students' reasons for neutral responses found in the Likert prompts. The number of neutral responses on the Likert scale section was bigger than, in some cases, agree or disagree responses, indicating that students may have found these questions unclear. Another possible limitation of the survey being online and anonymous is that students did not actually receive parent permission, as well as their ability to accurately convey their perceptions to each question truthfully.

## **Results**

### **Quantitative Data**

The number of participants (N=81) total 52 females and 29 males. The ethnicity demographic was dominantly Caucasian at 77.78%, while other ethnicities such as African American, Latino, Asian, etc., were represented by 6.17% or less per ethnicity. An important question asked in the demographic section was that of how many semesters the students reporting participating in school band. A total of 53 students (65.43%) reported being in band 8 or more semesters, while 19 students (23.46%) reported membership as four or more semesters, while the remaining 9 students were representative of three semesters or less. This indicates that respondents have spent a lengthy amount of time in band and have many possible positive and negative experiences. The 81 students recorded quantitative data make up each graph below based on their Likert scale responses. Large percentages of data, such as students strongly agree or agree, have been combined in some instances due to the frequency of responses. The results are divided into four categories: coping mechanisms, community, social development, and self-efficacy.

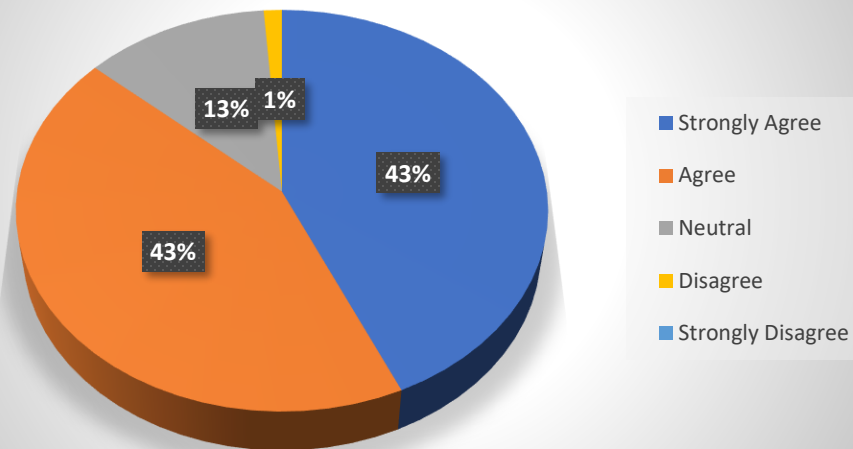
### **Coping Mechanisms**

Students were provided with the following question. "I believe participation in school band has resulted in my ability to":

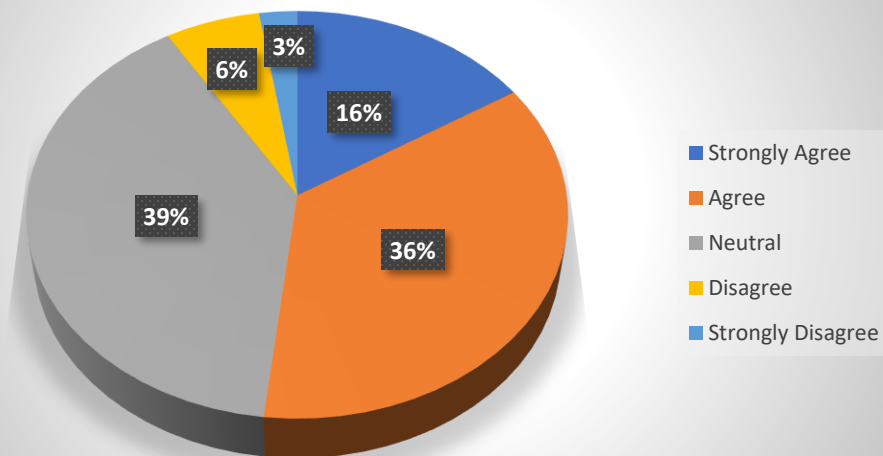
- Manage my emotions, such as anger or sadness
- Express my feelings appropriately
- Think more clearly
- Adapt to unplanned events better

This question in the survey received large percentages of neutral responses. Student responses to managing their emotions contained a 48.1% agree or strongly agree response, a neutral response at 38.3%, disagree 9.9%, and strongly disagree as 3.7%. The question of expressing feelings appropriately yielded a 51.8% agree or strongly agree, 39% neutral, and 7.7% disagree or strongly disagree. Students reported that 76.6% agreed or strongly agreed that band helped them think more clearly, with 17.3% feeling neutral and 5.1% as disagree or strongly disagree. Students largely agreed that band helped them adapt to unplanned events better as an equal number of students agreed or strongly agreed at 43% each, leaving 13% neutral, and 1% disagree.

### Adapt to Unplanned Events Better



### Express My Feelings Appropriately



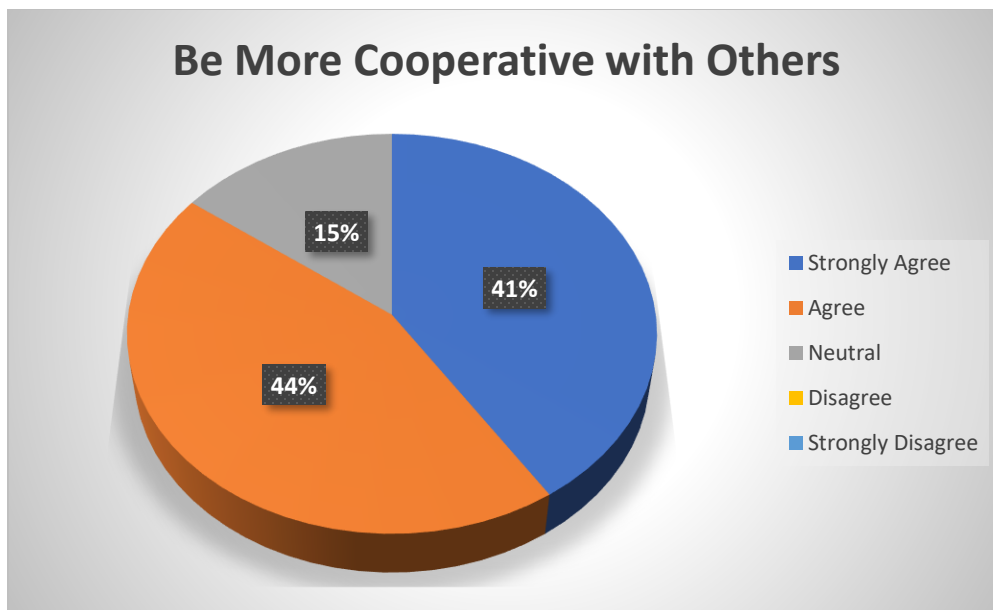
### Community

Students were given a set of the following questions which they were to respond. The question, “I believe participation in school band has resulted in my”:

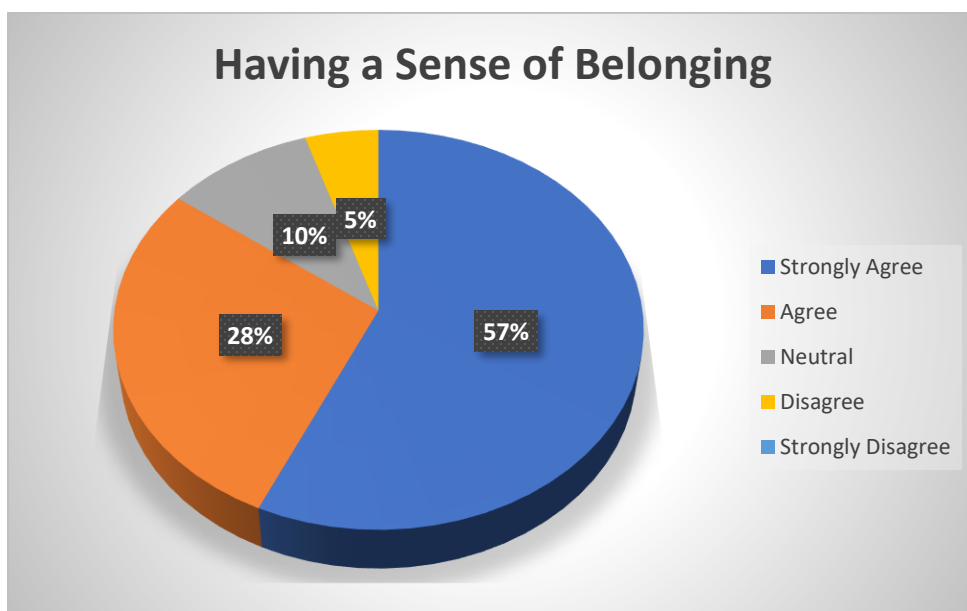
- Ability to feel closer to others
- Ability to be more cooperative with others
- Having a sense of belonging

- Feeling safe at school

Two of these graphs were representative of the overall data. 85% of students strongly agreed or agreed that they perceived participation in school band helped them cooperate with their peers. The data showed a similar response to the question of feeling closer to others with approximately 80% of students reporting they agreed or strongly agreed with that statement. The remaining data displayed 17.3% of students were neutral and the remaining 2.5% of students disagreed.



A majority of students (85%) reported strongly agree and agree to having a sense of belonging in school band, while 10% of students were neutral and the remaining 5% disagreed with the statement. The results were different for students responding to feeling safe at school with 76.5% strongly agree or agree, neutral responses at 19.8%, with 3.7% either disagree or strongly disagree.

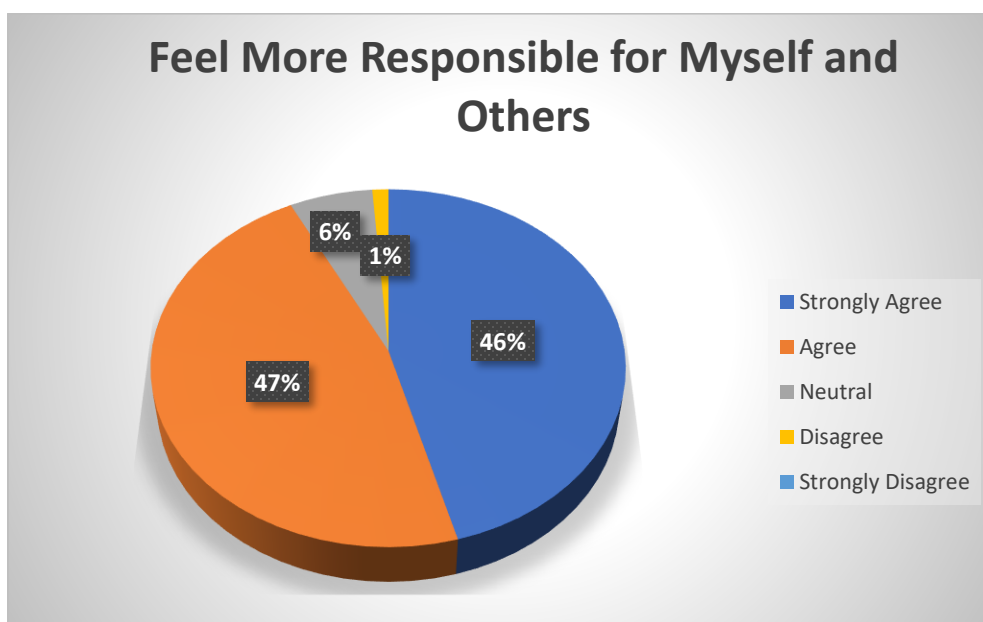


## Social Development

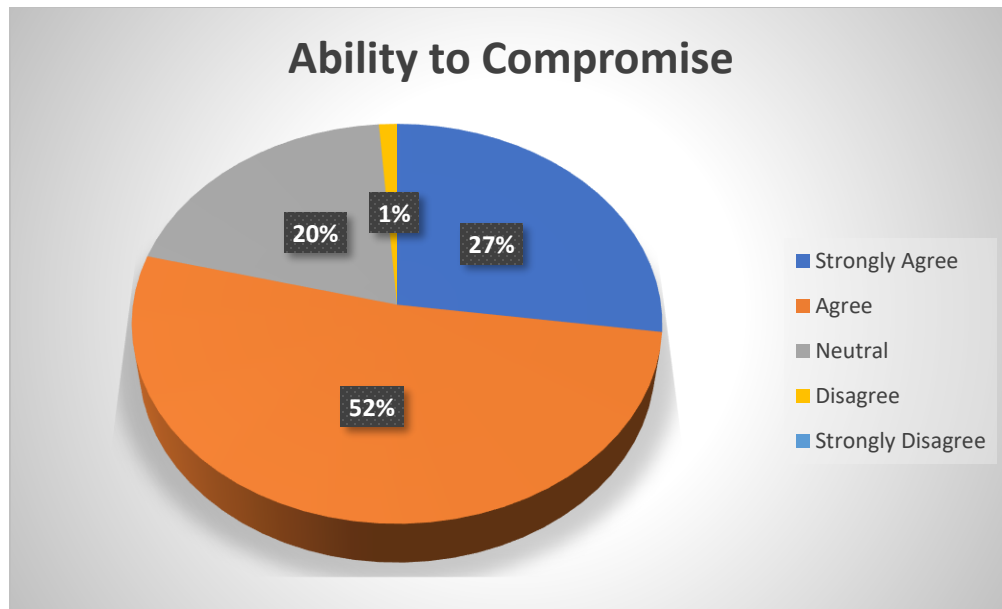
The questions asked of students was, “I believe participation in school band has resulted in my ability to:

- Make friends
- Feel more responsible for myself and others
- Learn to compromise
- Have better relationships with peers

Most students (91.4%) feel as if band helped them make more friends, while 7.4% of students felt neutral in band effecting their ability to make more friends, and 1.2% strongly disagreed. A total of 93% of students strongly agree or agree that being in band has developed their ability to feel more responsibly for themselves and others, while 6% remain neutral and 1% disagreed. Developing the ability to compromise in band is either strongly agreed or agreed by 79.1% of students, leaving a remaining 19.8% of students neutral and 1.2% disagree.



Lastly, student responses totaled 83.9% of students perceived that their participation in band caused them to develop better relationships with peers, with 11.1% of students neutral, and 4.9% of students disagree or strongly disagree.

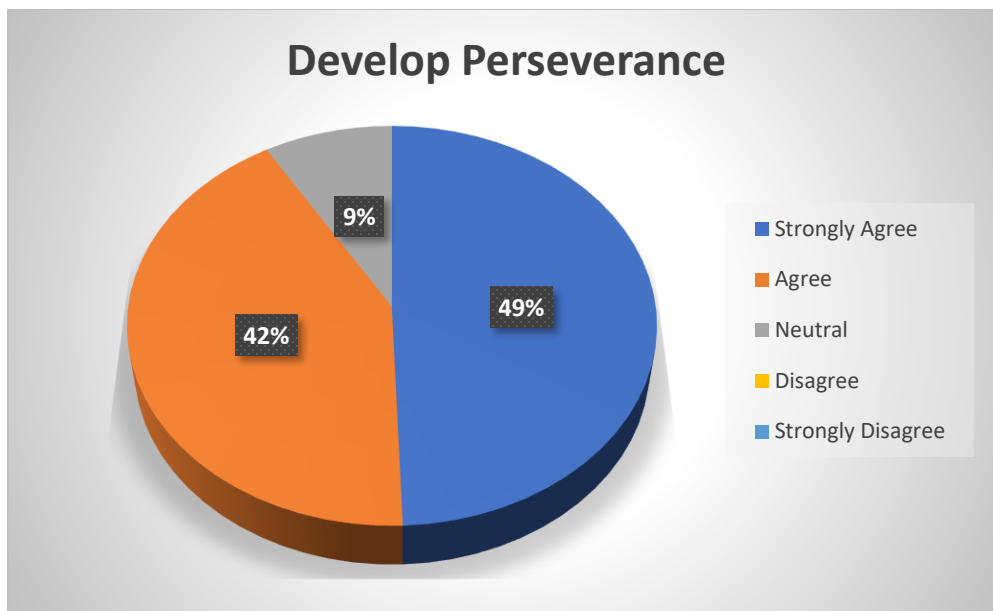


### Self-Efficacy

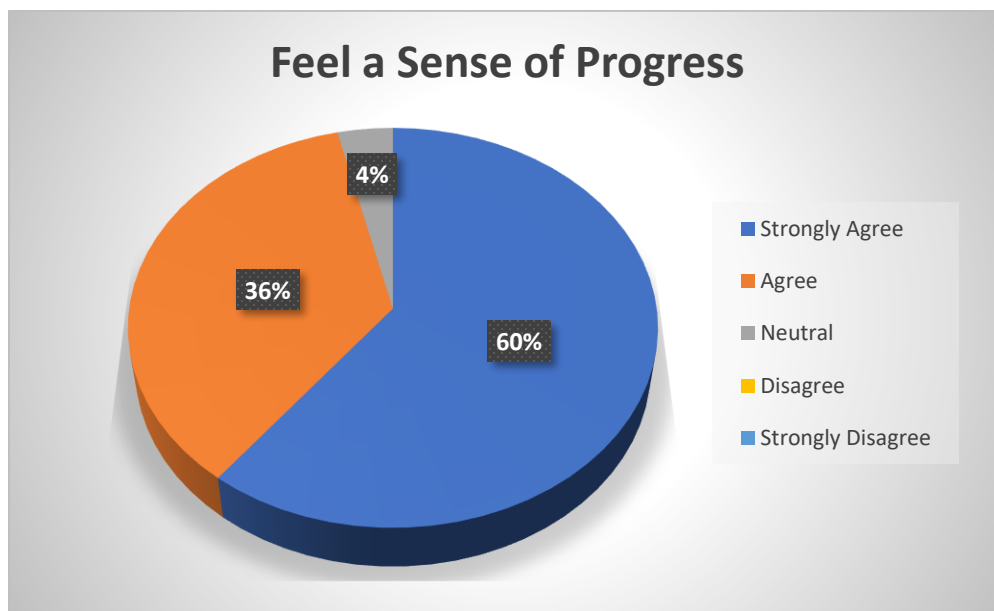
Lastly, students were asked the question, “I believe participation in school band has resulted in my ability to:

- Develop perseverance
- Understand myself better
- Feel a sense of progress
- Feel more confident

When asked if participation in band helped students develop perseverance, 49% of students strongly agreed, 42% agreed, and 9% of students were neutral. Student responses indicate that when asked the question of band helping them with the ability to understand themselves better, 76.5% marked strongly agree or agree, 21% remained neutral, and 2.4% disagreed or strongly agreed.



A total of 60% of students strongly agreed to the statement of participating in band made them feel a sense of progress, the remaining 36% agreeing, and 4% remaining neutral. When asked if band made them feel more confident, 75.3% of students agreed or strongly agreed, with 22% feeling neutral and 2.5% of students disagreeing with that statement.



#### Qualitative Data

Qualitative data are analyzed through five categories which sum up observed responses from each question. The five categories are coping mechanisms, social development, identity, self-efficacy, and memorable experiences.

### **Coping Mechanisms**

Students were presented with the question, “How does attending band class help you cope with the stresses of the school day.” Common responses included band being described as “fun”, “relaxing”, and being an activity they enjoyed. A majority of students frequently shared positive feelings regarding band class. Many referred to band class as an “escape” from stressful schoolwork or school emotions, and as a “safe space”. In regard to band being a safe space, a common definition of band was that student peers were “family” and people that they “love”. Some students reported that going to band class was like heading home for the day, “...school basically ends for me at 1:19 because when that bell rings and I go to band it’s like I’m already going home.”

Band class is reported as relieving student stress, although some students say that band causes a positive stress and helps them to feel as though they have accomplished something. One student wrote:

...being in band class is just relaxing and instead of feeling like I’m falling behind further and further every day, I feel at peace because I completed something or I got better at something.

Approximately (7%) of students considered band to cause more stress due to the pressure of an upcoming performance, leading a section, or not fitting in with other members.

### **Social Development**

Question twelve asked the students to describe their ability to develop relationships with their peers prior to, and after, joining band class. A number of students reported that prior to joining band, they were shy and had a difficult time talking to other students. A frequent phrase used by students to describe this transition is “coming out of my shell”. Students reported beginning to make friends and close connections to peers through their participation in band. Developing close relationships with friends has led some students to feel as though band is their family. One student reported,

I was extremely introverted until I joined band...we strive for greatness and so we talk to each other like family, this has enabled me to be more outgoing in the rest of my classes and with my fellow peers outside of band...because my friends and family gave me the confidence to step outside the box.

Another common response was that of a shared common passion or interest in music being an instant ice breaker that immediately broke barriers preventing new relationships. Of 81 responses, nine students (11%) reported no change in their ability to develop relationships or make friends.

### **Identity**

A focus on identity was explored through the question, “Please describe your sense of identity in school as a member of the band community”. Responses to this question resulted in a wide variety of views. Some students reflected on their own self-image and how they relate to other people also

in band. Others discussed how their peers view them and various others. Often, students indicated that being in band enabled them to have a sense of participating in something greater than themselves on an individual level. “The band is something that makes me feel a sense of importance. As if I am a part of something bigger than myself.” Students commonly wrote about their identity as a band member through a sense of belonging, membership, and community. One student stated, “I have a sense of belonging somewhere now...I have a better sense of identity now and it has really improved my school life.” Another student comments on their school identity, “I like knowing that I am a member of the band...It gives me a strong sense of identity with the school and it makes me feel like I am a part of the school.” Several students reported that being in band gave them a feeling that they could contribute something to the school that they could not do as just themselves, but collectively as a unit.

“As a band member, I feel like I can do more for our school.”

Not all students feel as positive about the “band member” image. A small portion of students reported that being in band made them feel like a “band geek” and were not taken as seriously; others saying that they preferred not to label themselves.

### **Self-Efficacy**

In order to determine whether or not participation contributes to students’ development of self-efficacy, the question, “Does being in band make you feel more confident in your own ability to face difficult circumstances?” was asked. The common theme of the majority of responses, was that of resiliency.

...In band, when things get rough, quitting isn’t always an immediate option. You always have to finish out that difficult practice or that long rehearsal, and once you get through it, it isn’t as difficult to do it again.

Students describe times in which participation in band has caused them to experience roadblocks, and they were forced to find another way around. Students also report increased confidence in skills such as public speaking and leadership as a result of performing in front of crowds. A number of students reported that because they felt their band community was like a second family, they felt an increase of confidence due to the love and support received from other band members during difficult or uncertain times.

Band has forced me into positions I wouldn’t normally put myself into, like playing in front of people by myself or taking leadership. Being in these positions has helped me grow and now I willingly put myself in such positions.

Students also reported personal growth in self-confidence through the challenges and struggles they experienced in band. A few students attribute this to feeling a sense of “success” because they felt like they accomplished something in band and that success could potentially extend to other areas outside of band.

I believe band has helped me feel more confident in difficult circumstances. In band there’s always going to be a challenge and we’ve gotta learn to adapt to it and having to do that



just helps build the confidence for that...we're always having to play out or doing things on our own so doing those things also helps build confidence that I think could help in any situation.

Of 81 responses, 14 respondents (17%) reported that band helps them sometimes depending on the situation or skill in question, and seven respondents (9%) reported no effect caused by participating in band.

### **Memorable Experiences**

Lastly, students were asked to describe their most memorable experience in band. The most common reflections by students are of their first experiences on the field at a football game half time show, or at a marching band competition (approximately 37 responses or 29%).

It was the last competition of our 2018 show...my best friend at the time locked eyes after the last note of the show and I remember feeling extremely happy and I was flooded with a sense of love and community because everyone on the field was happy for everyone else. No one was being selfish or not being smart we were all in it for each other and it was beautiful.

Student responses overlapped in this question often, for example, due to students reflecting on a memory of winning their first competition and feeling as though they were surrounded by "their family." Many students reflected on their feeling like they gained a family, close friends, or feeling like they belonged to something.

"My most memorable band experience was this entire year. It's my first with Walker Valley Band, and I now feel like I'm musically home. We strive to perfect the imperfections, and the talent is insane, but most importantly we're tight as a family unit, not only with each other but with the other school programs."

Three student responses were negative memories about their time in band, due to a negative performing experience or not fitting in.

### **Conclusion**

Even though some negative effects (pressure to perform well, or not fitting in with other band members) were reported, the data in this study indicates overwhelming positive impacts of participation in band on the emotional wellbeing of students. Students experienced growth in their self-confidence and social development, as well as improved ability to cope with stress through music. Students also perceived the acquisition of leadership responsibilities and gained friends that have a deep connection beyond the surface level and are even considered as a second family. A feasible conclusion to draw from this data is that students experience development on an intellectual and emotional level beyond that of learning music, but also that of learning to be responsible and disciplined individuals. The band classroom has been reported by these students as a place in which identity, self-confidence, musicality, and communication meet at an intersection that is resolved through compromise and empathy. Being in band not only gave these students a pathway to

contribute to their school, but to also feel a sense of commitment and identity to the school. Students develop skills far beyond that of academic or musical standards in band, but instead are able to experience their own growth on an individual level and benefit from the fruits of their accomplishments as a person. An example would be the student who was able to overcome anxiety issues through their time in band, although they may have never become a first chair musician or win a place in an all-state band. Connections can be drawn from the quantitative data and linked to students' written responses. One example of this would be the Likert responses indicating a large portion of students agreed they feel band helped them feel more responsible for themselves and others. This could correspond with students' qualitative responses that they feel as though they connected to other band members on a deeper, more familial level than other friends made at school outside of band.

For future research, one might consider extending this study to examine the connection between students' social and emotional development gained in band, and its impact on improved academic grades. A larger and more geographically diverse sample of band students is suggested when developing a continuation of this study as suggested above. Another possible study would interview band directors and examine their perceptions of students' socioemotional development in band.

## References

- Arnett, J. J. (1995). Adolescents' uses of media for self-socialization. *Journal of Youth and Adolescence*, 24(5), 519–533. <https://doi.org/10.1007/bf01537054>
- Barbaki, M. (2014). The role of music in the education of young male workers in nineteenth-century Greece: The case of charity institutions. *Music Education Research*, 17(3), 327–339. <https://doi.org/10.1080/14613808.2014.930113>
- Betancourt, D., & Betancourt P R E V I E W, D. (2009). *STUDENT AND DIRECTOR PERCEPTION OF NON-MUSICAL OUTCOMES IN SUBURBAN SCHOOL BAND PROGRAMS*.
- Bloom, S. L. (2010). Bridging the black hole of trauma: the evolutionary significance of the arts. *Psychotherapy and Politics International*, 8(3), 198–212. <https://doi.org/10.1002/ppi.223>
- Cabane, C., Hille, A., & Lechner, M. (2015). *Mozart or Pelé? The Effects of Teenagers' Participation in Music and Sports* (pp. 1–81). Swiss Institute for Empirical Economic Research.
- Catterall, J. S., Dumais, S. A., & Hampden-Thompson, G. (2012). *The Arts and Achievement in At-Risk Youth: Findings from Four Longitudinal Studies*. <https://www.arts.gov/sites/default/files/Arts-At-Risk-Youth.pdf>
- Catterall, J. S., & Peppler, K. A. (2007). Learning in the visual arts and the worldviews of young children. *Cambridge Journal of Education*, 37(4), 543–560. <https://doi.org/10.1080/03057640701705898>
- Cogo-Moreira, H., de Ávila, C. R. B., Ploubidis, G. B., & Mari, J. de J. (2013). Effectiveness of music education for the improvement of reading skills and academic achievement in young poor readers: A pragmatic cluster-randomized, controlled clinical trial. *PLoS ONE*, 8(3), 1–8. <https://doi.org/10.1371/journal.pone.0059984>
- Črnčec, R., Wilson, S. J., & Prior, M. (2006). The Cognitive and Academic Benefits of Music to Children: Facts and fiction. *Educational Psychology*, 26(4), 579–594. <https://doi.org/10.1080/01443410500342542>
- Davis, K. (2010). Music and the Expressive Arts With Children Experiencing Trauma. *Journal of Creativity in Mental Health*, 5(2), 125–133. <https://doi.org/10.1080/15401383.2010.485078>
- Dosseville, F., Laborde, S., & Scelles, N. (2012). Music during lectures: Will students learn better? *Learning and Individual Differences*, 22(2), 258–262. <https://doi.org/10.1016/j.lindif.2011.10.004>
- Duerksen, G. L., & Darrow, A.-A. (1991). Music Class for the At-Risk a Music Therapist's Perspective. *Music Educators Journal*, 78(3), 46–49. <https://doi.org/10.2307/3398288>

- Eccles, J. S., & Barber, B. L. (1999a). Student Council, Volunteering, Basketball, or Marching Band. *Journal of Adolescent Research*, 14(1), 10–43. <https://doi.org/10.1177/0743558499141003>
- Eccles, J. S., & Barber, B. L. (1999b). Student Council, Volunteering, Basketball, or Marching Band. *Journal of Adolescent Research*, 14(1), 10–43. <https://doi.org/10.1177/0743558499141003>
- Epstein, J. S. (1994). *Adolescents and their music : if it's too loud, you're too old* (pp. xiii–xvii). Garland.
- Garner, A. (2019). *A Literature Review on the Benefits of Music Education: Beyond the Scope of Academics How Does Participation in School Band Affect Student's Socioemotional Development? View project*. <https://doi.org/10.13140/RG.2.2.17222.63049>
- Glavin, C. (2014, February 6). *History of music education in the United States / K12 Academics*. K12academics.Com. <https://www.k12academics.com/education-subjects/music-education/history-music-education-united-states>
- H A R G R E A V, J. (2004). Uses of Music in Everyday Life. *Music Perception Fall*, 22(1), 41–77.
- Hille, A., & Schupp, Jj. (2013). How Learning a Musical Instrument Affects the Development of Skills. *SSRN Electronic Journal*, 1–33. <https://doi.org/10.2139/ssrn.2338467>
- Hoffman, A. (2008). *Title of Dissertation: "LIKE WHO YOU ARE:" SOCIALLY CONSTRUCTED IDENTITY IN THE MIDDLE SCHOOL BAND*. <https://drum.lib.umd.edu/bitstream/handle/1903/8749/umi-umd-5768.pdf?sequence=1>
- Humpal, M. (1991). The Effects of an Integrated Early Childhood Music Program on Social Interaction Among Children with Handicaps and Their Typical Peers. *Journal of Music Therapy*, 28(3), 161–177. <https://doi.org/10.1093/jmt/28.3.161>
- Humphreys, J. T. (1992). *Instrumental Music in American Education: In Service of Many Masters*. Repository.Asu.Edu. <https://repository.asu.edu/items/15404>
- Johnson, E. (2017). The Effect of Symmetrical and Asymmetrical Peer-Assisted Learning Structures on Music Achievement and Learner Engagement in Seventh-Grade Band. *Journal of Research in Music Education*, 65(2), 163–178. <https://doi.org/10.1177/0022429417712486>
- Kirkpatrick, F. (1942). *Music and the Factory Worker - ProQuest*. Search.Proquest.Com. <https://search.proquest.com/openview/7c0b363ed467f38950709e72e98094e9/1?pq-origsite=gscholar&cbl=1817765>
- Kwak, Y., Mihalec-Adkins, B., Mishra, A. A., & Christ, S. L. (2018). Differential impacts of participation in organized activities and maltreatment types on adolescent academic and socioemotional development. *Child Abuse & Neglect*, 78, 107–117. <https://doi.org/10.1016/j.chiabu.2017.09.026>

- Labbé, E., Schmidt, N., Babin, J., & Pharr, M. (2007). Coping with Stress: The Effectiveness of Different Types of Music. *Applied Psychophysiology and Biofeedback*, 32(3–4), 163–168. <https://doi.org/10.1007/s10484-007-9043-9>
- Macdonald, R. A. R., Mitchell, L. A., Dillon, T., Serpell, M. G., Davies, J. B., & Ashley, E. A. (2003). An Empirical Investigation of the Anxiolytic and Pain Reducing Effects of Music. *Psychology of Music*, 31(2), 187–203. <https://doi.org/10.1177/0305735603031002294>
- McClung, A. C. (2000a). Extramusical Skills in the Music Classroom. *Music Educators Journal*, 86(5), 37–68. <https://doi.org/10.2307/3399635>
- McClung, A. C. (2000b). Extramusical Skills in the Music Classroom. *Music Educators Journal*, 86(5), 37–68. <https://doi.org/10.2307/3399635>
- Miranda, D. (2013). The role of music in adolescent development: much more than the same old song. *International Journal of Adolescence and Youth*, 18(1), 5–22. <https://doi.org/10.1080/02673843.2011.650182>
- Miranda, D. (2019). A review of research on music and coping in adolescence. *Psychomusicology: Music, Mind, and Brain*, 29(1), 1–9. <https://doi.org/10.1037/pmu0000229>
- Miranda, D., & Claes, M. (2009). Music listening, coping, peer affiliation and depression in adolescence. *Psychology of Music*, 37(2), 215–233. <https://doi.org/10.1177/0305735608097245>
- Montgomery, J., & Martinson, A. (2006). Partnering with Music Therapists: A Model for Addressing Students' Musical and Extramusical Goals. *Music Educators Journal*, 92(4), 34–39. <https://doi.org/10.2307/3401110>
- Moreno, S., Friesen, D., & Bialystok, E. (2011). Effect of Music Training on Promoting Preliteracy Skills: Preliminary Causal Evidence. *Music Perception: An Interdisciplinary Journal*, 29(2), 165–172. <https://doi.org/10.1525/mp.2011.29.2.165>
- North, A., & Hargreaves, D. (2009). The power of music. *The Psychologist*, 22(22), 1012–1014.
- Nowak, B. (2014). MUZYKA A ROZWÓJ EMOCJONALNO-SPOŁECZNY DZIECI W WIEKU PRZEDSZKOLNYM. *Wstęp* (pp. 47–71). [https://sbc.org.pl/Content/214928/Nowak\\_B\\_muzyka%20a%20rozw%C3%B3j.pdf](https://sbc.org.pl/Content/214928/Nowak_B_muzyka%20a%20rozw%C3%B3j.pdf)
- Panksepp, J., & Bernatzky, G. (2002). Emotional sounds and the brain: the neuro-affective foundations of musical appreciation. *Behavioural Processes*, 60(2), 133–155. [https://doi.org/10.1016/s0376-6357\(02\)00080-3](https://doi.org/10.1016/s0376-6357(02)00080-3)
- Parker, E. C. (2010). Exploring student experiences of belonging within an urban high school choral ensemble: an action research study. *Music Education Research*, 12(4), 339–352. <https://doi.org/10.1080/14613808.2010.519379>
- Przybylska-Zielińska, A. (2018). Functions of music that support a child's development. *Konteksty Pedagogiczne*, 1(10), 61–79. [a.przybylska@amuz.bydgoszcz.pl](mailto:a.przybylska@amuz.bydgoszcz.pl)

- Radocy, R. (1989). Special Focus in Music Education. *Educators Journal*, 76(4), 30–33.
- Rathmann, K., Bilz, L., Hurrelmann, K., Kiess, W., & Richter, M. (2018). Is being a “small fish in a big pond” bad for students’ psychosomatic health? A multilevel study on the role of class-level school performance. *BMC Public Health*, 18(1), 1–13. <https://doi.org/10.1186/s12889-018-5977-5>
- Reimer, B. (1999). Facing the Risks of the “Mozart Effect.” *Music Educators Journal*, 86(4), 37–43. <https://doi.org/10.2307/3399576>
- Rickard, N. S., Bambrick, C. J., & Gill, A. (2012). Absence of widespread psychosocial and cognitive effects of school-based music instruction in 10–13-year-old students. *International Journal of Music Education*, 30(1), 57–78. <https://doi.org/10.1177/0255761411431399>
- Saarikallio, S., & Erkkilä, J. (2007). The role of music in adolescents’ mood regulation. *Psychology of Music*, 35(1), 88–109. <https://doi.org/10.1177/0305735607068889>
- Schwartz, K. D., & Fouts, G. T. (2003). Music Preferences, Personality Style, and Developmental Issues of Adolescents. *Journal of Youth and Adolescence*, 32(3), 205–213. <https://doi.org/10.1023/a:1022547520656>
- Seaton, D. (2017). *Ideas and styles in the Western musical tradition*. Oxford University Press.
- Sloboda, J. A., O’Neill, S. A., & Ivaldi, A. (2001). Functions of Music in Everyday Life: An Exploratory Study Using the Experience Sampling Method. *Musicae Scientiae*, 5(1), 9–32. <https://doi.org/10.1177/102986490100500102>
- Southgate, D. E., & Roscigno, V. J. (2009). The Impact of Music on Childhood and Adolescent Achievement. *Social Science Quarterly*, 90(1), 4–21. <https://doi.org/10.1111/j.1540-6237.2009.00598.x>
- The power of music | The Psychologist*. (n.d.). Thepsychologist.Bps.Org.Uk. Retrieved July 6, 2020, from <https://thepsychologist.bps.org.uk/volume-22/edition-12/power-music>
- Trandahl, J. (2004). 08TH CONGRESS 2D SESSION CONCURRENT RESOLUTION. <https://www.congress.gov/bill/108th-congress/house-concurrent-resolution/380/text>
- Trusty, J., & Oliva, G. M. (1994). The Effect of Arts and Music Education on Students’ Self-Concept. *Update: Applications of Research in Music Education*, 13(1), 23–28. <https://doi.org/10.1177/875512339401300105>
- Vaughn, K., & Winner, E. (2000). SAT Scores of Students Who Study the Arts: What We Can and Cannot Conclude about the Association. *Journal of Aesthetic Education*, 34(3/4), 77–89. <https://doi.org/10.2307/3333638>
- Young, R., Camic, P. M., & Tischler, V. (2015). The impact of community-based arts and health interventions on cognition in people with dementia: a systematic literature review. *Aging & Mental Health*, 20(4), 337–351. <https://doi.org/10.1080/13607863.2015.1011080>

Zillman, D., & Gan, S. I. (1997). Musical taste in adolescence. In D. J. Hargreaves & A. C. North (Eds.), *The social psychology of music* (pp. 161–187). Oxford University Press.

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# The Rhetorical Presidency's Relationship with the Bureaucracy: Bureaucratic Signaling as a Tool for Policy Making

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*Under the guidance of Dr. Mark Scully*



## Abstract

*While scholarship of presidential leadership is seemingly extensive, defining the success of presidential leadership is not as simple as one may assume. Developing public policy is among one of the most important actions a president may take to secure a legacy of success. However, presidents often take different approaches to map out their policy visions and guide the country down the path they imagine. Scholars noticed the phenomenon of increased presidential communication with the public among 20th century presidents. This phenomenon, known as the rhetorical presidency, transformed presidential communication with the public. Most presidents suggest that the rhetorical ability to persuade public opinion is vital to accomplish their goals. However, scholars remain skeptical of the overall effectiveness of presidential persuasion of the public. Some hold the opinion that rhetoric does not persuade the public, but presidents still utilize rhetoric as a way to signal bureaucratic action. I suggest that while presidents do not always persuade a change in public opinion, their rhetoric targets the bureaucracy in an attempt to signal policy implementation that complies with the presidential administration's policy agenda.*

## Introduction

While scholarship of presidential leadership is seemingly extensive, defining the success of presidential leadership is not as simple as one may assume. Presidents come from a diverse array of backgrounds, and while they each seek to lead the American public, each has different views of what their leadership should accomplish. As a result, scholars study multiple aspects of the presidency to attempt an understanding of presidential success. Developing public policy is among one of the most important actions a president may take to secure a legacy of success. However, presidents often each take different approaches to map out their policy visions and guide the country down the path they imagine. Scholars noticed the phenomenon of increased presidential communication with the public among 20th century presidents. This phenomenon, known as the rhetorical presidency, transformed presidential communication with the public. Most presidents suggest that the rhetorical ability to persuade public opinion is vital to accomplish their goals. However, scholars remain skeptical of the overall effectiveness of presidential persuasion of the public. Some hold the opinion that rhetoric does not persuade the public, but presidents still utilize rhetoric as a way to signal bureaucratic action.

## Literature Review

The rise of the rhetorical presidency represents a revolutionary shift in the executive leadership of the United States by fundamentally changing the way presidents communicate with the public. Prior to the twentieth century, presidents seldom spoke directly to the general public about policy. Then, presidents delivered addresses but typically only sought to address the general ideology of government's functions or statesmanship. Over time the strategy, coined by Kernell as "going public," became a routine tool used by presidents to propose policy stances to the general public, as well as other political actors.<sup>1</sup> This change paved the way for presidents to become a part of the policy making process, allowing them to voice their preferences and seemingly persuade

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<sup>1</sup> Kernell, Samuel, *Going Public: New Strategies of Presidential Leadership*, (Washington: Congressional Quarterly Press, Revised, 4th edition, 2006.)

public opinion.<sup>2</sup> This shift eventually created a sense of obligation among presidents to utilize rhetoric routinely. Presidents, and even the general public, commonly express the beliefs that presidential rhetoric plays a key role in leadership of people and policy alike.<sup>3</sup> However, scholarship of the presidency suggests that rhetorical leadership is conditional, not as concrete as presidents and the public believe.

Scholars are skeptical that presidential rhetoric leads public opinion effectively due to the conditional aspect of rhetorical leadership. Amnon Cavari cites several case studies in which presidents seek public support for policies, such as Ronald Reagan's push for tax reform or Franklin Roosevelt's efforts to obtain support for entering World War II with America's allies, which suggest conflicting rhetorical success for presidents who go public in order to lobby for policy support.<sup>4</sup> George Edwards III and Brandice Canes-Wrone contend that presidents recognize their political environment and use it to their policy advantages. This means "going public" on policies already trending with the public in order to capitalize on existing support. Additionally, Edwards and Brandon Rottinghaus pose studies that confirm more recent presidents struggled to obtain support for their policies, and often even push public opinion away from policies they support.<sup>5</sup> Therefore, presidents are not actually using rhetoric to create more support for policies among the public, they recognize their opportunity structure and take advantage of their political environment.

Other scholars contend that because presidents understand they cannot always affect public opinion on policy, they can use rhetoric to signal policy changes in the bureaucracy.<sup>6</sup> The constitutional prerogative of the executive gives presidents the ability to affect bureaucratic procedures through budget changes, appointments, and agency reorganization.<sup>7</sup> To act more indirectly, however, presidents use rhetoric to indicate policy preferences to bureaucratic agencies instead of taking more direct measures to coerce policy action.<sup>8</sup> For example, Whitford and Yates cite former Treasury Secretary Don Regan as an example of an upper-level bureaucrat who took it upon himself to understand the president's policy preferences by accessing and studying president

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<sup>2</sup> Whitford, Andrew B. and Jeff Yates, *Presidential Rhetoric and the Public Agenda: Constructing the War on Drugs*, (Johns Hopkins University Press, 2009.)

<sup>3</sup> Edwards III, George C, *Predicting the Presidency: The Potential of Persuasive Leadership*, (Princeton University Press, 2016).

<sup>4</sup> Cavari, Amnon, *The Party Politics of Presidential Rhetoric*, (New York: Cambridge University Press, 2017.)

<sup>5</sup> Peak, Jeffrey, Review of *The Provisional Pulpit: Modern Presidential Leadership of Public Opinion* by Brandon Rottinghaus, (*Presidential Studies Quarterly*, September 2012.)

<sup>6</sup> Eshbaugh-Soha, Matthew, "The Impact of Presidential Speeches on the Bureaucracy," *Social Science Quarterly*, 89, no. 1 (March 2008): 116-132.

<sup>7</sup> Wilson, James Q, *Bureaucracy: What Government Agencies Do and Why They Do It*, (Basic Books, 2019.)

<sup>8</sup> Eshbaugh-Soha, "The Impact of Presidential Speeches on the Bureaucracy."

Reagan's speeches.<sup>9</sup> After doing this, Reagan implemented programs which he felt addressed Reagan's political promises.

I embrace the idea that presidents utilize rhetoric to signal bureaucratic action. Instead of utilizing more direct tools defined in the executive's constitutional prerogative, I contend that presidents prefer the use of indirect tools like presidential rhetoric. Agencies choose to comply with the wishes of the president in order to prevent the president from taking action against their agency. This protects their budgets, core tasks, and personnel, and allows the president to demonstrate policy leadership to the American public. Eshbaugh-Soha coined positive and negative bureaucratic signaling as terms to describe two separate types of rhetoric used to prompt change in the bureaucracy. Positive bureaucratic signaling, according to Eshbaugh-Soha's research, often prompts bureaucratic action more than negative signals. For the purpose of this theory, I wish to perform a more substantial study of positive bureaucratic signaling in order to determine what such signals use to incentivize bureaucratic action. For this I will choose a presidential speech that contains positive bureaucratic signaling, and study the contents of the speech to determine what exactly about positive signaling prompts bureaucratic agencies to comply.

This project seeks to shed light on the relationship between positive rhetorical signals and bureaucratic behavior. I intend to further define successful rhetorical signaling to better understand which aspects of presidential rhetoric prompt changes in bureaucratic policy implementation. This distinction is critical in understanding policy drafting and implementation in the executive branch due to its implications for successful presidential leadership of public policy. Because the executive branch is responsible for the implementation of rules and laws, presidents must understand their relationship with the agencies and how to prompt action according to their goals. Furthermore, developing a deeper understanding of positive bureaucratic signaling will allow scholars to better understand the rhetorical president as a leader of public policy.

### Theory

I propose the argument that presidential rhetoric signals bureaucratic action in the direction of the president's policy preferences. I seek to define the relationship between positive bureaucratic signaling and bureaucratic action. Because of their desire to create a legacy through policy leadership, presidents chose to affect policy through the bureaucracy, meaning rules and other policy implementation instead of utilizing specific authorities such as budget cuts, appointments, and agency reorganization. Bureaucratic agencies find the incentive to heed the president's rhetorical cues in order to prevent direct action from the president. As a result, bureaucratic leaders make themselves aware of policy signals coming from the executive, and choose to implement programs that reflect such preferences.

For the purpose of this paper, bureaucratic signaling entails rhetoric by the president indicating policy preferences specifically to bureaucratic agencies. This could include speeches directly to agency members, or messages addressed to the general public, however, the common link for these messages is the specific phrases used to prompt agency action. Eshbaugh-Soha suggests that there are two types of bureaucratic signaling: positive and negative. Positive signaling includes presidents voicing support for an agency or their fundamental mission, as well as supportive speech for the policies the presidents wish to see accomplished. On the other hand,

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<sup>9</sup> Whitford, Andrew B. and Jeff Yates, *Presidential Rhetoric and the Public Agenda: Constructing the War on Drugs*, (Johns Hopkins University Press, 2009).

negative signaling is more coercive. This sort of signaling threatens direct action such as budget cuts, reorganization, or anything that may alter the current duties of the bureaucratic agencies. Because bureaucratic agencies operate generally by their own discretion, agencies may exercise the authority to ignore presidential preferences. On the same note, though, agencies likely refrain from ignoring presidential preferences due to the president's ability to tinker with their budget, replace their leadership, or even merge their entity with other agencies.

Because positive signaling prompts bureaucratic agencies to increase action, I intend to describe the aspects of these signals which prompt bureaucratic agencies to implement or revise policy procedures. In order to determine these factors, I will utilize a case study model to examine a specific instance of positive bureaucratic signaling. This will entail closely studying a presidential speech known by scholars for creating a shift in policy implementation. Specific aspects I intend to note include supportive language, definition of the president's specific policy preference or preferences, and whether or not the president addresses a bureaucratic agency directly. For the purpose of this case study, I focus on John F. Kennedy's signaling to the bureaucracy in terms of the Civil Rights Division.

## Bibliography

- Canes-Wrone, Brandice. *Who Leads Whom? Presidents, Policy, and the Public*. Chicago: University of Chicago Press, 2006.
- Cavari, Amnon. *The Party Politics of Presidential Rhetoric*. New York: Cambridge University Press, 2017.
- Edwards III, George C. *Predicting the Presidency: The Potential of Persuasive Leadership*. Princeton University Press, 2016.
- Eshbaugh-Soha, Matthew. "The Impact of Presidential Speeches on the Bureaucracy." *Social Science Quarterly*, 89, no. 1 (March 2008): 116-132.
- Eshbaugh-Soha, Matthew. Review of *Who Leads Whom? Presidents, Policy, and the Public*, by Brandice Canes-Wrone. *Presidential Studies Quarterly*, September 2007.
- Kernell, Samuel. *Going Public: New Strategies of Presidential Leadership*. Washington: Congressional Quarterly Press, Revised, 4th edition, 2006.
- Peake, Jeffrey S. Review of *The Provisional Pulpit: Modern Presidential Leadership of Public Opinion* by Brandon Rottinghaus. *Presidential Studies Quarterly*, September 2012.
- Rottinghaus, Brandon. *The Provisional Pulpit: Modern Presidential Leadership of Public Opinion*. College Station: Texas A&M University Press, 2010.
- Tulis, Jeffrey K. *The Rhetorical Presidency*. Princeton University Press, 1987.
- Whitford, Andrew B. and Jeff Yates. *Presidential Rhetoric and the Public Agenda: Constructing the War on Drugs*. Johns Hopkins University Press, 2009.
- Wilson, James Q. *Bureaucracy: What Government Agencies Do and Why They Do It*. Basic Books, 2019.

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Volume 3

Article 9

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## New World Primates' Response to Native Predator Vocalization in Captive-Raised Individuals

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## Abstract

*The purpose of this study is to determine if New World primates raised in captivity respond with antipredator behaviors to vocalizations of predators from their native range. We tested this by comparing monkeys' responses to harpy eagle calls versus the songs of thrushes from the monkeys' native range. The outcome will differ if antipredator behavior is learned versus innate. Behaviors of nineteen callitrichids of five different species were observed during a sixty-second pre-stimulus and post-stimulus period. The monkeys' behavior along with location indoor or outdoor and region of enclosure it was occupying were analyzed every second throughout the trial. Based on the preliminary results presented here from four individuals, we observed no significant difference in responses between harpy and thrush trials. If this observation holds true with a larger sample size, then we can conclude that antipredator responses have an important learned component that has been lost in captive populations.*

## Introduction

Many callitrichid species, commonly referred to as marmosets and tamarins, are endangered or face declining populations due to habitat loss (<https://www.iucnredlist.org>). Callitrichids are small monkeys native to the Neotropics that are dependent upon intact forest canopy for food and shelter (Catenacci, 2016). Species such as *Saguinus bicolor* (pied tamarin), *Saguinus oedipus* (cotton-top tamarin) and *Saguinus imperator subgriseus* (bearded emperor tamarin) are considered endangered.

*Leontopithecus rosalia* (golden lion tamarin) would be extinct without an intensive breeding program (Junker, 2019). One goal of breeding programs is ultimately to release captive-born animals into the wild to help maintain or restore wild populations. Due to this human intervention the extinction of many callitrichids has been avoided; however, reintroduction programs of captive-raised primates have not been particularly successful (Junker, 2019). In terms of releasing captive-raised individuals we must acclimate them to their native environment prior to reintroduction to maximize survival and reproductive success. Anti-predator behaviors are essential to survival in the wild, so one major challenge to successful reintroduction is understanding how each species responds to predators and whether those antipredator behaviors are preserved in captive populations. Many Paleotropical monkeys use complex alarm systems to reduce predation risk.

Many of these alarms contain information on the type of predator, and those alarms are partially learned, but with a strong genetic component. For example, even infant vervet monkeys in East Africa produce the eagle alarm call, but in response to all sorts of overhead objects, they learn through watching others to refine their alarm calling until they only alarm call in response to eagles (Seyfarth & Cheney, 1980). Cäsar & Zuberbühler (2012) explains how Neotropical monkeys present similar behaviors as they use generic alarm calls for certain predators, but also utilize more specific calls for aerial predators. While callitrichid monkeys are known to use alarm calls, it is unclear to what extent antipredator behaviors for Neotropical monkeys are due to genetic predispositions versus being learned from more experienced individuals. The relative

effects of experience and genetics in shaping behaviors is a fundamental question in behavioral studies.

Populations raised in zoos offer the opportunity to test for these antipredator behaviors in a group that has never experienced a predation event. In this case, the callitrichids are all several generations removed from the wild. Our goal for this study was to look at the response of captive-raised individuals to the vocalizations of birds from each monkey species' native range. Specifically, comparing their response to calls of raptors known to prey on callitrichids versus the songs of songbirds. If these captive individuals maintain some of the behaviors needed to survive in their natural environment, then they should respond differently to the sounds of the two bird species, and do so in a way that would maximize their inclusive fitness in a natural setting. For example, in response to the predatory vocalization, they may look in a specific direction, depending on the threat type, or move toward or away from the threat. In comparison, Palearctic monkeys exhibit antipredator behaviors such as mobbing, hiding and other vigilant behaviors (Brockman & Schaik, 2005). However, in the wild, alarm calling was not always utilized as an antipredator behavior perhaps because it could give away the prey's location (Brockman & Schaik, 2005). With the songbird vocalization as a control, we will be able to determine whether the primates' responses to native predator vocalizations is because it is a threat or if they are merely responding to a new sound being introduced to their captive environment. This study could allow us to determine if behavioral conditioning is required before release back into the wild if antipredator behaviors are learned. If the behaviors are genetic, it could provide insight to improve breeding practices in order to ensure desirable genes, such as antipredator behaviors, remain in future generations.

## **Methods**

This experiment was designed to deliver a native predator or control playback to one focal individual of one species a day in order to limit habituation to the sounds. Although there were four to five trials conducted daily the monkeys showed no decrease in responses to playbacks. For this experiment we presented pairs of playbacks to nineteen individuals consisting of four pied tamarins, four cotton-top tamarins, three golden lion tamarins, two bearded emperor tamarins, and six Geoffroy's marmosets (*Callithrix geoffroyi*) at the Chattanooga Zoo. Recordings of bird vocalizations used as stimuli were obtained from the Xeno Canto (<https://www.xeno-canto.org>) database of bird recordings. For the native predatory vocalization, harpy eagle (*Harpia harpyja*) screams were used in which each individual monkey received a different audio. Each harpy eagle playback consisted of three to five consecutive screams. For our control vocalizations we used songs from thrushes (*Turdus* sp.) native to each monkey species' native range. Harpy eagle and thrush recordings were paired and thrush recordings were trimmed to the nearest whole syllable to match duration of the harpy screams. Clay-colored thrush (*T. grayi*) song was presented to cotton-top tamarins and white-necked thrush (*T. abicollis*) song for all other species. Thrush songs, and not alarm calls, were used because they are not associated with the presence of any predator. Trials were completed in June and July 2020, at various times between 0900 and 1700. Trials were also performed in various weather conditions with the exception of heavy rain. The



monkeys had access to both indoor and outdoor enclosure areas throughout each trial. To minimize discrepancies one researcher operated equipment while the other tracked the focal monkey and collected notes during the trial.

Each trial began with a check in with keepers to ensure there were no unusual activities that needed to be noted. To record each trial a Panasonic HD camcorder was setup on a tripod outside of the enclosure in addition to a Hero8 GoPro mounted to the inside window of the enclosure in the keeper area to cover all access spaces. An Outdoor Tech TurtleShell 3.0 wireless speaker was placed on a pole 1.83 meters from ground level and at a distance of 2.44 meters from the outside fence of the enclosure. The speaker volume was set to approximately 70 decibels at 1m from the speaker. Each trial began with a sixty-second control period in order to observe normal behavior pre-stimulus before introducing the assigned playback, either eagle or thrush. Following the start of the stimulus a sixty-second post-stimulus period took place to observe any antipredator behaviors of the focal monkey.

Videos from the camcorder and GoPro were used to analyze behaviors during the two-minute trial on a one-second interval basis. Each second the individual's behavior was documented as either non-predator associated behavior or predator associated behavior. In addition to this, the location of the monkey was documented as indoor or outdoor as well as the region of the enclosure being top, middle, or bottom third. The pre-stimulus and post-stimulus periods were both analyzed to determine the monkey's response.

**Table 1.** Anti-predator behavior categories used, and descriptions used to identify them when scoring videos.

Behavior	Description
Aerial scanning	All four feet are touching the substrate (ground, tree trunk, etc.) but the head is lifted away from the surface
Mobbing	Gathering of multiple monkeys and approaching the sound
Standing bipedal	Standing up on hind legs, but not holding food to mouth
Running	All four feet leave the surface, these jumps are repeated at least once
Moving up trees	Moving up trees- moves further up trees than previous location
Moving down trees	Moving down trees- moves further down trees than previous location
Hiding	Moves to seek cover in leafy areas of enclosure or under building ledge covering top of enclosure

**Table 2.** Normal, non-antipredator, behavior categories used, and descriptions used to identify them when scoring videos.

Behavior	Description
Relaxed foraging	Nosing around ground, or digging, or poking through fruit
Eating	Holding food at mouth with forepaws, chewing or biting it
Grooming others	Running forepaws through another monkey's fur
Self-grooming	Running forepaws through fur, chewing self, scratching with hind feet, or scratching on tree
Walking, climbing	Moving on ground or in tree, at least one foot in contact with ground/tree. Includes single jumps that are not immediately preceded or followed by running
Sitting	Remaining in a given spot without any significant movement as if observing
At rest	Chin and belly against top of horizontal surface (less than 45-degree angle) for greater than half a second

## **Results**

Although nineteen monkeys were tested the results of four individuals have been analyzed thus far.

These results include harpy eagle and thrush trials for Zafra (pied tamarin), Trixie (cotton-top tamarin), Fiyero (Geoffroy's marmoset) and Sal (emperor tamarin). These individuals all spent more time in non-antipredator behaviors during both the sixty-second pre-stimulus and post-stimulus periods than in antipredator behaviors for both harpy and thrush playbacks. However, in the first minute directly following a playback we observed an increase in antipredator behaviors in response to harpy eagle calls versus thrush song (Figure 1). On an individual basis Zafra showed no change in antipredator behavior for either sound, with no antipredator behavior observed in either trial. Sal showed a slight two second decrease in antipredator behavior from the thrush to the harpy sound. Fiyero and Trixie both showed large increases in antipredator behavior during the harpy playback compared to the thrush (Figure 2).

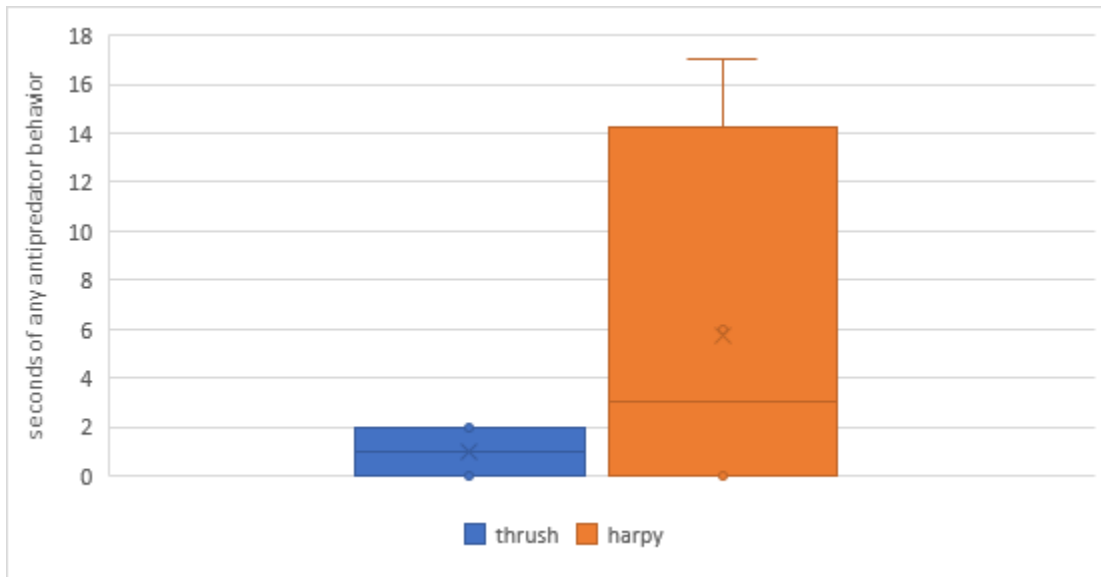
One of the most direct responses to predator vocalizations is aerial scanning. Although more data is needed, trends based on these four individuals show when presented a harpy eagle call average time spent aerial scanning was greater than when presented with a thrush song (Figure 3). However, this increase is solely because Fiyero showed a large increase in aerial scanning when presented with a harpy sound while the other individuals showed no change (Figure 4). Another antipredator behavior observed in both the control and playback period was standing bipedal. Similar to the previous results, there was an increase in standing bipedal for harpy eagle screams than thrush songs (Figure 5). While Zafra and Fiyero showed no change, Trixie showed a large increase in standing bipedal after being given a harpy playback. However, Sal showed a slight decrease in standing bipedal during the predator vocalization (Figure 6). Statistical tests of significance were not performed on these preliminary data because the small sample size does not provide enough statistical power to detect an effect, even if there were large effect size. The large variation observed in the responses of these four individuals further lowers statistical power, so only descriptive data are presented here. In addition to these results, we are continuing to analyze data from fifteen other monkeys before conducting statistical analysis.

## **Discussion**

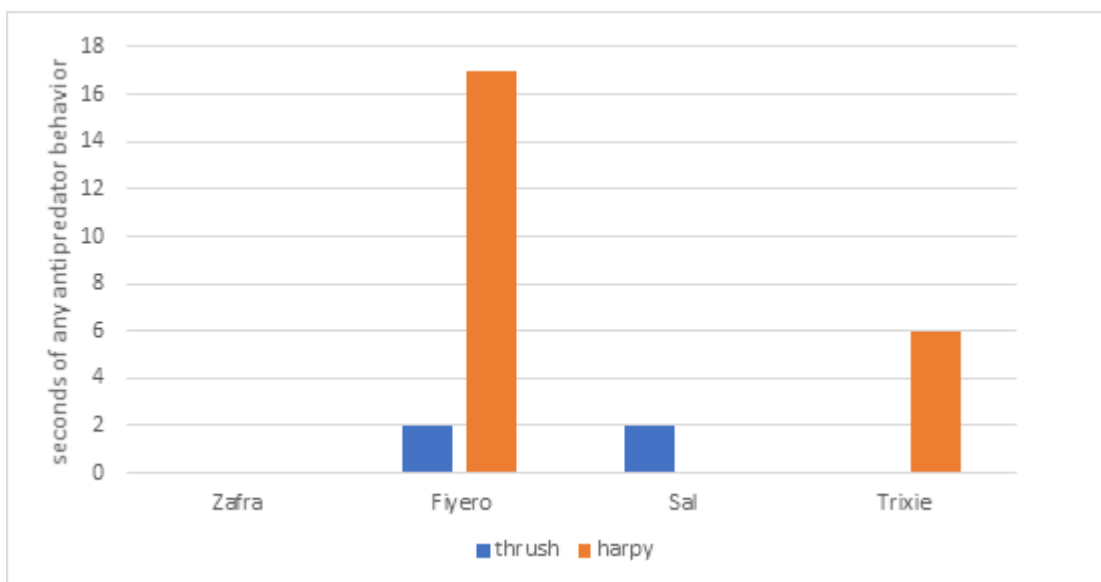
If captive monkeys retain antipredator behavior the same or similar to that of wild individuals, then we would expect to see an increase in aerial scanning during harpy trials and a constant or decreased amount of scanning for thrush trials. We observed only one individual following these expectations and the other three showing no changes. We would also expect to see an increase in the antipredator behavior standing bipedal following a harpy playback but observed a decrease in one individual. Based on these results it is possible that the monkeys did not distinguish between a predator and control sound resulting in the lack of antipredator behavior. While this is preliminary data, if the general lack of antipredator response to harpy eagle calls is observed in the rest of our sample, it suggests that antipredator behavior is due to learning from other experienced callitrichids in the wild rather than genetic predispositions. Given that these individuals are several degrees removed from the wild it could result in a lack of antipredator responses to predator vocalizations. If the remaining 15 individuals show similar responses to those observed thus far, then the responses of captive- raised individuals appear to be affected by their captivity. In order to preserve their natural antipredator behaviors, there should be some exposure and conditioning, especially before reintroduction, as a way to maximize their survival in their native range. For this experiment it seems as though the monkeys responded merely to having a new novel sound introduced rather than the vocalization posing a threat. Considering this information, breeding programs are less likely of losing desirable antipredator genes since it appears to be generally learned behaviors.

## **References**

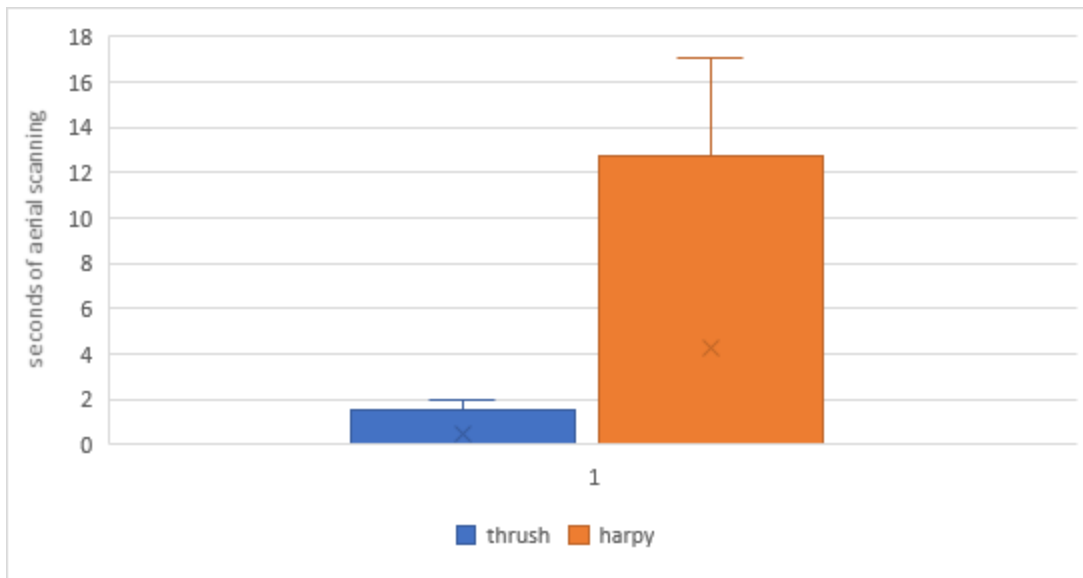
- Brockman, D. K., & Schaik, C. P. V. (2005). Seasonality in Primates Studies of Living and Extinct Human and Non-Human Primates. *ISBE Newsletter*.  
<https://doi.org/10.1017/CBO9780511542343>
- Cäsar, C., & Zuberbühler, K. (2012). Referential alarm calling behaviour in New World primates. In *Current Zoology* (Vol. 58, Issue 5, pp. 680–697). Chinese Academy of Sciences.  
<https://doi.org/10.1093/czoolo/58.5.680>
- Catenacci, L., Pessoa, M., Nogueira-Filho, S., & Vleeschouwer, K. (2016). Diet and Feeding Behavior of *Leontopithecus chrysomelas* (Callitrichidae) in Degraded Areas of the Atlantic Forest of South-Bahia, Brazil. *International Journal of Primatology*, 37(2), 136–157.  
<https://doi.org/10.1007/s10764-016-9889x>
- Junker, J., Kühl, H.S., Orth, L., Smith, R.K., Petrovan, S.O. & Sutherland, W.J. (2019) *Primate conservation*. Pages 439-491 in: W.J. Sutherland, L.V. Dicks, N. Ockendon, S.O. Petrovan & R.K. Smith (eds) *What Works in Conservation 2019*. Open Book Publishers, Cambridge, UK.
- Seyfarth, R. M., & Cheney, D. L. (1980). The Ontogeny of Vervet Monkey Alarm Calling Behavior: A Preliminary Report. *Zeitschrift Für Tierpsychologie*, 54(1), 37–56.  
<https://doi.org/10.1111/j.1439-0310.1980.tb01062.x>



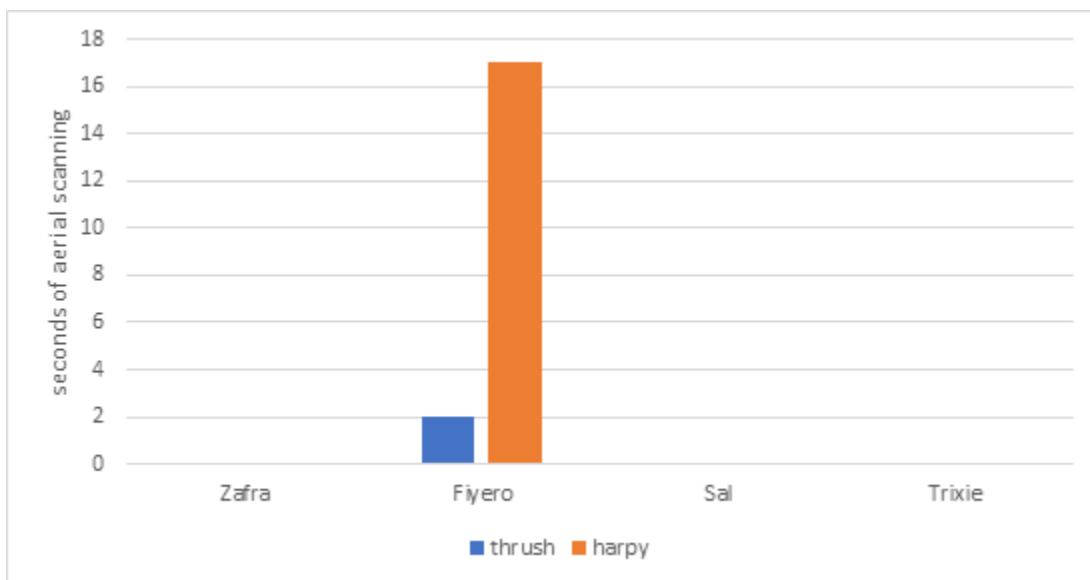
**Figure 1.** Box and whisker plot of total duration of antipredator behaviors in the 60 seconds following the start of playback for harpy and thrush trials



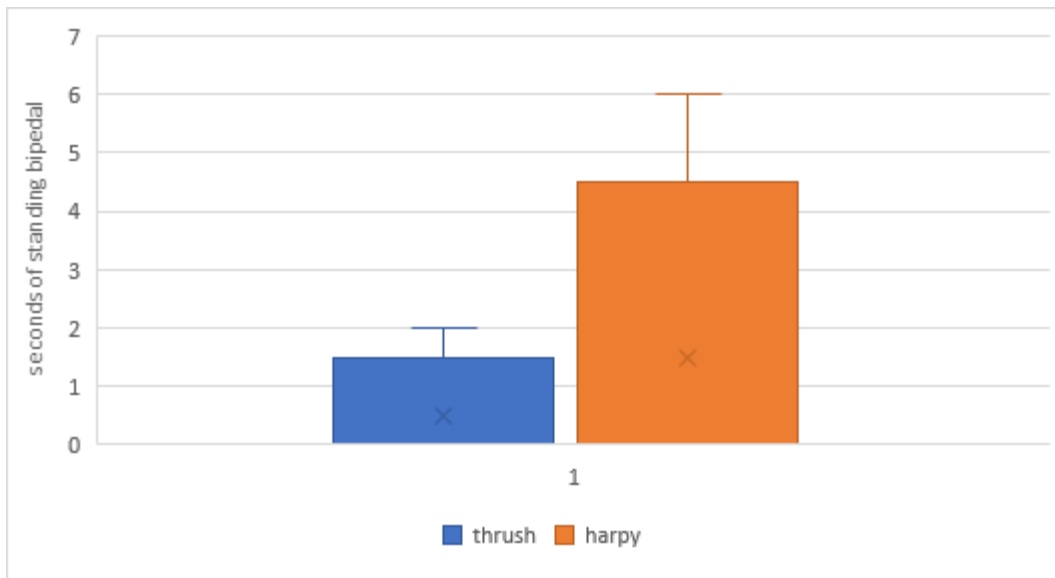
**Figure 2.** Total duration of all antipredator behavior in the 60 seconds following the start of playback for each individual



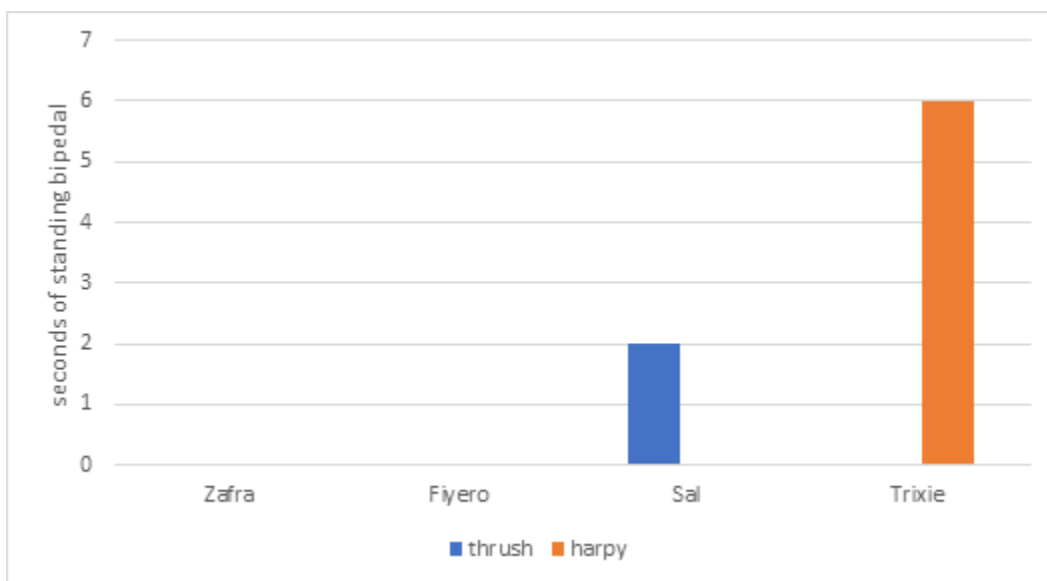
**Figure 3.** Box and whisker plot of total duration of aerial scanning behaviors in the 60 seconds following the start of playback for harpy and thrush trials



**Figure 4.** Total duration of all aerial scanning behavior in the 60 seconds following the start of playback for each individual



**Figure 5.** Box and whisker plot of total duration of standing bipedal behavior in the 60 seconds following the start of playback for harpy and thrush trials



**Figure 6.** Total duration of all standing bipedal behavior in the 60 seconds following the start of playback for each individual

Summer 2020

# Effects of Physical and Chemical Factors on HeLa and Melanoma Cell Susceptibility to Irreversible Electroporation (IRE)

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## Abstract

*Irreversible Electroporation (IRE) is a novel therapy used in thermal ablation of tumors. It has been effective for treatment of tumors in difficult areas that are highly vascularized, such as the pancreas and liver. Cancer treatments aim to limit recurrence and resistance to treatment, so understanding the possible mechanisms cancer cells could use to evolve resistance to IRE could be informative for treatment strategies. This study uses a HeLa model of cervical cancer and the A375 cell model of melanoma to assess various factors that may affect cell susceptibility to IRE. Chemical, environmental, and physical factors were tested by 1) chemically altering membrane composition, 2) varying the amount of growth signaling in the environment, and 3) exposing the cells to repeated rounds of IRE treatment. A significantly higher viability was found in HeLa cells pre-treated with atorvastatin compared to control cells, but the trend did not hold for melanoma cells. Decreased growth factor availability resulted in a trend of lower viability, but the result was not statistically significant. In the HeLa cell model, cell viability decreased with repeated IRE, suggesting that HeLa cells may not develop resistance to repeated IRE treatment over time.*

## Introduction

The hallmarks of cancer therapy have traditionally been surgery, chemotherapy, and radiation. The Human Genome Project paved the way for tumor sequencing and rational drug design, ushering in an era of targeted therapies and personalized medicine. Precision medicine also uses immunotherapy to prime a patient's own immune system to fight their cancer. These pillars of cancer treatment are often used in combination to approach fighting the disease from multiple angles. New technologies for direct tumor ablation are also being developed, including cryotherapy, ultrasound technology, and irreversible electroporation (IRE) (Davalos, et al, 2005; Hsiao and Huang, 2017). IRE was approved by the FDA in 2009, and research is ongoing to determine effectiveness of IRE for tumors inaccessible through traditional surgery resection methods (Dong, et al.; 2018). The IRE clinical procedure involves laparoscopic insertion of two electrical probes outside the margins of a tumor mass. Electrical voltages are conducted between the probes, causing the cell membranes of the tumor cells to form pores. The stressed cells initiate apoptosis and cell lysis, and the immune system clears the tumor remnants. IRE is a promising avenue for therapy because many drawbacks to traditional therapies can be avoided. IRE seems to target the tumor and leaves surrounding tissue undamaged, which aids in wound healing (Blazeveski et. al; 2019). IRE is also not mutagenic, so the risk of developing another type of cancer is minimized.

A major obstacle for cancer treatment is overcoming resistance and recurrence. In response to selective pressures imposed by treatments, cancer cells often acquire advantages that make them more aggressive and difficult to treat. This study models the factors affecting cancer cell susceptibility to IRE induced death in a HeLa cell line and aims to assess how chemical, environmental, and physical factors may affect IRE effectiveness. Experiments were conducted to examine if chemical modifications to the cell membrane may allow the cell to recover from pores induced by IRE. Environmental factors, such as amount of growth factor signaling, may also affect cell susceptibility to IRE through protective, pro-survival mechanisms. Finally, previous physical exposure to IRE may cause a cell to develop adaptive resistance to repeated IRE treatments.

## Results

Initial experiments demonstrate a voltage-dependent decrease in cell viability (Fig 1). As the applied voltage increases, the cells are more susceptible to IRE induced cell death and lysis. The electroporation protocol was optimized to determine a voltage where approximately half of the cells in the treatment were killed. Based on the initial voltage testing, 300V treatments were sufficient to kill a significant percentage of HeLa cells. At this voltage, approximately 50-60% of the cells were viable (Fig 1). Using 300V treatments ensures a sizeable cell population is left behind for future use in adaptive resistance experiments. Having a sizeable proportion of cell survival after IRE treatment also allows for the effects of various chemical and environmental conditions to be differentiated.

IRE disrupts the cell membrane's potential beyond repair, causing the cell to induce programmed cell death and lysis (Davalos, et al, 2005; Blazeovski, et al; 2019). A cell may become resistant to IRE induced cell death through modifications to the composition of the cell membrane (Cantu, et al.; 2019, Hong, 2019). Cells were pre-treated with atorvastatin to decrease overall cholesterol synthesis and potentially decrease the amount of cholesterol in the cell's membrane. Cholesterol molecules interact with the phospholipids in the cell membrane and increase the rigidity of the membrane. If the cell membrane has fewer cholesterol molecules, the membrane will be more fluid, and it may be able to reseal the pores induced through IRE treatment. 1  $\mu$ M atorvastatin treatment resulted in a 10% increase in cell viability compared to nontreated control cells (Fig 2A). No significant difference was found between DMSO and atorvastatin treated A375 cells (Fig 2B).

Decreasing the amount of growth factors in the environment may increase the cell's susceptibility to IRE. Cells cultured in reduced serum before IRE treatment had slightly lower viabilities than cells cultured in 10% FBS (Fig 3).

HeLa and A375 cells were shocked once, twice, or three times and the viabilities were compared between groups. HeLa cell viability was significantly lower when shocked two or three times compared to the cells shocked only once (Fig 5A). Adaptive resistance experiments will be performed with A375 cells to determine if melanoma cells may develop resistance to repeated IRE treatments.

## Discussion

Cancer cells are notorious for developing resistance to treatments over time. Understanding the mechanism of resistance and the contributing factors can help inform treatment strategies to increase the effectiveness of cancer treatments. This study aims to determine if two cell lines, HeLa and melanoma, can develop resistance to repeated IRE in culture. Additional factors such as membrane composition and growth factor signaling are considered as possible contributors to cell susceptibility to IRE.

The microenvironment of a tumor may be a factor to consider when exposing cells to IRE. Tumor cells often acquire genetic changes to aberrantly express growth factors, which leads to increased pro-survival and mitogenic signaling that drives uncontrolled cell growth and proliferation. Different tumor types have various amounts of growth factors in the surrounding tissue

environment (Hanahan and Weinberg, 2011). More aggressive tumors may have increased amounts of growth factors in their environment that stimulate their continued survival and proliferation. In the HeLa model, cell viability decreased in reduced serum conditions, but there was no significant difference compared to control cells cultured in 10% FBS (Fig 3). While the results obtained were not statistically significant, these results suggest the amount of growth factor signaling may be somewhat protective for a tumor exposed to IRE.

The atorvastatin dosage was based on a mathematical model studying the effects of atorvastatin on cholesterol synthesis in four cell lines (Blattmann, P; et al; 2017). These results suggest increasing the fluidity of the cell membrane through altered cholesterol synthesis or modified intracellular cholesterol storage may be a mechanism HeLa cervical cancer cells may use to evolve resistance to IRE. This finding may have implications for patients who are taking cholesterol lowering statin drugs. Statins are one of the most commonly prescribed drugs in the US, so tumors in patients with a comorbidity of high cholesterol levels may be inherently more resistant to IRE induced cell death.

The adaptive resistance experiment is based on previous work with pancreatic cancer cells, where researchers saw a slightly higher viability in cancer cells that had been shocked twice compared to cells shocked only once (Shao, 2018). If the cells develop adaptive resistance to IRE, the cells shocked three times may have a higher overall viability than the cells only shocked one time. Survivors of the first shock may produce cells that are more resistant to the same IRE treatment through genetic modification and adaptability. Previous exposure to IRE may confer some adaptive resistance to IRE treatment, which could be an important consideration for patients undergoing multiple IRE treatments for tumor ablation.

In the HeLa model, cell viability decreased with repeated IRE treatments (Fig 5). HeLa cells in culture do not appear to develop resistance to IRE, suggesting tumors originating from cervical cells may be effectively ablated with minimal risk of resistance if ablation procedures are repeated. Animal model studies could be performed to corroborate this finding in the context of a living tissue environment. Once a voltage curve is determined for the A375 cell line, repeated IRE treatments will be performed to determine if melanoma cells may develop resistance to IRE in culture.

## Materials and Methods

*HeLa and A375 cell culture.* HeLa and A375 cells (ATCC CCL-2 and CRL-1619) were cultured in DMEM media with 10% FBS and 1% Penicillin/Streptomycin. Cells were not tested for mycoplasma. The passage number for HeLa cells ranged from 15-25. The passage number for A375 cells ranged from 8-15. No known contamination was present in cells used in the reported experiments.

*Electroporation.* Cells in suspension were electroporated using Genetronics ECM 600 Electroporation system. Cells were electroporated at various voltages (100V, 300V, 400V, 500V). The pulse length range was recorded for the trials, ranging from 0.34 ms to 0.38 ms.

*Atorvastatin Treatment.* Cells were seeded in a 12 well plate at a density of 200K/mL and grown in DMEM 10% FBS with 1 uM atorvastatin (Cayman Chemical 10493) or 1 uL DMSO (ATCC 4X) for 24 hours before electroporation. Cells were electroporated 10 times at 300V and recovered in Eppendorf tubes at 37°C for 6 hours. Cell viability was assessed using Trypan Blue dye exclusion.

*Reduced Serum.* Cells were seeded in a 12 well plate at a density of 200K/mL and grown in 5% or 1% serum with 1% Penicillin/Streptomycin for 24 hours before electroporation. Cells were electroporated 10 times at 300V and recovered in Eppendorf tubes at 37°C for 6 hours. Cell viability was assessed using Trypan Blue dye exclusion.

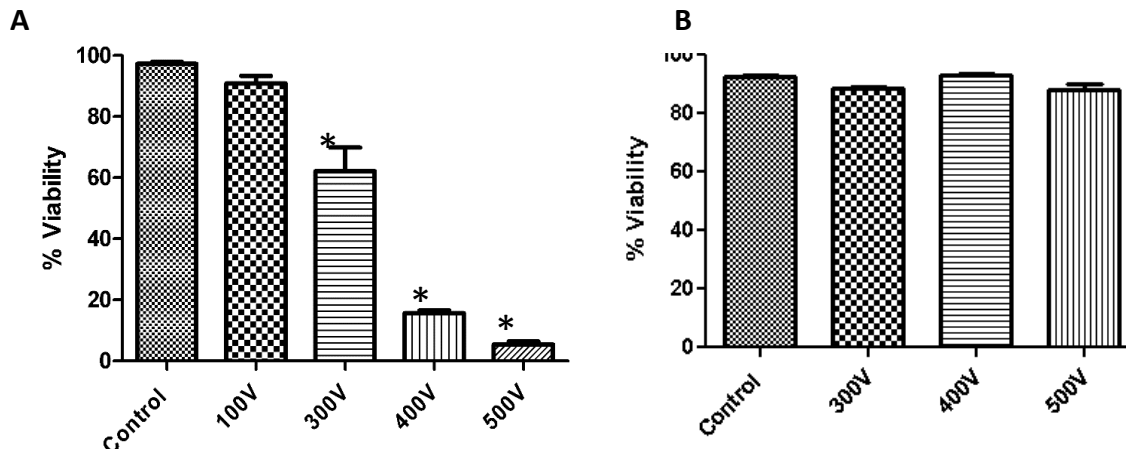
*Adaptive Resistance.* Cells in suspension at a density of 250K/mL were used to begin the adaptive resistance experiment from the same starter culture. Cells in the groups shocked 2 or 3 times were shocked 10 times at 300V, re-plated, and recovered until 80-90% confluent. Control cells were split into suspension, placed in cuvettes, and re-plated twice before being shocked once and allowed to recover in Eppendorf tubes. Cell viability was assessed using Trypan Blue dye exclusion after the final IRE treatment for each group.

**Acknowledgments:** A special thank you to the funding source for this project, the Lee University McNair Scholars program. Thank you, Lee University Science and Math Complex, for ensuring a safe laboratory space and summer research experience.

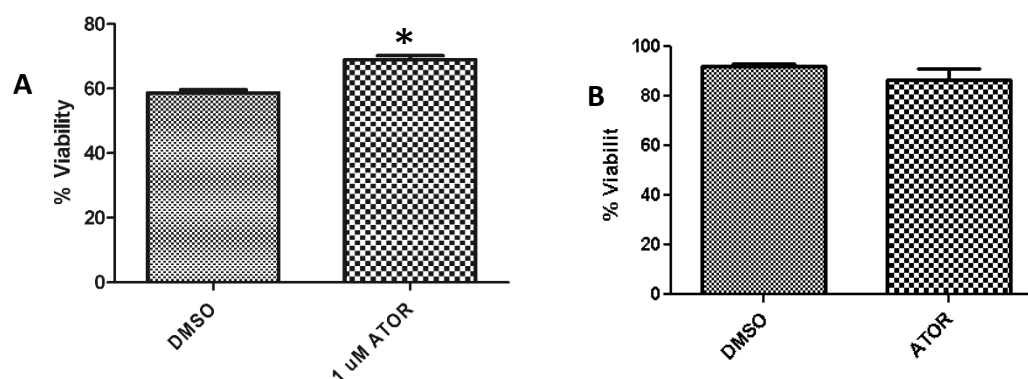
## References

- [1] Davalos RV, Mir IL, and Rubinsky B. Tissue ablation with irreversible electroporation. *Ann Biomed Eng.* 2005;33(2):223–31.
- [2] Hsiao, CH, and Huang, KW. “Irreversible Electroporation: A Novel Ultrasound-guided Modality for Non-thermal Tumor Ablation,” *J Med Ultrasound.* 2017 Oct-Dec; 25(4): 195–200. Published online 2017 Oct 6. doi: 10.1016/j.jmu.2017.08.003
- [3] Outcomes of Ablation of Unresectable Pancreatic Cancer Using the NanoKnife Irreversible Electroporation (IRE) System <https://www.clinicaltrials.gov/ct2/show/NCT02041936>
- [4] Dong, S; et al. (2018) “First Human Trial of High-Frequency Irreversible Electroporation Therapy for Prostate Cancer,” *Technology in Cancer Research and Treatment*, 17(1-9).
- [5] Blazeovski, A; Scheltema, M; Amin, A; Thompson, J; Lawrentschuk, N, and Stricker, P. “Irreversible Electroporation (IRE): a narrative review of the development of IRE from the laboratory to a prostate cancer treatment,” doi: 10.1111/BJU.14951
- [6] He, Chaobin; Huang, X; Cai, Z; Lin, X; and Li, S. “Comparison of Survival Between Irreversible Electroporation Followed by Chemotherapy and Chemotherapy Alone for Locally Advanced Pancreatic Cancer,” *Frontiers in Cancer Oncology*, 10(6).
- [7] Cantu, JC, Tarango, M, Beier, HT; and Ibey, BL. “The biological response of cells to nanosecond pulsed electric fields is dependent on plasma membrane cholesterol,” *BBA – Biomembranes*, 1858(11), November 2016, p. 2636-2646, doi: 10.1016/j.bbamem.2016.07.006
- [8] BH; et al. “Physiochemical factors that affect electroporation of lung cancer and normal cell lines,” *Biochemical and Biophysical Research Communications* 517 (2019) p. 703-308.
- [9] Blattmann, P; et al. “Systems Pharmacology Dissection of Cholesterol Regulation Reveals Determinants of Large Pharmacodynamic Variability Between Cell Lines,” *Cell Systems*, 5(6) 604-619, Dec 2017.
- [10] Shao, Q. “Physical and chemical enhancement of and adaptive resistance to irreversible electroporation of pancreatic cancer,” *Ann Biomed Eng.* 46(1), 2018.
- [11] Hanahan, D, and Weinberg, RA. “Hallmarks of Cancer: The Next Generation,” *Cell*, 144. March 2011. Doi: 10.1016/j.cell.2011.02.013

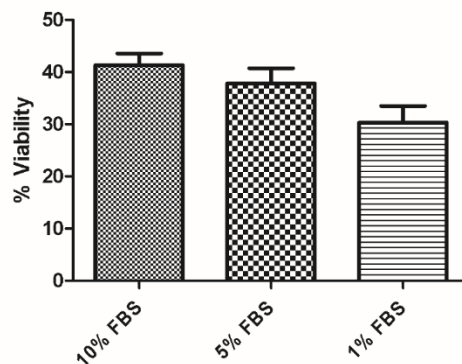
## Figures and Legends



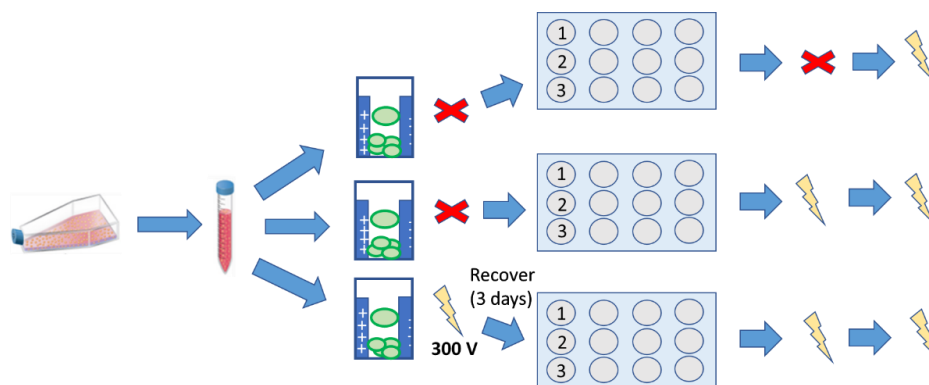
**Figure 1. HeLa cell viability decreases as applied electrical voltage increases, and melanoma cells seem to be resistant to electroporation.** Cells were shocked 10 times at various voltages. Pulse length ranged from 0.35-0.37 milliseconds. Each bar represents the mean of three IRE trials for each voltage. ANOVA test and Tukey's multiple comparison post-test demonstrate significance with  $p < 0.05$  for HeLa cells shocked at 300V, 400V, and 500V (**A**). Melanoma cells seem to be resistant to IRE induced cell death when shocked at 300V, 400V, and 500V (**B**). Bars indicate SEM. Asterisks indicate significance when compared to control.



**Figure 2. Statin Inhibition of Cholesterol Synthesis Confers Resistance to IRE induced Cell Death in HeLa cells, but not in melanoma cells.** Cells were shocked 10 times at 300V after 24 hours in media with atorvastatin or DMSO. Pulse length ranged from 0.35-0.37 milliseconds. Each bar represents the mean of three IRE trials. A two-tailed student's t-test demonstrates significance with a  $p$  value of 0.003,  $p < 0.01$  for HeLa cells (**A**). No significant difference was found between DMSO and atorvastatin treated melanoma cells with a  $p$  value of 0.2775 (**B**). Bars indicate SEM. Asterisk indicates significance when compared to DMSO alone.

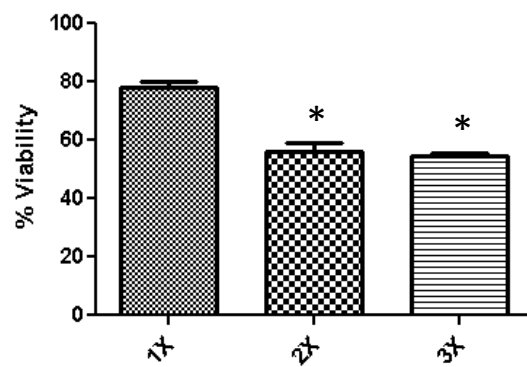


**Figure 3. HeLa cell viability decreases when cultured in reduced serum conditions.** Cells were grown overnight in reduced serum media and then shocked 10 times at 300V. Pulse length ranged from 0.35-0.37 milliseconds. Each bar represents the mean of three IRE trials. ANOVA test and Tukey's multiple comparison post-test give a p-value of 0.08.



Shao, et al. "Physical and chemical enhancement of and adaptive resistance to irreversible electroporation of pancreatic cancer," *Ann Biomed Eng.* Jan 2018, 46(1): 25-36

**Figure 4. Methods schematic of three treatment groups for adaptive resistance experiment** (receiving one, two, or three IRE treatments) from the same starter HeLa or A375 cell culture.



**Figure 5. HeLa cells do not seem to develop adaptive resistance to repeated electroporation.** HeLa cell viability decreases with repeated electroporation. ANOVA test and Tukey's multiple comparison post-test give a p value of 0.003,  $p < 0.01$ , when comparing cells shocked only once to cells shocked two or three times. There was no significant difference between cells shocked two and three times. Bars indicate SEM of three trials.



Summer 2020

## Dining at a French Table: Federalist and Anti-Federalist Invocations of Montesquieu

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*Under the guidance of Dr. Mark Scully*

## Abstract

*The United States Constitution and subsequent development of America's political landscape owes much to Baron de Montesquieu. Indeed, Montesquieu is one of the most frequently discussed figures amongst early American statesmen, with modern scholars often claiming him as the single most influential man responsible for shaping founding-era documents. Montesquieu's comments in his Spirit of the Laws concerning political tyranny in England, to furnish just one example, explicitly informed James Madison's significant understanding of checks and balances as necessary to the American republic (see Federalist 47). The influence of the Frenchman, however, is not as clear cut as it is often presented or appears from a casual reader's glance. Montesquieu was certainly cited by those in favor of the new Constitution to argue for its ratification, but also by those claiming him as a representative for their anti-federalist sentiments. These conflicting citations confound the simple attribution of Montesquieu as a friend of the United States Constitution.*

**Keywords:** Montesquieu, American Political Thought, Anti-Federalist, Constitution.

## Introduction

The tradition and role of dissent in the national political landscape is an important feature of American life. Seen in the inclusion of Supreme Court minority opinions, voting structure during election cycles, freedom of speech rights, and more, the ability to express disagreement with majority sentiment is central to the Constitutional system of the United States. This ability was strongly advocated for by early American political framers who understood difference of opinion to be central to the flourishing of free society.<sup>1</sup> Ironically, the persistent arguments of those Anti-Federalists who opposed the men now known as Founding Fathers concerning the government of the young America are vastly underread and grossly underappreciated. As Herbert Storing says, "The political life of the community continues to be a dialogue, in which the Anti-Federalist concerns and principles still play an important part. The Anti-Federalists are entitled, then... to share in the honor and study devoted to the founding."<sup>2</sup> It is in the spirit of this quote that the project at hand is framed.

As the Articles of Confederation were being reviewed in search of a new political system during the late Eighteenth century, the dissenters of the coming Constitution were known as Anti-Federalists. Although this group of citizens varied vastly in their contentions with the reformed government, certain common rallying points united them against the Federalists. In general, the Anti-Federalists were concerned that the Constitution of Madison, Hamilton, and others did not adequately preserve the paramount notions of the Declaration and the concrete freedoms afforded by the Bill of Rights. It was, after all, the staunch enemy of the Constitution, George Mason, whose Virginia Declaration of Rights influenced Jefferson's Declaration of Independence to begin with.<sup>3</sup> Although the men who voted for the Constitution's ratification were adamant that the system

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<sup>1</sup> See *Federalist 10* for a classic defense of faction in the name of the liberty.

<sup>2</sup> Herbert Storing, *What The Anti Federalists Were For* (University of Chicago Press, 1981), pg. 3.

<sup>3</sup> For more on this, see Peter Wallenstein's *Flawed Keepers of the Flame: The Interpreters of George Mason* (The Virginia Magazine of History and Biography, Apr., 1994, Vol. 102. 2) pgs. 229-260.

proposed was safe enough to preserve the country from corruption, the Anti-Federalists were not satisfied. To articulate their arguments, they found a representative in Baron de Montesquieu.

Montesquieu was a French writer, philosopher, and statesman who lived from 1689 to 1755. His works (particularly *The Spirit of the Laws*) contained fuel for the Anti-Federalists who, as mentioned above, frequently adduced his work in their treatises and pamphlets against the Constitution. The Federalists who also mentioned Montesquieu in their promotions of the same document, have, however received substantially more attention. In fact, Montesquieu is primarily known within scholarly literature as the primary influencer of pro-Federalist sentiment with little attention paid to the dissenters. This will be demonstrated in the following literature review.

## Literature Review

The scholarly attention typically directed at Baron de Montesquieu has tended towards one of two areas of focus. The first has to do with Montesquieu's status as a prominent member of the French enlightenment movement alongside figures such as Descartes, Voltaire, Rousseau, and Jean d'Alembert.<sup>4</sup> While important, this first strain of scholarship will be of less interest to me for the purpose of this project than the second, which is directed at charting the political impact of Montesquieu's writings. In this field, it is all but invariably mentioned that the Frenchman played a paramount role in furnishing the philosophical framework for American law through his *corpus* of work. Discussing Montesquieu's most widely read and perhaps greatest text, *The Spirit of the Laws*, Zeitlin states that "[His] theory of an equilibrium of powers as the precondition of freedom leads to the famous chapter on the British Constitution, which profoundly influenced the framers of the American Constitution."<sup>5</sup> Zeitlin's statement here is representative of a great host of writers who offer similar comments.<sup>6</sup>

Some interesting qualitative studies have been produced in successful attempts to numerically establish the prevalence of Montesquieu in America during the late 18th century. Spurlin's now-published doctoral thesis, *Montesquieu in America, 1760-1801*, endeavored to analyze the philosophical texts that would have been circulated, referenced, and read during this time period. By cataloguing political advertisements, various pamphlets, and library catalogues, he concludes that Montesquieu's *Spirit of the Laws* was the foremost French text circulated throughout

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<sup>4</sup> In example, See: Hugh Trevor-Roper, *History and the Enlightenment*, "Chapter 1: The French Republic: History, Values, Debates" (See "Enlightenment" chapter also); Inna Gorbato, *Catherine the Great and the French Philosophers of the Enlightenment* (Academica Press, 2006); I also suggest Daniel Brewer, *The Cambridge Companion to the French Enlightenment* (Cambridge University Press, 2014).

<sup>5</sup> Irving Zeitlin, *Montesquieu* (In *Rulers and Ruled: An Introduction to Classical Political Theory*, University of Toronto Press, 1997) 144.

<sup>6</sup> See works such as: Sarah Bruns' *The Politics of War Powers: The Theory and History of Presidential Unilateralism*, (University Press of Kansas, 2019), Chapters 3 and 4; James F. Jones, *Montesquieu and Jefferson Revisited: Aspects of a Legacy*, (The French Review, Mar., 1978, Vol. 51, No. 4), pgs. 577-585; Anne M. Cohler, *Montesquieu's Comparative Politics and the Spirit of American Constitutionalism*, (Kansas University Press, 1988).

American society during this time period.<sup>7</sup> Rossiter, expanding Spurlin's thesis, concludes that Montesquieu was popular even before 1760: "...every literate colonist could quote [Montesquieu] to advantage and [his] exposition of the separation of powers was already making perfect sense to American minds."<sup>8</sup>

Further than mere laymen, Montesquieu was especially prominent in the minds of the American statesmen often attributed with the accomplishment of shaping the young nation's Constitution. Francis Newton Thorpe stated that *The Spirit of the Laws* was the "political Bible" of men such as Jefferson, Madison, and Hamilton.<sup>9</sup> A paper trail of letters, albeit incomplete, have even been published to link Montesquieu and Washington as warm correspondents.<sup>10</sup> Lamberti draws attention to Montesquieu's affiliation with these great American men, reinforcing it with a quote from former President Woodrow Wilson: "The makers of our federal Constitution followed the scheme as they found it expounded in Montesquieu, followed it with genuine scientific enthusiasm. The admirable expositions of the Federalist read like thoughtful applications of Montesquieu to the political needs and circumstances of America."<sup>11</sup> Kirk piles on, framing Montesquieu as the patron intellectual "apologist" of America's founding fathers.<sup>12</sup>

While it has been thoroughly established in mainstream academia that Montesquieu was a prime inspiration for the United States Constitution, the fact that those who opposed its ratification also read and cited the Frenchman in their arguments has received substantially less attention. If Montesquieu truly did stand as tall above the realm of American political thought as these previously mentioned sources indicate, one might expect there to be literature dedicated to the French philosopher's effect on those who regarded the Constitution with suspicion. Sadly, the handful of scholars who have mentioned the Anti-Federalist's employment of Montesquieu only seem to do so briefly; even more sparse are those who directly address the contrast between the pro-Constitutionalists and the anti-Constitutionalists receptions.

In his lauded exposé on anti-federalist thought, *What the Anti-Federalists Were For*, Storing only mentions Montesquieu once in passing.<sup>13</sup> A book by Dr. Pole goes a small step further, mentioning the impact of the Frenchman upon both sides of framing arguments, but without

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<sup>7</sup> Paul Merrill Spurlin, *Montesquieu in America, 1760-1801*, (Octagon Books, 1969).

<sup>8</sup> Clinton Rossiter, *The Political Thought of the American Revolution, Part III*, pg. 359; See also Sharon Krause, *The Spirit of Separate Powers in Montesquieu*, (The Review of Politics, Spring, 2000, Vol. 62, No. 2), pg. 260.

<sup>9</sup> Francis Newton Thorpe, *The Constitutional History of the United States, Vol. I*, (Callaghan, 1901), pg. 155.

<sup>10</sup> "To George Washington from Charles-Louis de Montesquieu", 25 April 1785.

<sup>11</sup> Jean-Claude Lamberti, *Montesquieu In America*, (European Journal of Sociology, Vol. 32) pg. 199; Wilson, Woodrow. *Constitutional Government in The United States*, pg. 56.

<sup>12</sup> Russell Kirk, *The Roots of American Order*, (Intercollegiate Studies Institute, 2014), pg. 357. This quote of Kirk in the same work is also of relevance: "...Montesquieu expressed better than any Englishman or American of his day the very principles in which most thinking Englishmen and Americans already believed" (351).

<sup>13</sup> Herbert Storing, *What The Anti Federalists Were For* (University of Chicago Press, 1981), pg. 73.

highlighting any specific interest in this.<sup>14</sup> Other writers such as Ward and Shklar have made efforts to go beyond descriptions and explain the heterogeneity of Montesquieu's intellectual influence. The former explains Montesquieu as a writer intimating certain couched criticisms of French monarchy through his positive comments directed at English government. In this subtly, though, Ward argues that Montesquieu lost a certain measure of clarity in his argument, allowing varying interpretations of his work to spread.<sup>15</sup> While relevant, the theater of this author's argument is focused on Montesquieu's relevance in step with France and England. Given this, Ward devotes little time (one paragraph, to be precise) to the varying American receptions of Montesquieu. Shklar's article set forth a look at historical method, tracing how varying groups could draw true, yet opposing ideas from the same text:

Both sides were in fact attentive readers of Montesquieu's *The Spirit of the Laws* and like subsequent generations had emerged with quite different interpretations... The federalists took from Montesquieu not only analyses of the history of various forms of government, but also encouragement to design an institutional structure different from any known to the past...The [anti-federalists] found in Montesquieu lessons of social complexity that convinced them of the need to proceed slowly by mending the standing structure.<sup>16</sup>

Shklar's predominant interest in methods, while valuable, precludes Shklar from being able to provide in-depth examinations of how each side of the ratification debate understood works such as *The Spirit of the Laws*.

Overall, there is a void in relevant scholarship concerning the Anti-Federalist treatment of Montesquieu. Even the few scholars who observe this topic do so in passing, often in service of other ends. My work in this article will seek to fill that vacancy. This project will suppose that the influence of Montesquieu upon early statesmen is understood incompletely in American political thought and seek to add content to this field. A fitting research question for this project is something like, "What patterns will emerge from observing the Federalist and Anti-Federalist citations of Montesquieu?" To execute this mission, I will (hopefully) engage in an innovation of the extant academic conversation, contextualizing the influence of Montesquieu's writings upon the Federalists by comparing this to his influence on Anti-Federalist sentiment as well. This broadening will, of course, require an investigation of the ways in which Montesquieu is invoked in pro-Federalist and Anti-Federalist documents. I hypothesize that such a project will reveal that the Federalists cite Montesquieu more broadly and primarily in reaction to their counter-Constitutional enemies. Conversely, I postulate that the Anti-Federalists reference Montesquieu more in detailed and proactive ways.

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<sup>14</sup> J.R. Pole, *The American Constitution: For and Against*, (Farrar Straus & Giroux, 1987), pg. 16.

<sup>15</sup> Lee Ward, *Montesquieu on Federalism and Anglo-Gothic Constitutionalism*, (Publius, Vol. 37, No. 4, Fall, 2007), pgs. 551-577.

<sup>16</sup> Judith Shklar, *Publius and the Science of the Past* (The Yale Law Journal, Vol. 86, No. 6) pg. 1286.

My hope is that this project will lead students of American political theory to amend the long-unchallenged perception of Montesquieu as a dispositional sympathizer of the United States Constitution. Before launching headlong into argument, however, I would like to pause and offer a few words of preliminary importance for the methodological element of this project. As I hope has been made clear by now, this article is about the ways in which the Federalists and Anti-Federalists both admire and draw from the same philosopher to articulate their conflicting arguments about the future of America. On one hand, these opposing citations could imply that one side correctly reads and applies Montesquieu, while the other does not. This, however, I think is far too obtuse and lacks nuance. For starters, both the Federalists and their enemies are heterogeneous groups, too much so to declare one side as the arbiters of “correct” Montesquiean thought, with the other side being the “wrong”. Further, Montesquieu himself often seems contradictory within his own works.<sup>17</sup> Voltaire, when he read the famed *The Spirit of the Laws*, remarked the following: “I’m sorry the book should be a labyrinth without a clue, lacking all method... I have looked for a thread throughout this labyrinth: the thread is broken at almost every article; I was deceived I found the spirit of the author- and he has a great deal!- but rarely the spirit of the laws.”<sup>18</sup> To esoteric enthusiasts such as the Straussians, the prospect of Montesquieu’s textual labyrinth is delightful, but not so much to others.<sup>19</sup> In any case, the combination of a disparate readership and puzzling text renders a proclamation of correct or incorrect interpretation impossible.<sup>20</sup>

There is an alternative to the black-and-white, right-and-wrong approach mentioned just now. This alternative is that each side (Federalist and Anti-Federalist) simply understands Montesquieu differently, and perhaps each looks to him for different reasons. If nothing else, this supposition will make for a more interesting and tenable project. Instead of making a wholesale argument about one side or the other, I will take three cross-sectional looks at various points of contention between those arguing about the Constitution. These points will be discussed, in order, as the size of the republic, political representation of the citizens, and separation of powers within the government.<sup>21</sup> Within each area, I will aim to articulate the ways each side approaches the topic *via* Montesquieu.

In terms of data collection, I will be narrowing the scope of my research to several sources. For the Federalists, I will be scouring Jay, Hamilton, and Madison’s *Federalist Papers* as well as the *Constitutional Convention Notes*. For the Anti-Federalists, I will examine their essays. While their writings are not as unified as the *Federalist*, I will be relying upon the groupings of scholars

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<sup>17</sup> Ana Samuel, *The Design of Montesquieu's "The Spirit of the Laws": The Triumph of Freedom over Determinism* (The American Political Science Review 103, no. 2, 2009), pgs. 305-21; The previously mentioned Lee Ward article speaks to this (see footnote #15).

<sup>18</sup> Peter Gay, *Voltaire Philosophical Dictionary* (Yankee Publishing Company, 1962), see pgs. 497-509.

<sup>19</sup> It may also be mentioned that Montesquieu is, after all, French. This places him in a literature tradition known for playful style and confounding effects amongst readers.

<sup>20</sup> *The Spirit of the Laws* is Montesquieu's most famous work; thus why it alone is mentioned here rather than his lesser known, but perhaps equally confusing texts.

<sup>21</sup> I was influenced to select these three areas by Herbert Storing, whose books and articles highlight these as recurring themes of contention. While there are other areas of disagreement, size, representation, and separation of powers are each large enough topics to promise enough textual data to work with.

such as Storing, and the faculty of the University of Tulsa Law School.<sup>22</sup> In addition to these sources, I will also be consulting Jonathan Elliot's five-volume work, *Debates in the Several State Conventions of the Adoption of the Federal Constitution*.<sup>23</sup> This work contains, as the title indicates, the debates held concerning ratification within individual states. Naturally present are both Federalist and Anti-Federalist arguments. In each aforementioned source, I will locate, sort, and describe the relevant invocations of Montesquieu for analysis.<sup>24</sup>

## I. SIZE<sup>25</sup>

Those in favor of James Madison's patent Virginia Plan during the convention were implicit advocates of an expansive, top-down approach to government. As opposed to the existing system of loosely connected states in the confederated regime without a centralized supreme power, the Constitution was aimed partially at creating and energizing the national aspect of American politics.<sup>26</sup> There were, of course, several prominent individuals who aimed to further the cause of expansion and consolidation while still explicitly empowering the people as a basic building block of society. James Wilson was the prominent representative of this concept. Federal Convention Notes say that, "[Wilson] was for raising the federal pyramid to a considerable altitude, and for that reason wished to give it as broad a basis as possible."<sup>27</sup> Here, however, although Wilson and his ideological supporters envisioned a great pyramid girded about with the support of the people, the Anti-Federalists were concerned that individual states and their citizens would be crushed beneath a large, national government.<sup>28</sup>

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<sup>22</sup> Storing, *The Anti-Federalist: Writings by the Opponents of the Constitution* (University of Chicago Press, 1985). In the spirit of accessibility, when I quote evidence found in the writings contained within Storing's compilation, I will cite them independently from the book in order that anyone can locate the reading themselves online.

Tulsa Web Page accessed:  
<http://resources.utulsa.edu/law/classes/rice/Constitutional/AntiFederalist/antifed.htm>

<sup>23</sup> University of Minnesota, 1827.

<sup>24</sup> Perhaps this sounds more daunting than it actually is, since Montesquieu is not quoted as much as might be expected. For example, he is only discussed and/or quoted in four Federalist papers, and only three times at the Philadelphia ratification convention; "Relevant" sources are those in which Montesquieu (or a quote of his) is directly mentioned.

<sup>25</sup> As a forewarning, I intend to spend more time in background information at this time to illuminate aspects of Anti-Federalist identity. This background information will decrease progressively at the start of the coming REPRESENTATION and SEPARATION OF POWERS sections.

<sup>26</sup> See, in example, Hamilton's emphasis on consolidation in *Federalist 1* ("Vigor of government is essential to the security of liberty").

<sup>27</sup> *Notes on the Debates in the Federal Convention*, Thursday, May 31st entry. This base was, of course, intended to be the people.

<sup>28</sup> Brutus, spokesperson for Anti-Federalist thought, did not believe that Wilson's concept of a broad base was reflected in the Constitution: "When a building is to be erected which is intended to stand for ages, the foundation should be firmly laid. The Constitution proposed to your acceptance, is designed not for yourselves alone, but for Generations yet unborn. The principles, therefore, upon which the social compact are founded, ought to have been clearly and precisely stated, and the most express and full declaration of

No matter how broad the democratic base by the optimistic Wilson, the Constitution opened the door for a nationally dominant form of government. One need only look to the supposed shortcomings of the Articles of Confederation that initially prompted the convention to see this. The diseases of the confederacy were listed by Madison as “[A] want of a uniformity in cases requiring it, as laws of naturalization and bankruptcy; a coercive authority operating on individuals; and a guaranty of the internal tranquillity of the states.”<sup>29</sup> George Washington himself directly stated his hope that the convention would “provide radical cures” for these and other defects.<sup>30</sup> While these certain shortcomings of the confederacy would find their remedy after the ratification, the Anti-Federalists foundationally believed that true independence of states would be lost with the suppressive uniformity that the new government would have the potential to wield.

In order to maintain liberty and happiness, the Anti-Federalists tended that the nation originally chose and should continue to be composed of small, state-level building blocks. Luther Martin said at the convention that “...the people of America preferred the Establishment of themselves into thirteen separate sovereignties instead of incorporating themselves into one...the federal government they formed to defend the whole against foreign nations, in case of war, and to defend the lesser states against the ambition of the larger.”<sup>31</sup> By allowing individual states to be the chiefest entities unto themselves, the regional inhabitants’ needs and happiness could be most directly catered to. This, however, would be impossible in a large, top-down government, unfamiliar with the particulars of small towns and boroughs.

To articulate this concept in the public arena, those statesmen opposed to the Constitution often looked to Book IX of Montesquieu’s *Spirit of the Laws*. Here, Montesquieu lays out the foundational issue of size in his first paragraph: “If a republic is small, it is destroyed by a foreign force; if it is large, it is destroyed by an internal vice.”<sup>32</sup> It is only a carefully crafted republic, then, that can resist these internal and external dangers. A successful federal system is formed towards confederacy in this way by what Montesquieu calls “associations”.<sup>33</sup> Associations come to be formed between cities, towns, or, in the case of America, states. The associations render nations “able to resist external force... maintained at its size without internap corruption: the form of this society curbs every drawback.”<sup>34</sup>

A number of outspoken anti-federalists drew upon this concept to contend the looming, suffocating, and overpowered national government. Richard Henry Lee, for example, stated that

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rights to have been made - but on the subject there was almost an entire silence” (Brutus II, 1 November 1787).

<sup>29</sup> *Notes on the Debates in the Federal Convention*, Introduction. Edmund Randolph mentions defects as well to begin the proceedings. In addition to Madison’s general observations, Randolph specifically adds the lack of national military and inability to regulate commerce (Monday, May 28th).

<sup>30</sup> Personal letter from George Washington to James Madison, 31 March 1787.

<sup>31</sup> *Notes on the Debates in the Federal Convention*, June 20th. Martin was notably opposed to the Constitution’s ratification.

<sup>32</sup> *Spirit of the Laws*, II.IX.I.

<sup>33</sup> This word is important, connoting autonomy and equality.

<sup>34</sup> *Spirit of the Laws*, II.IX.I.



“So extensive a territory as that of the U. States, including such a variety of climates, productions, interests; and so great differences of manners, habits, and customs; *cannot be governed in freedom*, unless formed into States *sovereign sub modo*, and *confederated for common good*.”<sup>35</sup> Melancton Smith similarly quoted Montesquieu against the Federalists during the New York debates concerning the adoption of the federal constitution, saying that “...the intent of the Constitution [is] not a confederacy, but a reduction of all the states into a consolidated government.”<sup>36</sup> He proceeded to remind the assembly that “Montsqueiu, with all the examples of modern and ancient republics in view, gives it as his opinion, that a confederated republic has all the internal advantages of a Republic, with the external force of a monarchy.”<sup>37</sup> Smith was not the only New Yorker to hold such a view: Cato, the Anti-Federalist essayist was New York governor George Clinton. Clinton, in his *Cato III*, directly iterates the concept of small, confederated liberty espoused by “the great Montesquieu” in the same fashion as Smith.<sup>38</sup>

Even Thomas Jefferson, who is sometimes argued to be as less than a full-blooded Anti-Federalist, was an avid reader of the Frenchman and drew extensively upon his concept of associations, serving as a mouthpiece for the friends of the Confederacy.<sup>39</sup> As a self-described advocate for the preservation of state rights, Jefferson wrote:

Our country is too large to have all its affairs directed by a single government. Public servants at such a distance, and from under the eye of their constituents, must, from the circumstance of distance, be unable to administer and overlook all the details necessary for the good government of the citizens; and the same circumstance, by rendering detection impossible to their constituents, will invite public agents to corruption, plunder and waste.<sup>40</sup>

Jefferson’s solution to the problem of size was the formation of a “large confederation”. This, he said, would “more effectively secure independence and the preservation of republican government.”<sup>41</sup>

It is worth noting at this point that these authors and others are referencing a major touchstone of Montesquieu’s philosophy. Over half of *The Spirit of the Laws* is, unsurprisingly, dedicated to discussion of laws. This extensive section is introduced by Montesquieu’s discussions

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<sup>35</sup> Letter to Samuel Adams; Date Unknown; Emphasis Mine. It is known from early New York library records that Lee was an avid reader of Montesquieu and *The Spirit of the Laws*. Visit [cityreaders.nysoclib.org/People & Organizations>Richard Henry Lee](http://cityreaders.nysoclib.org/People%20&%20Organizations/Richard%20Henry%20Lee) for more information on this.

<sup>36</sup> *Debates In The Convention Of The State Of New York, On The Adoption Of The Federal Constitution*. (20 June 1788).

<sup>37</sup> Ibid.

<sup>38</sup> Cato III (25 October 1787).

<sup>39</sup> Recall from the literature review that Jefferson was influence extensively by Montesquieu. For reading on Jefferson’s political leanings, I recommend James C. Kelly and B. S. Lovell’s *Thomas Jefferson: His Friends and Foes* (The Virginia Magazine of History and Biography , Jan., 1993, Vol. 101, No. 1).

<sup>40</sup> Thomas Jefferson to Gideon Granger (13 August 1800).

<sup>41</sup> Thomas Jefferson to the Rhode Island Assembly, (26 May 1801).

on associations and confederated republics. In the several hundred pages that follow, virtuous lawmaking and just laws in Montesquieu's framework stems from this understanding.

Hamilton prominently opposed explicitly and at length the use of Montesquieu's theory of association by the Anti-Federalists. *Federalist 9*, in fact, is dedicated to this very objective. "The opponents of the plan proposed have with great assiduity city and circulated the observations of Montesquieu on the necessity of a contracted territory for a republican government, But they seem not to have been apprised of the sentiments of that great man expressed in another part of his work."<sup>42</sup> Interestingly, though criticizing his opponents for not reading Montesquieu widely enough, Hamilton proceeds to only reference Book IX of *The Spirit of the Laws* himself. Essentially, he claimed that Montesquieu had in mind much smaller unit sizes while writing. Towns and villages were mentioned in *The Spirit of the Laws*, but America possessed large states:

"When Montesquieu recommends a small extent for republics, the standards he had in view were of dimensions, far short of the limits of almost every one of these states. Neither Virginia, Massachusetts, Pennsylvania, New York, North Carolina, nor Georgia, can by any means be compared with the model from which he reasoned..."<sup>43</sup>

Hamilton is correct on this point: Lycia, the ideal confederated republic according to Montesquieu, was smaller than most early American colonies.<sup>44</sup> "Thus we perceive," concludes Hamilton, "based on the distinctions insisted upon, were not within the contemplation of this enlightened writer".<sup>45</sup> James Madison uses this exact same argument against Oliver Ellsworth of Connecticut during the Convention, comparing the smallness of Lycia to the expanse of American states.<sup>46</sup>

Interestingly, despite attacking the Anti-Federalist's use of Montesquieu in some places, the Federalists twice employ Montesquieu's opinion on republic size to promote their Constitution. George Nicholas does this at the Virginia state ratification debates. Believing the virtue of smallness to be guaranteed by the Constitution, "Mr. Nicholas concluded by making a few observations on the general structure of the government, and its probable happy operation... then quoted the opinion of the celebrated Montesquieu... that a confederate republic as the only safe means of extending the sphere of a republican government."<sup>47</sup> This statement, in frankness, seems enigmatic. While I am not sure why Nicholas might do this, it might be important to add that his remark was the last of that particular day of debate. In fact, Nicholas' comment marked the very last recorded sentence of the session's proceedings. It was not brought up for further consideration the following morning. At best, then, it would seem that this quotation of Montesquieu was a

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<sup>42</sup> *Federalist 9*.

<sup>43</sup> Ibid.

<sup>44</sup> *Spirit of the Laws*, II.IX.III.

<sup>45</sup> Ibid.

<sup>46</sup> *Notes on the Debates in the Federal Convention*, June 30th.

<sup>47</sup> *Debates In The Commonwealth Of The State Of Virginia, On The Adoption Of The Federal Constitution*. (10 June 1788).

distantly supporting point in the speaker's (rather scattered, as it were) argument in favor of ratification.

The second recorded instance of a Federalist positively citing Montesquieu in a discussion of republic size occurs in an essay by James Madison. Moving through each section of the Constitution's Article IV in *Federalist 43*, Madison invokes Montesquieu in an exposition on Section 4. He first says that "Governments of dissimilar principles and forms have been found less adapted to a federal coalition of any sort, than those of a kindred nature."<sup>48</sup> In a clever fashion, Madison then uses *The Spirit of the Laws* as evidence. Montesquieu vocally preferred the republics of Holland and Switzerland above Germany's.<sup>49</sup> The reason for this is that Germany's republic consisted of heterogeneously structured parts, while uniformity rendered the republics of Holland and Switzerland as politically blessed. In bringing this to light, Madison flipped the script on his intellectual opponents: to protect the confederated republics that the Anti-Federalists desired, some uniformity would be needed amongst them, according to Montesquieu. Madison continues: "Among the advantages of a confederate republic enumerated by Montesquieu, an important one is, 'that should a popular insurrection happen in one of the States, the others are able to quell it. Should abuses creep into one part, they are reformed by those that remain sound.'"<sup>50</sup> Madison seems intimates that the presence of uniformity amongst the states does not mean that interstate accountability must cease.

As I hope is clear, Madison's use of Montesquieu as a positive source in the conversation concerning republic size is far more serious than George Nicholas'. Despite this, though, although he is quoting sections of *The Spirit of the Laws* in which Montesquieu reveals himself as a staunch believer in confederated republics, Madison himself is not in favor of this regime type. Instead, it would seem that Madison relies upon these quotations to pacify the Anti-Federalists, hopefully winning over some of Montesquieu's loyal disciples. As previously discussed, Hamilton and Madison elsewhere attack the Anti-Federalist's use of Montesquieu. These assaults, directed at the likes of Melancton Smith, George Clinton, and Oliver Ellsworth, simply state that the Frenchman's philosophy is not applicable to the American predicament. The Federalists, free from the same burden of proof encumbering their opponents, can afford to do this without seriously reckoning with Montesquieuan thought. So far, my hypothesis has held true: The Federalists have mostly reacted to Montesquieu in broad strokes, while the Anti-Federalists have done so in more specific and proactive capacities.

## II. REPRESENTATION

In addition to the foundational disagreement between the Constitution's supporters and detractors concerning republic size, the debate over political representation between these same opposing sides was prominent. In frankness, the necessity of a complex representational system would have been understood by the Anti-Federalists as a symptom of a deficient system to begin

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<sup>48</sup> *Federalist 43*.

<sup>49</sup> *Spirit of the Laws*, II.IX.III.

<sup>50</sup> Article IV.IV: "The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and on Application of the Legislature, or of the Executive (when the Legislature cannot be convened) against domestic violence." *Federalist 43*; Madison quotes *Spirit of the Laws*, II.IX.I.

with.<sup>51</sup> As the cautious voices of their time, the opponents of the Constitution wanted a structure that would be as close to the people as possible. As defenders of small-scale political units discussed in the previous section on size, the Anti-Federalists leaned towards a belief that business should be done in small towns and provinces first, as a baseline of most civic operation. If the need presented itself, Montesquieuan associations of these towns could coordinate.<sup>52</sup> It is worth noting before continuing that the conversation concerning representation revolved around the legislature, as lawmaking is a primary apparatus of any republic and the existing confederation did not have an executive force. Although the Publius and other advocates of the new government championed the legislative congressional body as representative, the Anti-Federalists had their doubts about how well one person could represent thousands of others.<sup>53</sup>

Brutus sums up the primary Anti-Federalist anxiety concerning representation in an early essay:

If the people are to give their assent to the laws, by persons chosen and appointed by them, the manner of the choice and the number chosen, must be such, as to possess, be disposed, and consequently qualified to declare the sentiments of the people; for if they do not know, or are not disposed to speak the sentiments of the people, the people do not govern, but the sovereignty is in a few.<sup>54</sup>

This declaration suggests a caution about rule by “a few” rather than “the people”. In this statement, Brutus declares that representatives must, in fact, know theoretically and be practically driven to speak on behalf of their constituents. This condition of virtuous representation comes about *via* proximity to and affiliation with a given legislator's district. As George Mason put it during the Philadelphia convention, “Ought the merchant, the monied man, the parent of a number of children whose fortunes are to be pursued in his own Country, to be viewed as suspicious characters, and unworthy to be trusted with the common rights of their fellow Citizens?”<sup>55</sup> The best Anti-Federalist representative is a common, trustworthy man: A true microcosm of “We the people”.<sup>56</sup>

It is worth noting here that, upon these grounds, the Constitutional Convention of 1787 is highly suspect through an Anti-Federalist perspective. Patrick Henry noted this “I have the highest veneration for those gentlemen; but, sir, give me leave to demand, What right had they to say, We, the people? [...] Who authorized them to speak the language of, We, the people, instead of, We, the

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<sup>51</sup> See Storing's chapter, “Conservatives” in his book, *What the Anti-Federalists Were For*.

<sup>52</sup> I say “leaned” here because the Anti-Federalists have many different ideas on this topic, but all tend to revolve around this conservative base.

<sup>53</sup> See *Federalist* 62. For Madison, the Constitution provided a system that was both justly representative and stable.

<sup>54</sup> Brutus, Essay I (18 October 1787).

<sup>55</sup> *Notes of Debates in the Federal Convention of 1787*, August 7th.

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states?”<sup>57</sup> Amidst rising tension and frustrations by those who shared Henry’s viewpoint, James Madison persistently argued that the legislative function of the coming government would be apportioned in an optimal fashion, particularly in the *Federalist* papers 52-62. Publius’ disputants, though, were not convinced. Brutus, responding to Madison and Hamilton’s reassurances of equality amongst elected political agents and their electors said, “...there is an appearance of justice, in the appointment of its members-but if the clause, which provides for this branch, be stripped of its ambiguity, it will be found that there is really no equality of representation, even in this house.”<sup>58</sup> He relied upon the “celebrated Montesquieu” to demonstrate this, quoting at length from the *Spirit of the Laws*: “In a free state, every man, who is supposed to be a free agent, ought to be concerned in his own government, therefore the legislature should reside in the whole body of people.”<sup>59</sup>

To inspire and add weight to their arguments, the Anti-Federalists further relied upon Montesquieu as Brutus did. In an argument about “The principles of representation and responsibility,” Edmund Randolph, one of the few delegates present at the convention that did not sign the Constitution, cited Montesquieu during the state of Virginia’s ratification debates.<sup>60</sup> Relying upon his French source, Randolph claimed at length that republics are qualified as virtuous by their principles of representation, lawmaking, and consent: “The empire or government of laws, according to that phrase, is that in which the laws are made with the free-will of the people; hence, then, if laws be made by the assent of the people, the government may be deemed free.”<sup>61</sup> In direct response to this, the federally sympathizing John Dawson attacks the applicability of Randolph’s reliance on *The Spirit of the Laws*: “The same system of policy which might have been excellent in the governments of antiquity would not, probably, suit us at the present day.”<sup>62</sup>

A similar debate at the Massachusetts state ratification convention took place between William Heath, Henry Dawes, and Christopher Gore. On January 15th, Heath stood to argue in favor of annual election of representatives: “I will produce one observation from this celebrated writer, Baron Montesquieu; it is as follows: ‘The greatness of power must be compensated by the brevity of the duration; most legislators have fixed it to a year; a longer space would be dangerous.’

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<sup>57</sup> Patrick Henry Speech Before Virginia Ratifying Convention, June 5, 1788.

<sup>58</sup> Brutus, Essay III (15 November 1787).

<sup>59</sup> *Spirit of the Laws*, IV.VI; Federalist Farmer quotes this section as well and mounts a similar argument (Farmer VII, December 31, 1787).

<sup>60</sup> *Spirit of the Laws*, I.II.I.

<sup>61</sup> *The Debates In The Convention Of The Commonwealth Of Virginia, On The Adoption Of The Federal Constitution*. June 7th; The topic of consent as an interesting one as well, but a conversation about this would extend beyond the boundaries of this section. I cannot help, however, including this Montesquieu quote: “In the republic of Holland, one province cannot make an alliance without the consent of others. This law is good and even necessary in the federal republic. It is missing from the German constitution, where it would curb the misfortunes that can come to all the members from imprudence, ambition, or avarice of one alone” (*Spirit of the Laws*, IX.III). The Anti-Federalists would have identified strongly with this point of view.

<sup>62</sup> Ibid.

This was the wisdom of our ancestors; it has been confirmed by time...”<sup>63</sup> The concern expressed by Heath was that, given a period of extended separation between representatives and their constituents, the former would forget the particulars of the district from which they came. “The representative,” Heath continues, “is one who appears on behalf of, and acts for, others; he ought, therefore, to be fully acquainted with the feelings, circumstances, and interests of the persons whom he represents; and this is learnt among them, not at a distant court.”<sup>64</sup> From this point, Dawes and Gore, loyal to the Constitution, offer up their rebuttal. “Mr. DAWES, in answer to Gen. Heath, said, that the passage quoted from Montesquieu applied to single governments, and not to confederate ones.”<sup>65</sup> Gore, likewise, responds by attacking the source:

“A passage is adduced from Montesquieu, stating that, where the people delegate great power, it ought to be compensated for by the shortness of the duration. Though strictly agreeing with the author, I do not see that it applies to the subject under consideration. This might be perfectly applicable to the ancient governments, where they had no idea of representation, or different checks in the legislature or administration of government; but, in the proposed Constitution, the powers of the whole government are limited to certain national objects, and are accurately defined.”<sup>66</sup>

Dawes and Gore do not respond to the Anti-Federalist threat from Heath by citing Montesquieu in other areas that might bolster their points, but rather by calling into question the relevance of his advice to the American political context.

In addition to the conversations about representation occurring in Virginia and Massachusetts, Robert Yates’ *Notes Of The Secret Debates Of The Federal Convention Of 1787* indicate that, while not present in Madison’s more popular account of the convention, Montesquieu was the touchstone of conversation in a disagreement about representation. On June 23rd, Pierce Butler noted that, “The great Montesquieu says it is unwise to intrust persons with power, which, by being abused, operates to the advantage of those intrusted with it.”<sup>67</sup> Here, Pierce elaborated on the Anti-Federalist concept that representatives would be more prone to abuse power the farther separated (by time served in political office and location) they are from those who elected them. If elected officials are close enough to their province, they will want all the more to see to its prosperity. For their execution of this system, Montesquieu praises the town of Lycia.<sup>68</sup> Days after

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<sup>63</sup> *Debates In The Convention Of The Commonwealth Of Massachusetts, On The Adoption Of The Federal Constitution*. January 15th. Heath is quoting *Spirit of the Laws*, II.III.

<sup>64</sup> Ibid.

<sup>65</sup> Ibid.

<sup>66</sup> Ibid.

<sup>67</sup> *The Notes Of The Secret Debates Of The Federal Convention Of 1787, Taken By The Late Hon. Robert Yates, Chief Justice Of The State Of New York, And One Of The Delegates From That State To The Said Convention*.

<sup>68</sup> “If one had to propose a model of a fine federal republic, I would choose the republic of Lycia”. *Spirit of the Laws*, II.IX.III.

Butler's initial invocation of Montesquieu, while the conversation was still boiling, Madison stands to simply state that "Lycia, so justly applauded by the celebrated Montesquieu, was different."<sup>69</sup>

The notes of Yates as well as the debates in Massachusetts and Virginia illuminate a pattern similar to the one seen in the previous section. Once again, the Anti-Federalists consistently cite Montesquieu proactively and specifically in their arguments. The Federalists respond as to these citations, but do not often provide their own independent ones. Instead of adhering to Montesquieu as an authoritative vehicle to carry forward their ideas, the Federalists merely called into question the pertinence of the Frenchman's philosophy.

### III. SEPARATION OF POWERS

Having now discussed the invocations of Montesquieu in debates concerning size and representation of the young American republic, I will now turn to the discourse concerning separation of powers. A natural starting place for this third and final portion of my project is *Federalist* 47. This text is one of the more popular of Publius' work. Herein, Madison lays down the principles of the separation of power that are taught in schools at every level. This paper is of special interest, as Montesquieu is widely attributed as the inspiration for America's separation of powers doctrine.<sup>70</sup>

As might have been predicted, Madison references the Frenchman in his essay. He begins by calling lavishly him "The oracle who is always consulted and cited on this subject".<sup>71</sup> The goal moving forward in the essay is said to be "to ascertain his meaning" concerning the nature of political departments. Primarily, Madison aims to dispel the popular notion of Montesquieu as an advocate for totally separate governmental sectors. The Federalist writer first quotes a passage from the *Spirit of the Laws*: "There can be no liberty, where the legislative and executive powers are united in the same person, or body of magistrates....nor is there liberty if the power of judging is not separate from legislative power and from executive power."<sup>72</sup> Madison launches into argument from here: "[Montesquieu] did not mean that these departments ought to have no partial agency in, or no control over the acts of each other."<sup>73</sup> This, for Madison, is an important point to make. In

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<sup>69</sup> Ibid; June 30th.

<sup>70</sup> A quick Google search renders this evident. The Stanford Encyclopedia of Philosophy says, "[his] theory of the separation of powers had an enormous impact on liberal political theory, and on the framers of the constitution of the United States of America." Wikipedia: "He is the principal source of the theory of separation of powers, which is implemented in many constitutions throughout the world." Biography.com: "He also established the idea of a separation of powers — legislative, executive and judicial — to more effectively propagate liberty... the work influenced France's Declaration of the Rights of Man (Declaration des Droits de l'Homme et du Citoyen) and the U.S. Constitution." These sources (with the exception of Stanford) are not what might be called "academic". This speaks to my point, however, of the popular perception of Montesquieu separate powers doctrine.

<sup>71</sup> *Federalist* 47.

<sup>72</sup> *Spirit of the Laws*, II.XI.VI.

<sup>73</sup> *Federalist* 47.

quite a few cases, Anti-Federalists had been using the same section of *The Spirit of the Laws* to decry the Constitution's separate powers policies as not distinctive enough.

The minority dissenters of the Pennsylvania state ratification, publishing their objections in a state newspaper, opine that "Such various, extensive and important powers combined in one body of men, are inconsistent with all freedom; the celebrated Montesquieu tells us, that 'when the legislative and executive powers are united in the same person...'"<sup>74</sup> The disputant resolution is clear in the next paragraph: "The president general is dangerously connected with the senate."<sup>75</sup> Also similarly and directly empowered by Montesquieu's comments, the author publishing under the name of William Penn stated the following: "If, says Montesquieu, the same man, or body of men, is possessed both of the legislative and executive power, there is NO LIBERTY...Liberty therefore can only subsist, where the powers of government are properly divided, and where the different jurisdictions are inviolably kept distinct and separate."<sup>76</sup> Leonidas, an Anti-Federalist writer from London, offered similar comments, as did Brutus' 16th essay.<sup>77</sup>

Due to this host of voices clamoring against the Constitutional division of branches, it makes sense that Madison would endeavor to address the source of these Anti-Federalist articulations in *Federalist* 47. Madison places himself in Montesquieu's shoes and aims to contextualize his writing by appraising the "example in his eye". After the Anti-Federalist understanding of the Frenchman as a champion of totally separate powers was challenged, Madison was able to positively frame the foundational doctrine of partial power:

"[Montesquieu's] meaning, as his own words import, and still more conclusively as illustrated by the example in his eye, can amount to no more than this, that where the *whole* power of one department is exercised by the same hands which possess the *whole* power of another department, the fundamental principles of a free constitution are subverted."<sup>78</sup>

Through this, Publius effectively pulled the intellectual rug from beneath the feet of the Pennsylvania dissenters, William Penn, Leonidas, and Brutus. "What I have wished to evince," Madison says to close the essay, "is that the charge brought against the proposed constitution, of

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<sup>74</sup> Pennsylvania Packet and Daily Advertiser (18 December 1787); note, of course, that the writer here is quoting the exact passage from Montesquieu as Madison does in *Federalist* 47. The Pennsylvania Minority's official resolution at the debates was "That the legislative, executive, and judicial powers be kept separate."

<sup>75</sup> Ibid.

<sup>76</sup> William Penn, Philadelphia Independent Gazette (3 January 1788).

<sup>77</sup> "In this formidable combination of power, there is no responsibility. And where there is power without responsibility, how can there be liberty?" The London Times (30 July 1788); Brutus admits that, to some degree, political mixing is probably necessary. As much as possible, though, he tends for separate branches: "To have a government well administered and all its parts, it is requisite that the different departments of it should be separated and lodged as much as may be in different hands. The legislative power should be in one body, the executive in another, and the judicial in one different from either - but still each of these body should be accountable for their conduct." (Brutus XVI, 10 April 1788).

<sup>78</sup> *Federalist* 47; emphasis mine. This, like *Federalist* 43, exhibits the cleverness and awareness of Madison as an author.



violating a sacred maxim of free government, is warranted neither by the real meaning annexed to that maxim by its author, nor by the sense in which it has hitherto been understood in America".<sup>79</sup> Thanks to Madison, no longer could the Anti-Federalists cite Montesquieu as a sympathizer of their cause in this area without serious effort.

The only other mention of Montesquieu in the *Federalist* is hardly more than a footnote in the 78th essay written by Hamilton.<sup>80</sup> Elsewhere, I found little record of Montesquieu being mentioned in discourses on the separation of powers from either the Federalists or the Anti-Federalists.<sup>81</sup> Based on what I have already mentioned here, though, which revolves around *Federalist* 47, it appears that the same patterns are present that were also evident in the previous two sections on size and representation. Madison, the Federalist representative, defensively interacts with Montesquieu, offering an interpretation only to defend a pre-existing argument. The Anti-Federalists, meanwhile, seem to have initiated the debate with Montesquieu, consistently relying upon the specifics of his *Spirit of the Laws* to do so.

#### IV. CONCLUSION

In conclusion, my limited project has seemed to confirm my thesis at the outset: in discourse about republic size, representation, and separation of powers, the Anti-Federalists reliably lead the offensive charge with Montesquieu. The Federalists, on the other hand, invariably draw this source into question, without often interacting with him independently. This is important because, as my literature review hopefully showed, the overwhelming majority of literature paints Montesquieu as a prime intellectual tool of those in favor of the United States Constitution. My work here, albeit restricted, has suggested an opposing truth, that the Frenchman could be more aptly described as a foundational tool of the Anti-Federalists. My observations here may not be fully accurate, of course. It is altogether possible that the Federalists understand Montesquieu certain particular ways and patterns that evaded my readings. In any case, whether my observations are accurate or inaccurate, further examination would be helpful.

If it seems as if I have treated the dissenters of the Constitution with more attention than their counterparts in this project, it is because I have. In reality, the enemies of the Constitution mention Montesquieu vastly more than do the Federalists, at least in explicit fashions. In future research, I would like to compile an expansive catalogue of organized citations on both sides. My original thesis was that the Federalists quote Montesquieu more broadly and reactively than the Anti-Federalists; another trend that has emerged from my research is that the Federalists also quote Montesquieu drastically less than their counterparts. Further, it is to be noted that the majority of citations of Montesquieu revolve around Book IX of his *Spirit of the Laws*. Both of these concepts should be examined in later research.

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<sup>79</sup> Ibid.

<sup>80</sup> There literally is a footnote. Hamilton wanted to include Montesquieu's declaration of the judiciary as "next to nothing" in his discussion of the same (*Spirit of the Laws* II.XI.VI).

<sup>81</sup> It is, perhaps, possible that Madison's work in *Federalist* 47 served to limit the Anti-Federalist arguments dependant upon Montesquieu.

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## “We Were All Kind of By Ourselves.” Understanding the Challenges Faced by First-Generation College Students in Fentress County

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## Abstract

*This study investigated the factors that influence college completion for first-generation college students in Fentress County, TN, a county in Central Appalachia. Family dynamics, financial struggle, grit, mental health, and academic advising were the primary factors considered to have influence on college completion for students in Fentress County. To test this, ten former students from York Institute, a high school in Fentress County, who were first-generation college students were interviewed about their experiences. Three administrators from York Institute were also interviewed to discuss the current resources available to prepare high school students for the transition to post-secondary education. This research concluded that family dynamics, financial situations, grit, and academic advising were primary influences on college completion; however, themes of localism and transition also emerged from the interviews as potential factors. Using this data, educational institutions in Fentress County, as well as Central Appalachia as a whole, can better prepare potential first-generation Appalachian college students for post-secondary education.*

*Key words: Central Appalachia, college completion, first-generation students*

## Contents

<a href="#">Literature Review</a> .....	157
<a href="#">Appalachian Heritage and Culture</a> .....	157
<a href="#">Demographics of Central Appalachia and Fentress County</a> .....	157
<a href="#">Appalachian Views on Education and Career</a> .....	158
<a href="#">Community College</a> .....	159
<a href="#">Financial Struggle</a> .....	159
<a href="#">Developmental Courses for Community College Students</a> .....	160
<a href="#">Grit and Perseverance</a> .....	161
<a href="#">Mental Health</a> .....	161
<a href="#">Academic Advising</a> .....	162
<a href="#">Family Dynamics</a> .....	163
<a href="#">Methodology</a> .....	164
<a href="#">Procedure</a> .....	164
<a href="#">Participants</a> .....	164
<a href="#">Data Analysis</a> .....	165
<a href="#">Results</a> .....	165
<a href="#">Former Students Interviews</a> .....	165
<a href="#">Awareness of Options and Influences</a> .....	166
<a href="#">Financial Aid</a> .....	167
<a href="#">Cost of Living</a> .....	169

<a href="#"><u>Family Dynamics</u></a> .....	170
<a href="#"><u>Academic Advising</u></a> .....	172
<a href="#"><u>Mental Health</u></a> .....	175
<a href="#"><u>Grit</u></a> .....	175
<a href="#"><u>Developmental Courses</u></a> .....	178
<a href="#"><u>Transition</u></a> .....	179
<a href="#"><u>Localism</u></a> .....	179
<a href="#"><u>Mentorship</u></a> .....	180
<a href="#"><u>Advice for Future First-Generation Students</u></a> .....	180
<a href="#"><u>Group Interview</u></a> .....	181
<a href="#"><u>Student Body Demographics</u></a> .....	182
<a href="#"><u>Community and State Involvement</u></a> .....	182
<a href="#"><u>Financial Aid Events and Counseling</u></a> .....	183
<a href="#"><u>Post-Secondary Education Opportunities</u></a> .....	183
<a href="#"><u>Post-Secondary Education Completion</u></a> .....	184
<a href="#"><u>“Cultural Barriers”</u></a> .....	184
<a href="#"><u>Challenges and Fears Faced by Students</u></a> .....	185
<a href="#"><u>Parental Involvement</u></a> .....	185
<a href="#"><u>Student Action in the Post-Secondary Process</u></a> .....	186
<a href="#"><u>Discussion</u></a> .....	187
<a href="#"><u>Limitations</u></a> .....	190
<a href="#"><u>Future Research</u></a> .....	191
<a href="#"><u>Conclusion</u></a> .....	191
<a href="#"><u>Suggestions for Fentress County Secondary Institutions</u></a> .....	192
<a href="#"><u>Works Cited</u></a> .....	193

College retention rates for first-generation college students are known to be significantly lower than that of other college students (Fike & Fike, 2008). For college students in Central Appalachia, those rates are even lower, as many students face compounded difficulties. The majority of counties within Central Appalachia have a college completion rate between 4.9%-14.6% (Appalachian Research Commission, 2019), and only 12.3% of Appalachians as a whole hold a college degree (Wilson & Gore, 2009). This research explores the challenges faced by first-generation students in Fentress County, Tennessee in their pursuit of post-secondary education. A first-generation student, as used in this research, is a college student whose parents did not achieve a bachelor's degree or higher.

Located in Central Appalachia, Fentress County has experienced both economic distress and low college completion rates. Because of this, Fentress County served as a research location to study the complexities of Central Appalachians in relation to post-secondary degree completion. This research focused on individuals associated with Sgt. Alvin C. York Agricultural Institute, which is one of two public high schools in Fentress County. The researcher writes with the perspective of a former student from York Institute, as well as a direct descendant of Sgt. Alvin C. York. In the York family, stories of York's legacy are orally passed down from generation to generation. Returning home from World War I as a Medal of Honor recipient, Sgt. York wanted little to do with his newfound fame of being a war hero. Instead, he wanted to use his new social capital to help his community. His primary objective was to bring secondary education to all students in Fentress County. Because he only had an equivalency of a third-grade education, York knew first-hand the difficulty of not having a full education. While overseas, fellow soldiers would often mock his Appalachian accent and lack of education. Not wanting any other student from Fentress County to feel the way he did, Sgt. York took the steps to build the first ninth through twelfth grade high school in the area. He personally raised the funds to build the school, and in 1926, Sgt. Alvin C. York Agricultural Institute was ready to welcome its first class of students. York would eventually find himself filing for bankruptcy to pay for the costs of supporting the teachers at his new school. Struggling to keep the school financed, the State of Tennessee offered to take control of the school and its funding, as a favor to York. To this day, York Institute remains the only public high school funded by the State of Tennessee. Despite the deep history of this school, students there are still facing similar challenges as the rest of Appalachian students.

Current literature on the topic of first-generation Appalachian students leaves gaps this research seeks to fill. Research has been completed on factors influencing first-generation students across the nation yet does not address factors influencing first-generation college students in Central Appalachia. Appalachians have a unique approach to post-secondary education that needs to be further studied to provide students in this area quality post-secondary education. Based on the review of literature, themes such as family dynamics, financial struggles, grit, mental health, and academic advising stood out as potential factors influencing college completion for first-generation students in Fentress County (Fike & Fike, 2008; Wilson & Gore, 2009; Thayer, 2000; Wolters & Hussain, 2014; Eisenberg et al., 2009; Mowbray et al., 2006; Young-Jones et al., 2013; London, 1989). To test this hypothesis, ten former first-generation students from York Institute were interviewed about their experiences with family dynamics, financial struggles, grit, mental health, and academic advising while enrolled in their post-secondary institution. By understanding the factors influencing their post-secondary education, intentional programming at the secondary level can be designed to support post-secondary degree completion.

## **Literature Review**

### **Appalachian Heritage and Culture**

The Appalachian Region is defined by Wilson and Gore (2009) as, "...a mountain range running from northeast Mississippi to southwest New York." (p.72) Within this range, the Appalachian region touches twelve states. The Appalachian region is divided into five subregions: Northern, North Central, Central, South Central, and Southern (Pollard & Jacobsen. 2019). Referred to as the "invisible minority" (Tang & Russ, 2007), Appalachians have their own set of cultural differences in comparison to the mainstream American culture.

It is known that citizens of the Appalachian region share very strong cultural ties, which often differ from the rest (Wilson & Gore, 2009). Characteristics of citizens from this region include: having a strong sense of family ties and of community (as both a social identity and an organization), maintaining a distance from those outside their region, being attached to their geographic location, holding strong personal and religious values, and lacking the desire to acclimate to change (Wilson & Gore, 2009).

Social relationships within the Appalachian region are less hierarchical than the rest of the nation (Tang & Russ, 2007); however, social standing within the community is highly dependent on family (Tang & Russ, 2007). Rather than placing a high value on academic merit and college degrees, who you and your family are takes precedence (Tang & Russ, 2007). Often times, the first question you are asked when meeting a new person in Appalachia is about who your family is. In terms of gender roles, Appalachians hold tightly to traditional roles, and the region is strongly patriarchal (Tang & Russ, 2007).

### **Demographics of Central Appalachia and Fentress County**

This research study focused on Fentress County because of the compounded difficulties the county is facing. From fiscal years 2002 to 2020, Fentress County was labeled as a "distressed" county (Appalachian Research Commission (ARC), n.d.); however, for the first time in over a decade, the county is now labeled as "at-risk" for the 2021 fiscal year (ARC, n.d.). With this new change, the county is also experiencing a steady decrease in poverty rates between 2005 and 2017 (ARC, n.d.). Although there are positive changes, it should still be noted that the poverty rate for Fentress County for 2013-2017 was 23%, while the national average was 14.6% (ARC, n.d.). There is perhaps a correlation between steady poverty rates and the steady population of Fentress County. The lack of substantial population growth affects the community's ability to develop, which then leads to increased poverty rates. Between 2010 and 2017, Fentress County had a slight population increase of 0-1.3% (Pollard & Jacobsen, 2019), which remains significantly less than the national average of a 5.3% increase for the same years (Pollard & Jacobsen, 2019). The per capita income for Fentress County in 2017 was \$31,462, which is significantly lower than the national per capita income of \$51,640 (ARC, n.d.).

In terms of education, Pollard and Jacobsen released several education-relation percentages in their study (2019) for the years 2013-2017. In Central Appalachia, 78% of adults over 25 years old held a high school diploma or more (Pollard & Jacobsen, 2019). Of that percentage, 57.3% held only a high school diploma, 6.9% held an associate's degree, and 13.8% held a bachelor's degree

or higher (Pollard & Jacobsen, 2019). In comparison to this, the national percentage of adults over 25 years old holding a bachelor's degree or higher is 30.9% (Pollard & Jacobsen, 2019). Using this information, it is a reasonable assumption that a majority of Appalachian students would be considered potential first-generation college students.

In addition to income levels and educational attainment, it is also relevant to mention the teen birth rates for Central Appalachia. Teenage girls coming from at-risk households are most likely to experience teenage pregnancy (Bickel, Weaver, Williams, & Lange, 1997). These risks include income, ethnicity, family dynamics, and parental education (Bickel, et al., 1997). In addition to these factors, there has also been inclusion of access to educational and career opportunities in relation to teen pregnancies (Bickel et al., 1997). For the Appalachian region, the increasing numbers of teenage pregnancy has been linked to an absence of opportunities and the decline of traditional social relations (Bickel et al., 1997). Central Appalachia has the highest teenage birth rate of any other region in the nation at 56.3 births per 1,000, which is 63% higher than the national average (Marshall et al., 2017). Within the urban areas of Appalachia, the births per 1,000 is 29.6, which is lower than the rural areas at 51 per 1,000 (Marshall et al., 2017). Between 2007 and 2013, Fentress county had a teenage birth rate of 45.3-57.2 per 1,000, which is still well above the national average (Marshall et al., 2017). In addition to the at-risk factors that influence teen pregnancy, there should also be further research completed in Appalachia of the number of teenage marriages with pregnancies, which suggests that some teenage pregnancies might be planned.

### **Appalachian Views on Education and Career**

With low number of adults holding college degrees, students in this region have limited role models with college degrees, less access to college information, and fewer supporters to assist with the transition to college (Wilson & Gore, 2009). The cultural bounds of Appalachians have influenced their college retention, as higher education is not promoted as highly as other values. This has not always been the case. Although rare, books and education were highly prized by Appalachian pioneers (Wallace & Diekroger, 2000); however, as harsh conditions of the working life of Appalachians increased, work ethic and ability quickly took priority (Wallace & Diekroger, 2000). Over time, the Appalachian culture has remained relatively constant (Wallace & Diekroger, 2000). The unique characteristics of Appalachians have likely played a role in the development of their views of pursuing higher education.

Perhaps one of the strongest influences in the pursuit of higher education is family relations. For example, Appalachians place family responsibilities over that of educational pursuit (Tang & Russ, 2007). Studies have shown that parental interaction and expectations play a significant role on their child's academic success (Wallace & Diekroger, 2000). When a student is in a family environment that supports and encourages education, that student is more likely to achieve academic success (Wallace & Diekroger, 2000); therefore, a supportive family environment is necessary for long-term academic success. When an Appalachian student decides to pursue higher education, their parents are often reluctant to send them to institutions that would prepare the student for a career that is not readily available in the area (Tang & Russ, 2007). Parents could also be reluctant to send their children away for college for fear they might not return back home. The students' decisions post-high school effect their community's population and economic development rates.

When choosing a potential career, Appalachians tend to have a different focus than that of other Americans. While self-interest may guide most Americans, Appalachians have far more factors when looking at potential careers. Choosing a career based on self-interest is discouraged for Appalachians because family benefits top that of individual benefits (Tang & Russ, 2007). If the individual's choices lead to changes within the family structure, the person would be viewed as destructive to the family system (Tang & Russ, 2007). Appalachians also tend to rely on family advice for career pursuits (Tang & Russ, 2007). Individualized career and educational counseling could be effective for Appalachians; however, such counseling must allow for the uniqueness of Appalachian culture (Tang & Russ, 2007). Given the complexity surrounding educational decisions for Appalachian students, many of whom are first-generation, several topics need to be addressed, such as choice of post-secondary educational institutions and factors influencing that decision and degree completion.

### **Community College**

When choosing a post-secondary option, community colleges are a popular choice for many first-generation Appalachian students. In a study conducted by Fike and Fike (2008), it was concluded that students often choose to enroll in a community college due to “ease of access, low tuition, and the open-door policy.” (p.70) Those options make entrance easier for prospective students, especially those with underrepresented backgrounds; however, student success in such programs should be brought into question. Community colleges, by default, encourage students to have part-time status (Fike & Fike, 2008). The rise in part-time students has to do with several factors: more women are attending college, more students are choosing to combine work and school, and more adults are choosing to attend college (Fike & Fike, 2008). The above factors are just a few of the reasons why rates of part-time students are rising; however, the variance in choices to become part-time aligns with factors that should be considered when enrolling first-generation college students.

### **Financial Struggle**

First-generation college students often come from low-income households. Students coming from these households are directly affected by the family's finances. Students from low-income backgrounds are less likely to achieve a bachelor's degree than those from a higher income background (Thayer, 2000). First-generation college students often find themselves needing to work full-time hours to be able to take care of themselves and their families. Students in these situations find it necessary to enroll in college part-time. When a student is part-time, completing course assignments on-time and correctly often becomes a secondary concern. Work becomes a priority over education, especially when the family relies on the student's income. Such findings suggest that financial struggles are a factor in retention rates for first-generation college students, often because they are also from a low SES (Socioeconomic Status) household.

There is a difference between first-generation college students and low SES college students. Often the first-generation student is from a low SES; however, the college student from a low SES is not always a first-generation student. Some first-generation college students come from households where the parent(s) hold a technical certification. While the student still qualifies as a first-generation college student, he would not qualify as low-income as long as the parent brings home a suitable salary. For example, plumbers, truck drivers, electricians, real estate agents, etc.



all have positions that could bring home a middle-class salary without a college degree. However, a student who qualifies as both low-income and first-generation will usually face compounded difficulties because of the challenges of being a low-income and first-generation college student. Students of low-income households often have to work with their classes in order to be in college. Regardless of the family income level, first-generation college students will be met with challenges of transitioning to college life. Those challenges appear in various ways, such as a lack of parental knowledge of how to navigate the culture and environment of a university. When a first-generation college student comes from a low-income background, challenges are exasperated due to the lack of financial support (Thayer, 2000; Fike & Fike, 2008).

Another concern for low-income students is that of the gap between expected family contribution and actual family contribution to education. When a student fills out the Free Application for Federal Student Aid (FAFSA), he is given an expected amount of family contribution to the student's education (Kelchen, 2014). The expected contribution determines the amount of need-based financial aid the student receives. Even though the FAFSA expects the family will contribute, that is not always the case. There should be further study on the actual financial contributions from families versus the expected contribution.

### **Developmental Courses for Community College Students**

First-generation college students that are also part-time status are often similar to other community college students; for one, they both frequently need developmental/remedial courses before being prepared for college-level courses. Students choose to enter community colleges because universities are commonly more selective in acceptance for admission, while community colleges typically have more open enrollment policies. Because of this, students that are enrolled in community colleges often need remedial math, reading, and writing courses (Fike & Fike, 2008). These courses are required for such students to develop skills that will increase their likelihood to succeed in college-level courses. However, coursework alone will not guarantee success. The students need persistence and patience in completing remedial courses as well.

Current developmental courses often do not result in students completing their courses and achieving their degrees (Bailey, 2009). Community colleges are now tasked with preparing students for college-level courses; however, many students entering these programs significantly lack in one or more subject area that keeps them from successfully completing college-level work (Bailey, 2009). The primary reason for the lack of success in developmental courses is the students' lack of completion (Bailey, 2009).

In a study that tracked progress on student development from eighth grade to college, it was found that 58% of the students tracked, who attended a community college, were required to take at least one remedial course; 44% took between one and three remedial courses, and 14% took three or more remedial courses (Bailey, 2009). This study is not alone in its data, as another study in Bailey's report also found similar numbers. According to a second study, of 256,672 students, 59% were required to take at least one remedial course (Bailey, 2009). It should be noted that there is a limitation with this data. Students who had higher test scores did not have to take remedial courses; however, that does not mean that the student was adequately prepared for college. There are also gaps when students who are referred to take remedial courses choose to not enroll in them (Bailey, 2009).

After completion of the courses, it was found that over half the students passed their writing and reading remedial courses, yet only thirty percent passed their mathematic remedial courses (Bailey, 2009). While those numbers show optimism, it should also be mentioned that most students must take one to three levels of the developmental courses before the student is considered to be college-level ready (Bailey, 2009).

### **Grit and Perseverance**

Because of the number of remedial courses students must take, another factor should be considered: grit. Grit is defined as a person's "trait-level perseverance and passion for long term goals" (Duckworth & Quinn, 2009, p. 166). Students must have persistence while taking developmental courses (Fike & Fike, 2008). Without persistence to further their education, a student will not succeed. First-generation college students are less likely to have persistence in community colleges, compared to other students (Fike & Fike, 2008). Therefore, first-generation students, who need to take developmental course, are less likely to succeed, which leads to lower retention rates.

According to research completed by Duckworth and Quinn (2009), if a student has grit, he is more likely to pursue his long-term educational goals, even when faced with adversity (Wolters & Hussain, 2014). First-generation college students are faced with more adversity than most college students, which means grit is a necessary factor in order for the student to have college success. Since it is suggested that first-generation college students need grit, it would be relevant for colleges to promote the importance thereof. With that, the college should also provide the student with resources to strengthen their academic persistence. Using this information, another factor influencing low-retention rates for first-generation students is possibly the lack of persistence/grit and its direct influence on the overall educational goals of the student, rather than just its influence in developmental courses.

### **Mental Health**

Eisenberg, Golberstein & Hunt (2009) conducted a research study and produced an article on the correlation between mental health and academic success in college. Mental health is especially relevant for first-generation college students, as many of them already feel a lack of ability to succeed. In the study, information was provided pertaining to the feelings of sadness and hopelessness having detrimental effects in a student's academic success (Eisenberg et al., 2009). When a student experiences these feelings, he is less likely to have interest in the future (Eisenberg et al., 2009). This is alarming for first-generation college students experiencing mental illness, as they are already predisposed to uncertainty in their academic futures. A matter to this degree may cause the student to drop out of their university.

First-generation students are more likely to come from low-income households, which according to Eisenberg students from poor backgrounds are more likely to experience depression and anxiety (Eisenberg et al., 2009). Students who experience depression and anxiety are more likely to have a lower GPA, with a higher chance of dropping out (Eisenberg et al., 2009). Using these predictors of mental illness, it is relevant to have the effects of mental illness as a factor influencing college retention rates for first-generation college students, especially first-generation, low-income college students. Students with both backgrounds are at a higher risk for developing mental illness while in college due to their financial background (Eisenberg et al., 2009) and the

lack of persistence in their academic futures (Eisenberg et al., 2009). Knowing the overwhelming numbers of college students with mental illness, colleges should be well-equipped to handle the number of students needing counseling resources; however, universities have been frequently criticized about the lack of accessibility of resources for students (Mowbray et al., 2006).

In a study on mental health for college students, students identified that campus resources are often unhelpful because the students were expected to recognize their own mental illness and seek services (Mowbray et al., 2006). To counteract this, universities have suggested taking a campus-wide approach to reduce the stigma surrounding counseling (Mowbray et al., 2006). This would be especially useful for first-generation college students needing mental health counseling. A targeted approach would be helpful in assisting these students to identify resources available to them, while also providing information on mental health conditions. In addition to mental health counseling, first-generation college students would also benefit from proper academic advising. By having proper academic advising, a student may receive the emotional support (e.g. encouragement) needed to succeed. Receiving academic encouragement from a mentor may even be more effective for students. This is not to suggest academic advising should take place of mental health counseling or that advisors need formal mental health training. Rather, this just suggests the additional importance of having academic encouragement.

### **Academic Advising**

Student success and college completion are directly related to proper academic advising from a college advisor (Young-Jones, Burt, Dixon & Hawthorne, 2013). In their article, they stressed the importance of first-generation students having proper academic advising in order to achieve academic success (Young- Jones et al., 2013). For first-generation college students, this academic relationship is of great importance. These students often have a lack of support to complete college from immediate family members, so they need more support and encouragement than students with parents who went to college. With proper academic advising, a student should be able to plan out his degree completion, while being supported to make good career and educational decisions. While it is still up to the student to complete assignments and courses, having extra support has proven to increase college retention.

Although there have been studies completed to research the positive influence of academic advising, many post-secondary institutions do not capitalize on these benefits, which would increase their student retention rates. Students may complete course work adequately, yet still be at risk for dropping out (Young- Jones et al., 2013). The reason for this is that students still need to be able to develop academic confidence, which does not always come after completing coursework. The research completed on this topic suggests that students should meet with their advisor at least once per semester to maximize benefits, but more meetings should be encouraged (Young-Jones et al., 2013). This research also highlighted the specific need of first-generation college students to have academic advising (Young-Jones et al., 2013). Colleges and universities have seen an increase in enrollment from first-generation college students; however, they still have the lowest retention rates (Young-Jones et al., 2013). First-generation students often come to college with a lack of belief that they can succeed, which is why an advisement relationship is needed. The advisor is able to give the student resources and encouragement needed to be able to succeed (Young-Jones et al., 2013).

This study focused on the importance of academic advising in relation to college success, which ultimately leads to retention. Intentional academic advising promotes student success. When a student feels he can succeed, he is more likely to do so. First-generation college students need more encouragement during advising because many of them have little faith in their abilities to succeed. The information provided on the influence of academic advising suggests that academic advising is a factor in degree completion for first-generation college students, as well as using academic advising as part of a working solution for low retention rates.

### **Family Dynamics**

First-generation students often come from households that differ from other students. The home life of first-generation college students directly affects their success in college. London (1989) produced a study compiled of qualitative data. His study focused entirely on the lives of a handful of first-generation college students. Rather than presenting a paper with just factual statistics, his paper allows the students to do all the talking.

Before going into the students' stories, London discusses a multigenerational effect that is unique to first-generation college students. Within every family, each member will fulfill a family role assignment of some sort; however, this is much stronger in first-generation households. Role assignments in families are often based upon the histories of the parents. When the child grows into an adolescent and begins to individualize, the family begins to experience tension (London, 1989). This was a reoccurrence London noticed with each student he interviewed. He concluded the reason for this tension within the family stems from the family feeling separation (London, 1989). When the student decides to pursue higher education, the family feels the elemental concerns that are found in separation (London, 1989).

To understand why these families would feel separated, it is important to understand just how important family roles are in these households. When a child is given a significant role in the family, it often stems from parental need (London, 1989). Furthermore, family assignments are passed down from generation to generation. Therefore, parents who bind their own children are likely to have been bound by their own parents (London, 1989). If a parent does not experience liberation, it leads them to bind their own children (London, 1989). When it comes time for a teenager from this type of household to make a decision about post-secondary education, he is challenged with making a decision that affects his whole family, especially when the family relies on the teenager financially. Understanding the complexity surrounding the college decisions of first-generation college students, it is important to consider family dynamics to be a factor influencing retention rates.

To summarize, first-generation college students have specific needs that are not being properly addressed. The needs presented in the literature are especially amplified in the Central Appalachian region, as the rates of first-generation students are nearly twice the national average (Wilson & Gore, 2009). A possible, non-exhaustive, list of factors influencing college retention rates for first-generation Central Appalachian college students include: financial struggle, grit, mental illness, academic advising, and family dynamics. The cited research leads to the following question: How are financial struggle, grit, mental illness, academic advising, and family dynamics experienced by first-generation college students from Fentress County in relation to academic success?

## **Methodology**

### **Procedure**

Qualitative data was gathered for this study through interviews of both former students and current administrators from Alvin C. York Agricultural Institute in Jamestown, Tennessee. Ten interviews were conducted with former students who also met the following criteria: either completed or attempted post-secondary education as first-generation college students. Three current administrators took part in a group interview. Criteria for administrators was as followed: works at York Institute, works directly with preparing students for post-secondary education, and availability for interview. In order to protect the identities of those from the group interview, all will be referred to using a generic job title of administrator.

Fentress County was chosen as the research site because, at the time of interviews, it was experiencing both “distressed” (ARC, n.d.) economic levels and low college completion rates (ARC, n.d.). Since interviews were completed, Fentress County has been renamed as having an “at-risk” economical level (ARC, n.d.) for the 2021 Fiscal Year. This has been the first year in over a decade that the county has been removed from the “distressed” economic level category. Fentress County was also selected because I had developed informants within the county who were willing to participate in the research study.

### **Participants**

Former students were recruited to participate via social media ads, newspaper ad, flyers, and personal contact. Recruitment methods were limited due to the COVID-19 pandemic. Potential participants were screened through an online or verbal survey to make sure the participants met the criteria. Once selected, the participant chose either a face-to-face interview or a phone interview. Four former students had a face-to-face interview, and six had a phone interview. Each participant signed a consent form and was offered a \$25 gift card as compensation for donating time to the project. Administrators were recruited via email. The group interview with administrators was given face-to-face, and all signed a consent form. All participants will be referred to using a pseudonym in order to provide protections for each participant. All interviews lasted between thirty and seventy minutes. Responses were recorded by note-taking and by audio recording. The recordings were then transcribed and coded for themes from the literature reviews, as well as other emerging themes.

Interviews were semi-structured with a different protocol for former student interviews and for administrators. Interviews were guided with open-ended questions to allow participants to reflect on their individual experiences. Former student interviews were conducted in order to gain a deeper understanding of the individuals’ post-secondary experiences in relation to their abilities to complete their anticipated degrees. In order to have a broader range of responses, securing a diverse pool of participants was a priority. The search for participants intentionally targeted students from each of the three post-secondary options (technical school, community college, and four-year university) and by seeking both students who had completed their degrees and students who did not complete their degree. Administrators were interviewed in order to gain understanding into the practical ways the high school is preparing students for post-secondary education, as well as to provide opportunities for growth and development.

## Data Analysis

Thematic analysis was used in the interpretation of the data. After interviews were transcribed, an online, color-coded system was initially used to highlight common themes. To enhance the reliability of the coding system, I worked with my faculty advisor to refine my coding process. This led to a second round of paper-based, color-coded thematic analysis. Trends related to family dynamics, financial struggle, grit, mental illness, and academic advising were especially analyzed in relation to college completion; however, several other trends emerged from the data. Each was analyzed in-depth in relation to the overall purpose of the study.

## Results

### Former Students Interviews

The ten former students who were interviewed were all graduates from York Institute. Graduation years range from 1991 to 2017. All students were considered first-generation. Seven students were female, and three were male. **Table 1** refers to the post-secondary option chosen by each student. Five students attended a 4-year university, five a community college, three a technical school, and of these five attended graduate school. The numbers overlap due to students attending multiple institutions.

**Table 1**

#### *Post-Secondary Options Chosen*

Name	Post-Secondary Education Type	Completed degree/certification?
Emily	Technical/career	Yes
Taylor	4-year university	Yes
	Graduate school	Yes
Casey	Community college	No
	Technical/career	Yes
Brandon	Community college	Yes
	4-year university	Yes
	Graduate School	In progress
Danielle	4-year university	Yes
	Graduate School	In progress
Kevin	4-year university	Yes
	Graduate school	Yes
Gina	4-year university	Yes
	Graduate school	Yes
Olivia	Community college	No
Adam	Community college	Yes
Rachel	Technical/career	Yes

Community college	Yes
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### ***Awareness of Options and Influences***

The students were asked how they became aware of their options for choosing a post-secondary institution and program/major. **Table 2** shows the frequency of the reported ways students heard about their options. Some students gave multiple responses due to attending multiple post-secondary institutions. The most common way students became aware of their options was through the high school and guidance office. Additionally, five students felt they were fully aware of all their options, but four students did not feel they were fully aware of their options.

**Table 2**

### ***How Student Became Aware of Chosen PSE***

Option	Frequency
High School/Guidance Counselor	5
Peers/Family	3
Self	1
Social Media Advertisement	1
Interest in Field	1
Other	1

When choosing their institution, the students listed what influenced them. **Table 3** shows the reported influences and their frequency. Students were able to list all of their influences, hence the overlap of frequency. The most frequently listed influence was the cost of post-secondary education. The frequency of cost-related concerns was expected to be high due to the number of low-income households in Fentress County (ARC, n.d.; Pollard & Jacobsen, 2019) and due to low-income, first-generation students being more likely to choose a low-cost option, such as a community college, for their post-secondary institution (Fike & Fike, 2008).

**Table 3**

### ***Influences in Choosing Post-Secondary Institution***

Influences	Frequency
Cost-related	7
Field-specific	4
Location	3

Familiarity	2
Family	1
Negative Experience at prior PSE institution	1
Academic Requirements	1
Length of time	1
Social pressure	1

### ***Financial Aid***

The students were asked about their financial aid situations for the duration of their post-secondary enrollment and about their overall understanding of how financial aid worked. Eight students reported having little to no knowledge about financial aid when starting their post-secondary education, and two students felt they understood how their financial aid worked. Emily felt she understood the financial aid process; however, when asked about how she paid for school, she said, “I think the FAFSA paid for it...” She was unable to go into more detail of how the FAFSA (Free Application for Federal Student Aid) paid for her education, which indicated that she did not have full understanding of the financial process. For most of the students, understanding the financial aid process took time, as they gained more knowledge after post-secondary enrollment. For Olivia, she felt she never came to have an understanding of the financial aid process saying, “I don’t know to this day how it works.” Three students reported that they would have considered other post-secondary options if they had known more about potential financial aid.

The students had a mix of answers regarding financial aid events in high school. Several students acknowledged that financial aid events were available to them. These events included financial aid nights to learn about different options and Tennessee Promise nights, where students learned about the state-wide program that provides funding for their first two years at certain community colleges or technical schools. Few students attended the meetings and found them useful. Gina attended financial aid nights during high school and felt they were beneficial to her. Taylor attended financial aid events as well, but she did not find them to be beneficial to her. When asked about how beneficial she found the events, Taylor said, “[they were] not very good. That sounds awful, but it was the TN Promise. That was only for like if you were going to community college, and I did not go to community college.” Adam also attended some financial aid events but did not find them beneficial. When asked what could have helped him more, Adam responded, “I think just the confusion when I was starting college of how it [financial aid] all worked. It’s very stressful when you’re trying to figure it all out on your own. So, knowing that beforehand, and it being laid out for you would have been a lot easier.” For Adam, financial aid information would have been more beneficial if it were given to him in a personalized approach.

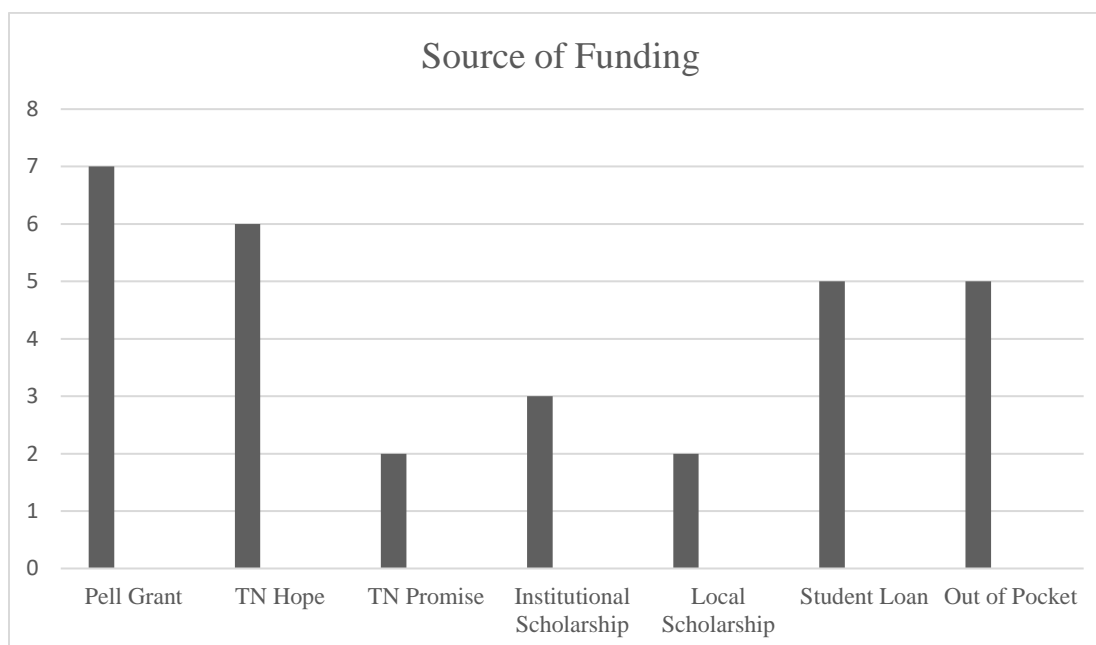
Five students reported receiving direct help from the guidance office in high school to assist with financial aid-related needs. Emily and Taylor said that the guidance office assisted them with finding scholarships for their individual programs. Casey and Olivia both had help from the guidance office to fill out the FAFSA. Rachel also had help from the guidance office in that she was unaware she needed to fill out the FAFSA prior to enrolling in her post-secondary institution.

The students were also asked about how they paid for their post-secondary education. **Table 4** shows the frequency of the types of financial aid used. The data was self-reported and was



limited when a student did not remember all the financial aid he or she received. Some students reported not having their funding for the entirety of their enrollments. For Taylor, she lost both the Pell Grant and the TN Hope scholarship after she began working. Danielle lost the TN Hope scholarship because she did not meet the GPA requirements for renewal. Brandon lost the TN Hope because it expired due to the number of years it took him to finish his bachelor's degree. Kevin did not receive the Pell Grant his first two years until his family's financial situation changed when his sibling also enrolled in post-secondary.

**Table 4**



**Table 4** also shows that five students needed to take out a student loan. Yet, six students reported not knowing how to take out a student loan and/or needed more information about loans. Two students reported knowing about student loans as an option for post-secondary education. When it comes to deciding whether or not to take out a loan, family ideals play a significant role for the student. Taylor struggled with whether or not to take out a student loan because her father had always told her to not take a loan out for school, even though she would be the one responsible for paying it back. Taylor said, “My dad has always been one to say like, don’t do it unless you have the money for it up front. So, he doesn’t believe in borrowing money. So, it was very stressful for me to make the decision to borrow money, you know, to continue my education.” In order to avoid taking out a loan for her undergraduate education, Taylor started working a part-time job. She was unaware that her new income would be combined with her parents on her tax documents for the FAFSA, so she ended up losing her need-based scholarship for having too high of an income. Now that she was spending more time working, she had less time to spend focusing on her school work, and her grades dropped. This led to her also losing her merit-based scholarship. After this experience, Taylor decided that she would take a student loan out for her graduate education. For

the students who needed more information about student loans, the primary information needed was about how to take them out and how to pay them back.

When asked who helped them fill out their financial aid forms, four students reported having at least one family member help with the forms. Danielle was one of the students who had a family member help her fill out the forms. When talking about her mother trying to help her, Danielle said, “Mom was scratching her head going insane trying to help me figure some of this stuff out.” Two students reported that their families were unable to help them. Two students said they had a school counselor help them with the forms. One student said she completed the forms herself. Adam reported that he was assigned an individual from his institution to help him, but the individual had gotten in trouble. This left the students assigned to this individual, including Adam, alone in figuring out the forms. When talking about the situation, Adam said, “We were all kind of by ourselves.” Because the students were now left without their assigned advisor, the process of filling out their financial aid forms became more confusing and stressful than it needed to be.

### *Cost of Living*

All of the students reported being enrolled in their respective post-secondary institutions full time. In addition to this, nine students reported working at some point during their post-secondary enrollment. Emily was the only student who did not work at any point of her enrollment. Rachel did not work the first time she was enrolled in a post-secondary institution; however, she went back to school a few years later and worked full time. Olivia did not report a specific number of hours, but she worked two part time jobs. She said she was at one of her jobs almost any time she was not in class. Of the students who reported hours, all of them were above twenty hours per week, and five students reported working thirty hours or more. The average hours the students worked was 24.4 hours per week. This mean includes the number of hours for all students with the exception Olivia, who did not provide the number of hours she worked.

For the students who reported working, four indicated having negative consequences from working during post-secondary enrollment. Taylor lost her two scholarships from working. Olivia reported that her working two jobs and going to school full time caused her extra stress. Adam also said that working while in school was very stressful. When sharing about his experience, Adam said, “It was hard to balance it all just because the job I had at the time I was a manager, so I felt like there’s a lot of weight on my shoulders, like, in that sense. And, I was just trying to study for school, and it was just—there’s just a lot on me all at once.” When working during her second time in post-secondary, Rachel did not feel that working affected her academics directly, but she said that it caused her to have extra stress.

The students were also asked about how their family was (or was not) able to financially contribute while the students were enrolled in post-secondary. Five students reported coming from low-income families, four from middle-income, and one high-income. There are limitations from this data because income levels were reported by the student, who may or may not have fully known their households’ incomes. There was a mixture of responses from the students about family contributions. Emily lived at home, and her family covered her expenses. Casey had some help from her family, but her income from working covered most of her expenses. Danielle’s family covered her minor expenses (e.g. gas), and she also used her excess financial aid to cover her school-related expenses. Brandon indicated that he used his excess student loans and aid to help cover his expenses. Kevin indicated that his family did not cover his everyday expenses, but if he

had a major expense (e.g. car repair), they would help as much as they could, which most likely would not be the full expense. Gina remained largely independent from her family financially; she covered her own bills and expenses. Olivia also remained independent from her family. After she moved out of her family home right before high school graduation, she started supporting herself, but she also has to help financially support her father, which adds additional strain on her. Adam relied on his parents for living at home, but he worked to be able to be independent and cover his own expenses. Rachel's family helped to support her financially, as well as her husband. Her parents would help buy clothes for her young daughter and help pay Rachel's car insurance.

Four students indicated that they did not feel they could ask for financial help from their families. Of these four, three reported that their families had offered to potentially help financially, but they did not want to burden their families. Even though Danielle's parents had given her a credit card to cover some minor expenses, she didn't like using it because she felt "paranoid" to spend the money. She knew that if she needed additional financial support her family would try to help her, but she did not want to burden them. Brandon's response was similar to this in that he did not want to ask his family for financial support. Even though he knew his family would try to help him, Brandon said that he "did not want to short them." Gina did not ask her family for financial support because she became self-reliant. She explained that, "I never really considered asking for financial support or anything like that from them [her family]. I just kind of—I took care of my own money, and you know, did my own thing."

Four students reported experiencing significant financial strain during post-secondary enrollment. One of those students was Rachel, who at one point said she only had \$5 in her bank account. When talking about her financial strain, Rachel said, "My husband, you know, of course he worked. Our daughter was in daycare. So, there would be weeks where we would have, like, \$5 in the bank after we filled up our cars and the bills were paid, which I'm blessed to have \$5 in the bank. And then, we had to stretch; it was hard, but it made us better."

### *Family Dynamics*

When describing their family dynamics, four students said their families were "close." Three described their families as "normal." Of those three students, two came from households where both parents worked and the children went to school, and one came from a family where the father worked, the mother stayed at home, and the children went to school. Gina described her family as a poor household. She reflected back on the time in high school when her family was building their house. Because her father was a carpenter, they were living in the house as they were building it. She reflected on the period of time where they had no bathroom to use until it got built. Olivia described her family dynamics as not being close with her father but financially supporting him, yet she was close with her mother. She said her relationship with her mother improved as she was enrolled in community college. Rachel spoke about her family dynamics by describing her parents as "wonderful" and "hard-working." She also talked about her dynamics shifting once she got married immediately after high school. When deciding to pursue post-secondary education, six students reported that their families either pushed or expected them to go to college. Adam's parents did not push for him to attend college. Rather, he said his family just pushed him to do whatever made him happy, even if it meant not going to college. He said the reason for this was that his family had several self-made businesses, and none of his family members attended college to start their businesses.

All ten students reported feeling some form of support from their families. Emotional support was the most reported. All ten students responded that at least one member of their families encouraged their decision to enroll in a post-secondary institution. Three of the students used the word “excited” when describing how their families felt about them attending a post-secondary institution. Each student described what support from their families looked like. For Emily, she felt supported by her family from encouragement and financial support. Taylor said her parents were both very supportive of her decision to go to a university, but the relationship with her sister distanced because of Taylor’s decision to move away for college. Although her family was excited for Taylor to attend college, Taylor said her parents told her, “You have to figure out how to pay for it because we can’t pay for it for you.” Gina’s parents also provided her with emotional support in that they would let her come home on the weekends when she was feeling homesick. Casey described her parents’ support in the form of checking in on her and how her classes were going. Danielle’s family supported her through minor financial expenses, but mostly through encouragement when she was homesick. Brandon’s family primarily supported him through emotional support. When he would come home, his family would provide him with “comfort food” because that was one of the best ways they knew to help him. Brandon said, “I guess they understood that I was going through craziness, but they didn’t understand because they hadn’t been through it.” Kevin’s family was primarily emotionally supportive of his decision to go to college, but he said they also offered minor financial support. Emotional support from her mother was exactly what Olivia said she needed after she decided to drop out of community college. Olivia stressed the importance of having her mother’s support when Olivia said, “You know, honestly, I felt like a failure. I didn’t even pass my first semester. Like, that was it.” Olivia said her family was able to provide her encouragement while she was enrolled in community college, but they lacked the practical support of how to help her navigate college. Adam’s family was able to provide him with practical and emotional support. They were glad to encourage him to pursue a path that made him happy, but when Adam was faced with practical problems of college, his father was also able to help him. Adam said, “I mean, dad was always really good about sitting down, talking to me about anything I need to about school, and he would help. My dad is a tech guy, and he’s, like, a problem solver. So, any questions I would have he would, like, immediately jump on the website or jump on anything he could try to help me figure out what I was trying to figure out. I always felt supported by that.” Rachel’s family also provided encouragement and emotional support while she was in post-secondary. More than that, they were able to help support Rachel’s family by cooking meals and taking care of her children while she was in class.

In terms of roles within the family, seven students reported having a student-focused role while in high school; however, all seven also reported having less significant roles, as well. Some of the less significant roles included household chores, being an athlete, working, and becoming a parent. Gina reported that her primary role was to be the “second mom” to her siblings. Olivia’s primary role was to work to support herself and her family. Emily felt that she did not have a significant role. After the students enrolled in a post-secondary institution, eight students felt that their roles remained the same. Adam felt his role shifted after he began community college. While in high school, his primary role was to be a student, but his secondary role was to work to learn to become independent from his parents. This changed when his mental health began to decline while in community college. Although he did not go into much detail about whether or not his primary role changed, he did stress that he was no longer able to become independent from his family

because of his mental health. Adam said, “Honestly, I just became this little hermit and just stayed in my room all the time. I just didn’t really talk to anybody.” Gina’s role also shifted when she began college. Because she had moved away for college, she was no longer able to be the “second mom” to her siblings. Instead, she began to have her role shifted to student-focused. Her role shifted a second time after she got married and had her first child while in college.

Three students experienced tensions from their families after enrolling in their post-secondary institution. Emily said she had minor tension with her grandmother when she chose her field of study in technical school. Emily said that other members of her family had chosen the same field, but her grandmother did not think that Emily had the abilities to be successful. Taylor experienced tensions with her sister when she moved away for college. Taylor felt this tension stemmed from her sister’s desire to move away from home, but her sister did not know how to do so. Meanwhile, Taylor took the steps to move away. Casey also felt minor tensions with her family over her decision to pursue a technical path rather than a university path; however, Casey said she was unable to do that because she had wanted to do what was best for her child.

Four students discussed unique family dynamics in relation to their educational decisions. Danielle decided to attend college because she wanted to better herself and her family. She opened up about part of her family having a long history abusing the welfare system. By going to college, she felt that she was doing her part to avoid those patterns. Reflecting on her decisions, Danielle said, “I think...that we’ve done our part to try and better ourselves and to help our kids better themselves.” Brandon discussed the pressure he felt from his father’s career being well-known throughout Fentress County. He felt he always had to be cautious and mindful of his actions. This led Brandon to feel pressure to avoid making a mistake. Talking about the added pressure he felt, Brandon said, “...if you’re going back into a rural area, you know, if you make a mistake, everyone’s gonna know about it.” Olivia also described feeling pressure from her circumstances. Her family had pushed her to go to college because they thought it would be easy for her. But for Olivia, her learning disability amplified the struggles of being in college. She felt her family pressured her without realizing how difficult it would be for her. Looking back, Olivia said that she had wished she knew that she did not have to go to community college, that she could have chosen another path. Lastly, Rachel opened up about the struggles of having children while in college. She had her first child while she was in high school, but her family supported her and helped her be able to finish her technical certificate. A few years later, Rachel decided she wanted to go back to school. This time, she had two children who were old enough to have school functions, like a class trip to the movies. Rachel said that she would frequently have to miss her children’s functions, and her husband would have to take them. When describing what it was like for her to miss those events, she said, “I felt very guilty because I missed things like that.” Even though it was difficult for her, she said that she kept going because she wanted to be an example for her children.

### ***Academic Advising***

The interviewees were each asked about their different experiences with academic advising. Five of the students felt their post-secondary advisor treated them as just another number, rather than providing them with individualized advising. For Emily, her assigned advisor was only there to assist her in keeping track of her academic progress, without any formal meetings to discuss progress. This advisor was also in charge of the progress for every student enrolled in the institution. In a similar manner, Taylor’s advisor fulfilled the academic requirements each semester with an in-

person meeting; however, Taylor felt her advisor seemed impersonal. When discussing her advisor, Taylor said, "...mine wasn't really someone who would want to talk about anything." When Rachel would meet with her advisor for their required session, she felt that she was rushed when she tried to ask questions. Talking about her first advisor, Rachel said, "...she would hurry up and rush you out." Both Casey and Gina also experienced advising that only fulfilled the minimum academic requirements.

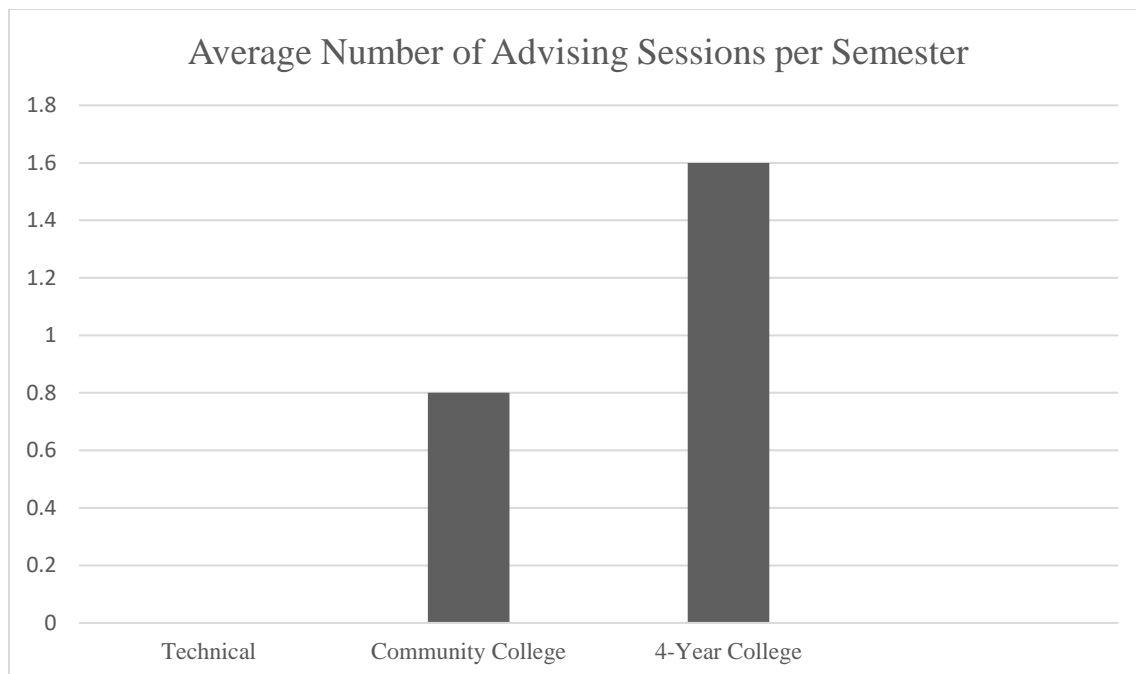
Five of the students discussed either a need for or experienced a personalized academic advising relationship with their advisor. For Danielle, her advisement in undergrad was personalized for her career path. Her advisor developed a personalized plan that even included taking classes at another institution during the summer. Danielle's advisor had suggested that she take classes at another institution because of the number of students who had failed a class Danielle needed to take. When she continued into higher education, Danielle's graduate advisor also provided personalized advisement in that he was focused on applying her education to her current career. Similarly, Brandon discussed that his graduate advisor was also focused on the practicality of his education. When discussing his graduate advising, Brandon said, "I've had the best advisement ever." This remark contrasted to how Brandon spoke of his undergraduate advising when he was taking 21 credit-hours for a semester because no one had intervened to tell him that was too much. Kevin's undergraduate advising was highly personalized on his academic and career goals. He spoke very highly of how his advising offered major-specific resources. For Adam, his assigned advisor was not very helpful, but he turned to a family friend, who worked at his post-secondary institution, for advising. His new advisor pushed and encouraged him to find a path that was most suitable for him, even if that meant switching institutions. Adam felt his advisor genuinely cared about his future. When speaking about his advisor, Adam said, "I mean, if there was nobody else at [the institution] that helped me, she was 100% the best that ever helped me, even through high school." Rachel wanted to have an advisor that gave her a personal academic plan. Her first advisor did not provide that for her, which she found to be extremely frustrating; however, once she changed programs, she was given a new advisor and finally received the personalized academic advising that she wanted. When talking about her frustrations of her first advisor, Rachel said, "My first one, I just wanted to get away from her." Rachel also specified that she did not want any form of personal relationship with her advisor. She wanted to focus strictly on academics, yet she did want a personalized academic plan that was suitable for her situation.

The students' experiences led to a variety of effective and ineffective attributes of academic advisors. Effective academic advising would consist of an advisor who cares about the student as a whole, focuses on the student's long-term academic and career goals, provides frequent and timely communication, provides academic resources, and is experienced and knowledgeable. In contrast to this, students who had ineffective advisors listed the reasons why they felt their advising was unhelpful. Ineffective advising, from the students' experiences, consists of advisors who did not care about or want to talk with student, took over a month to respond to an email, lacked student investment, did not provide needed resources, did not provide meaningful communication, who did not seem to care about student success, and who was inexperienced. In addition to this list, students also described frequent transitions of advisors to be difficult. Olivia described what it would have meant to her to have an effective advisor. She said, "I think it would have given me more hope, and like, kind of took the stress off. Like, someone supporting me, and like, wanting me to succeed

other than family. I think that would have helped a lot better because they know what they're talking about with that stuff."

When asked how often they met with their advisors, the students' answers varied. **Table 5** refers to the average amount of advisement sessions per post-secondary type. Emily and Casey both reported not having required advising sessions during their enrollment in a technical program. Both also reported having an insignificant advising relationship. However, Kevin had four required advising sessions per semester, and he reported having highly effective advising. Brandon and Danielle both reported being highly satisfied with their graduate school advising. Although they did not give a specific number of times meeting with their graduate advisor, they both reported having frequent communication with their advisors. The results show that students who had more frequent communication and/or advisement sessions were more satisfied with their advising.

**Table 5**



The students had divided answers when asked about whether or not they thought proper academic advising could have been beneficial for them. Emily felt that she did not need advising for her to be able to complete her degree. It should also be noted that her instructor filled the role of personal connection instead of her advisor. This could be the reason Emily did not feel she needed academic advising. Taylor, on the other hand, needed and wanted a caring relationship with her advisor. Brandon had been transitioned to several advisors and said that he just wanted stability in his undergraduate advising. Olivia needed her advisor to help her receive academic resources for her learning disability, and she needed someone to give her hope. Adam also needed someone who would take interest in his personal goals and who would help guide him. Like Casey, Rachel did not want a personal relationship with her advisor, only academic. Although the students each

needed something different from their advisors, the most common need was an advisor who would personalize their academic advising to fit the individual needs of the students.

### ***Mental Health***

All ten students reported feeling stressed and/or overwhelmed at some point during their time in post-secondary. Emily felt stressed and physically tired due to the constant demands of her field. Taylor felt stressed and anxious due to losing her financial aid and trying to balance working with school. Casey also felt stressed from balancing work and school. Danielle felt stressed and overwhelmed due to the transition to a big university and from the demanding academics. Brandon and Kevin also felt added stress from the rigor of college-level academic standards. Gina felt her stress came from balancing her newborn and college-life. Olivia felt stressed and overwhelmed due to her learning disability. She said that she felt constantly anxious while in class because she was afraid her professor would call on her to answer a question, but she feared that she would not know the answer. Adam felt stress due to the classroom environment of his community college. While attending a local community college, Adam said he did not have a professor physically present, rather his professors attended the classes virtually. In addition, he also had to travel to other counties for different classes. Although he did not mind the added drive, he found it difficult to stay motivated while enrolled. Talking about his experience in community college, Adam said, "...nothing against [institution] as a whole...there was never really opportunities there. Because most of your teachers are on a screen anyway, they were never in person. So, it was really hard to stay motivated and on top of things." Rachel reported feeling stressed and overwhelmed, but she did not give details of where those feelings stemmed from.

Two students opened up about their struggles with mental health during their post-secondary enrollment. Olivia experienced near-constant anxiety when she was in school. She described how she felt during college by saying, "It was like the most stressful thing I have ever been through in my whole life. It was stressful the whole time. That was really hard. But it was something I wish I was not forced to attend." Adam also experienced significant mental health issues while in college. He described feeling "miserable" his first year, which led to him distancing his friends and family. "I was so miserable my first year in college," Adam said, "I didn't really want to go out and do anything." Adam never resolved his mental health struggles while he was in college; however, now that he has graduated, he is working to repair the friendships he shut out. Adam said that his college did not offer mental health services. Even if they had offered services, he said that he would not have taken advantage of them.

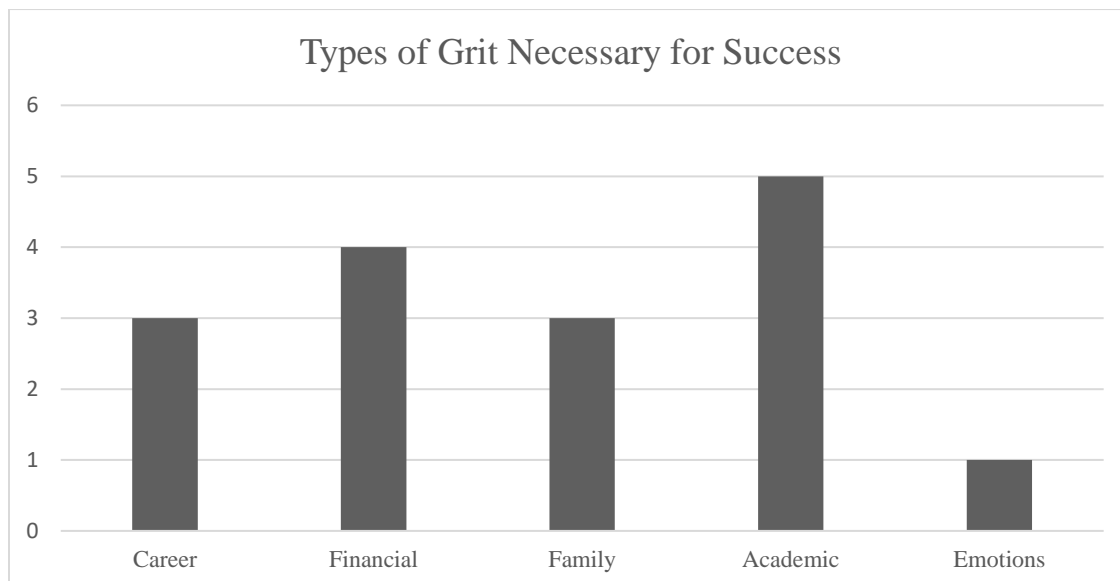
### ***Grit***

The students were given Duckworth and Quinn's (2009) definition of grit defined as a person's "trait-level perseverance and passion for long-term goals" (p.166) They were also asked how this related to their degree attainment. Nine of the ten students felt they would finish their anticipated degree prior to starting. Brandon reported not feeling like he would finish due to the difficulties of transferring institutions. Taylor talking about knowing she would complete her degree, she said, "I knew I would graduate...but honestly, it's because I didn't know what else I would do. Like, that's my only hope. I don't want to just, you know, be in a small town, live in a small town, or have a small job and barely get by. I want to get my education, get a good job, not have to struggle, and not have to worry about money."



All ten students felt they had demonstrated some form of grit during their post-secondary enrollment. The types of grit the students demonstrated were related to career, finances, family, academics, and emotions. **Table 6** shows the frequency of each type of grit. Career-related grit refers to the students' desires to pursue a particular career and do whatever it takes to attain the career. Financial-related grit was experienced by students who had significant financial concerns over their education. Family-related grit refers to students who had to balance family relations while pursuing education. Academic-related grit was experienced by the students who had challenges related to their academic courses/fields in post-secondary. It should be noted that it was possible for students to have experienced other situations in which grit was required to overcome; however, the students were asked to give a situation in which they felt they significantly required grit to overcome.

**Table 6**



For Emily, pursuing the career she wanted was physically demanding and exhausting while she was in technical school, yet because of how badly she wanted to pursue this career, she was willing to make the sacrifices it took for her to graduate. Taylor experienced both career- and finance-related grit. When it came time for her to student-teach, she had prepared to take her Praxis exam, which is required for all teachers. Knowing she felt ready to be a teacher, she took her Praxis exam, but was disappointed to find out that she did not pass. Seven tries later, she finally passed her Praxis exam. She discussed the frustrations and the disappointments of trying so hard for something, only to fail it six times. The financial grit became a growing concern with each Praxis exam she took because the cost of each exam was \$140. Nevertheless, Taylor attributed her success to her perseverance to keep trying because she was focused on her end goal of being a teacher. Adam also experienced career-related grit. After he finished his associate's degree, he decided he no longer wanted to pursue that field. He felt very little perseverance to continue down his original field, but once he found a career that he genuinely wanted to pursue, everything changed for him.

He is now working towards his new career field, and he expressed a desire and excitement to go down this new path.

Both Casey and Rachel experienced family-related grit in that they both had a child to care for while enrolled in post-secondary education. For both women, it took extra grit to be able to pursue and complete their degrees. Gina also experienced a similar situation after she had her child while in college. After having their child, each woman's reason for completing their degree was for their child. Casey altered her career path in order to have a job that would give her a schedule similar to her child's school schedule. Rachel focused on completing her degree to be able to one day tell her children that continuing education is possible, even when you have challenging circumstances. Gina described the grit it took to complete her degree when she shared the story of having her first child. During her junior year of college, Gina gave birth to daughter in November, right before final exam period. After giving birth, she took two weeks off school, but she came back to be able to take her final exams. She made the decision to come back to school the following January because she would have lost her scholarship for taking time off to be with her child. Describing the situation, Gina said, "I couldn't take any time off because I will lose my scholarships and stuff. So, that's just a decision I made."

Casey, Brandon, Kevin, Gina, and Olivia all experienced academic-related grit. Gina's refers back to the story of continuing to go to class and take exams right after giving birth. Casey, Brandon and Olivia all experienced this form of grit in that they each took a while before finding a field/major that was the right fit. When Casey realized she no longer wanted to pursue her degree at community college, she dropped out and started technical school the very next day. For her, she now had a weight lifted because she finally found a program that was the right fit for her. Brandon demonstrated grit in that he continued pursuing his bachelor's degree, even after changing schools and majors several times. Because of the transferring of colleges, he kept having to retake classes because his credits wouldn't transfer. He said, "These community colleges will say it's easy to transfer anything. Obviously, that's their thing. You can transfer, but it's not easy you know, especially if their classes don't match up." Despite the difficulties he faced, Brandon continued to pursue his degree because he knew he wanted to graduate. Kevin experienced career-related grit that stemmed from the immense difficulty of his major. When he first began in the program, he was told that only fifty percent of the students in the major would graduate. Knowing the statistics worked against his favor, he persevered and became one of the few to graduate. Talking about this experience, Kevin said, "It took a lot of perseverance and resilience to accomplish my goal of getting the degree I did." Olivia experienced academic-related grit in that she continuously had to work harder than her peers due to her learning disability. She tried to find as many tutoring opportunities as she could, but unfortunately, she said none of the resources given to her were enough to help. She would stay after class for tutoring or ask her friends in her classes for help. When she had to take tests, she would have to drive to another county for computer-assisted resources. Those resources were not available to her in the county she lived and went to class in. She talked about her frustrations when she said, "I'd try, like I tried really, really hard. And then, it's like I still don't go anywhere. Nothing happens...I feel like I think that I could have done it if I wasn't like I am, you know." Olivia persevered for a full semester of trying to find resources that would help her before she made the difficult decision to drop out.

In addition to Taylor experiencing finance-related grit, Rachel, Kevin, and Olivia also experienced this form of grit. Both Kevin and Rachel wanted to graduate as debt-free as possible.

This led to both of them working while in school. Kevin worked at least thirty hours a week, though he said his job would frequently keep him right below the full-time work hours of forty hours a week. He worked hard to be able to pay for college and reduce the amount of student loan debt he would have. Rachel decided that she wanted to be able to graduate completely debt free, so she worked three jobs while in her second attempt in college. One of the jobs she worked was a full-time position, and the other two were part-time jobs. Olivia worked two jobs while she was in school full-time. Because she lived on her own, she was financially independent from her family, which means she had to cover her own bills. In addition to this, she also had to financially contribute to her father. The weight of her financial situation exasperated the stress she was experiencing in community college.

Danielle was the only student to express a significant emotions-related grit. She struggled with staying in school because of her homesickness. She chose her university because it felt familiar to her from where she had a sibling attend there. Yet, the size of the university became intimidating. She would frequently call home asking her parents if there was any way she could come home and work on the family farm instead. For Danielle, homesickness was her biggest challenge. Due to her parents' constant support, Danielle decided to stay in school because she knew that she wanted to continue her education, despite the difficulties that came with it.

Four students reported changes in their grit as they progressed in their post-secondary education. Both Adam and Casey reported having little to no grit in attaining their first degree choice, but after changing programs, they both expressed commitment and excitement in finishing. Gina felt that at the beginning of her college journey she had very little grit to complete her degree, but after having her child, she felt more determined to finish her degree. Similarly, Rachel felt more grit to finish her second degree than she did her first. Although she did not go into more detail, it was likely due to going back to school as an adult that kept her focused, as well as her having a fully developed family.

The students offered ways to overcome challenges in post-secondary by surrounding yourself with a supportive community of family and friends and by staying focused on your goals. Taylor said that helped her overcome her challenges was simply "time and faith." Only two students reported that their post-secondary institution offered opportunities for them to develop grit and perseverance. Casey said her technical school would bring back former students to talk with the classes about overcoming obstacles and using their certificate practically. Kevin said his university provided numerous opportunities for students to develop grit and perseverance by providing a diverse group of special speakers to talk about these experiences. Both Casey and Kevin took advantage of these opportunities and found them beneficial.

### ***Developmental Courses***

Only three of the students took a development course in their post-secondary institution. Emily took some developmental courses when in technical school. She said, "They were easy. I mean, you just sit in front of a computer." Brandon also had to take them, as well. His experience with developmental courses was a negative one, saying, "As far as helping me academically, no. It was useless. I felt like I was back in sixth grade." On the other hand, Rachel found her developmental math course to be very beneficial for her. She talked about how her remedial math course helped her prepare and be able to pass her college-level statistics class. Rachel said, "I had to take remedial math, but it was really good. It was a good thing that I did." The other seven

students were either at college-ready levels or had not completed developmental courses due to the length of time enrolled in their post-secondary institution. For example, Olivia did not take developmental courses during her enrollment, but she felt she would have needed to in order to complete her degree.

### ***Transition***

This section primarily focuses on the locational transition for the students who moved out of county for their post-secondary enrollment. Of the four students who moved away for college, three of them reported feeling significant homesickness. Danielle experienced homesickness often. But after her roommate from Fentress County dropped out, Danielle's homesickness worsened. To help her with this transition, she frequently called and visited home. Her focus for completing her degree was so that she would be able to move back home afterwards and work. During her time in college, she got married, which she attributed to helping her feel less homesick. Brandon felt homesick after moving out of town once he completed his associate's degree. He was surprised to feel as homesick as he did because he thought he was "ready to leave Jamestown." Gina also experienced significant homesickness, which led her to come home almost every weekend. She felt that coming home often helped her. Kevin was the only student who moved away for college that did not report feeling homesick. It should be noted that all the students who went out of county for their post-secondary education still lived within a one-to-two-hour drive back to Fentress County.

Kevin experienced a personal and social transition when he moved away from Fentress County to go to college. He said, "I became a different person when I went to college. I lost the accent, obviously. I go back home. I get a lot of flak, you know? 'What you're talking proper?' It's like, it's not me that's talking funny." Kevin learned to embrace seeing the world from a new perspective, which he referred to as maturing. He was also opened to a new world of social opportunities. "You're living on a campus that is larger than just about the county you live in, population wise," Kevin continued with, "You're just inundated with a demand signal from your surroundings...there's just so many things that you would want to do. You get stretched pretty thin time-wise." Kevin attributed his first academic failure to what helped him settle the temptations from his new social transition. He said, "Academic failure was not something I had ever experienced before." After his first 'F', he said he was reoriented from his sophomore year on to focus on academics.

Although he stayed locally for community college, Adam also talked about having a transition, rather the lack thereof. He felt that he was not able to have a full transition to college life because he went to college in his hometown. The only time he felt he was able to experience a transition was when he would have to drive to classes out of county. Adam realized the students at these other locations were having more of a college experience than he was. The other locations out of the county, which are still part of the local community college, had in-person professors and much bigger facilities.

### ***Localism***

Choosing a college that is local was a priority for at least two of the students, Rachel and Adam. Rachel said that the biggest factor for her choosing the local community college was that it was in her hometown. Of the four students that moved away for college, two students reported frequently coming home. Three students implied they wanted to either move back or to stay in

Fentress County. Brandon originally wanted to move away from Jamestown, but after finishing his degree, he decided that he wanted to move back home. When discussing her plans of moving back home after college, Danielle said, “I was definitely ready to come back. Everybody’s ready to leave Jamestown; I was ready to come back.” Kevin was the only student to explicitly state that he did not want to move back. He stated, “My intent was to never return to the Appalachians. I knew what my career goals were, and that industry just simply did not exist.” The majority of students interviewed still reside in Fentress County.

### ***Mentorship***

The students were asked about the potential benefits of participating in a mentorship program in high school that was designed specifically for first-generation Appalachian students. Nine of the students felt that such a program would have been beneficial for them. The one student who said it would not have been beneficial was because she felt that she would not have taken advantage of such program when she was in high school. The students provided examples of things that would make such a program effective for them. The needs of the students are as followed: someone to help navigate the practical things of college (e.g. credit hours, degree types), someone to ask questions to without being afraid, someone who is in the same career/academic field, someone to walk through college with them, someone to help alleviate the stress of college, someone who is willing to be intentional, and someone who would be available via email or text for quick questions. The most common response of what the students needed from a mentorship was someone to just be able to ask questions to without being afraid.

There was also a personality component to the discussion of a potential mentorship program. Emily knew that she would not have participated in the program. Danielle felt that she would have been too shy to participate. Rachel felt that because of everything she had going on, she would have only participated if there were email or text options.

Unsure of just how much a mentorship program would have benefited him, Brandon said, “It would have been a start. That’s for sure.” Adam reflected on what a mentorship program could have done for him as he said, “...any guidance I could have used in high school to help better me and helped me not worry so much...like somebody else who was going through the exact same things that I’ve been through, it would have been very beneficial for my mental health and my education.” Open to the idea of the benefits of a potential mentorship program, Kevin stressed the importance of a career-focused program when he said, “If they [mentor] were in an unrelated field, it would have been of little value to me.”

### ***Advice for Future First-Generation Students***

The students were asked about things they wished they had known prior to starting their post-secondary education and about advice they would give future first-generation students from Fentress County. Taylor said that she wished she had known what to expect about the basics of college. Because she was a first-generation student, she had no idea what to expect, and she did not know about the different degree types. When describing what it was like to hear words such as “bachelor’s or master’s degree” in high school, Taylor said, “I hear all of these things, and you say them like I know them. But I have no idea what you’re talking about.” Gina also had a similar experience when she realized that her parents could not help her plan out her classes and credit hours because they did not understand how any of it worked either. Because this was her

experience, she stressed that students who are first-generation need to seek out answers when their families cannot provide them. Brandon also realized that his parents would not be able to help him with the practical things of college, so he suggested for parents to receive more information, if their child is going to college.

For future first-generation students struggling to decide how to pay for their education, Brandon said, “Don’t let money be, you know, the big factor. You can work something out to pay it [student loan] off.” Taylor also talked about the financial experience of being in college. She said, “I mean, financially, like you’ve never seen this much money in your life, literally. I mean, whether it be income or debt, you know?”

Casey’s experience during her post-secondary enrollment led her to stress the importance of having a community of supporters on your side to encourage you. Danielle also spoke of the importance of finding friends after you move for college. She said that making friends helps ease the transition from high school to college life. Taylor’s advice to students who are coming from situations similar to hers was for them to “find a buddy that’s been through it” so that you will have someone to ask questions to.

Kevin discussed his transition from Fentress County to his college town when he moved for school. After moving, he was exposed to new social opportunities he had not had in Fentress County. He would advise future students to stay focused on their long-term academic goals and minimize distractions. He stressed the importance of focusing on academics instead of the new distractions because college-level work is much different than high school. This was the most difficult transition he experienced, saying, “You know, you may be the ‘A’ student without trying too hard in high school, but everyone in college used to be that person. Now, you’re just average.”

Both Adam and Olivia talked about the importance of asking for help when you need it. For Adam, that meant asking for help when struggling with mental health. When asked what advice he would give future students, he responded, “I don’t know if everyone dealt with mental issues like I did, but the mental aspect of it [college experience] bothered me more than anything. I think that really affected me. I mean, it was a crazy time. So, I think anybody who’s going through something like that, and they really, you know, they need to ask for help...don’t just bottle it all in.” For Olivia, asking for help meant talking to someone about resources for a learning disability. Olivia talked about how she was not honest with her advisor about needing special resources for her learning disability, a regret she cautions others against.

Lastly, Casey, Olivia and Adam all discussed the importance of choosing a career path that is best for you. Casey started off in a community college before realizing that was not the type of education suitable for her, so she decided to switch paths to a technical school. Olivia felt like she was forced to go to a community college instead of pursuing other options, such as a technical school. Adam also talked about the pressure he felt to pursue a particular career path in community college because of the social pressure he felt. All three of these students want to encourage future first-generation students to take the time to figure out where they want to go to school and what field they want to study.

### **Group Interview**

After completing interviews with the former students, a group interview with three administrators from York Institute was completed in order to provide insight into how the high school is working to prepare their students for post-secondary education, to discuss challenges

faced by students and staff, and to find opportunities for growth in student development. Topics for this group interview were based on the experiences from the former students. For the protection and anonymity of the participants, all three will be referred to using a pseudonym and using a general job description of administrator.

### ***Student Body Demographics***

The conversation began by discussing the demographics of their student body. They reported that 98% percent of the student body is white. York Institute is a Title I school with 70% of the student body currently receiving free or reduced lunch. Christopher expressed that the percentage of students receiving free or reduced lunch should be much higher, but the students do not fill out the lunch forms to avoid the social stigma of needing a free or reduced lunch. “They don’t like being recognized as free or reduced lunch,” Christopher said of the students, “so we have the struggle of getting them to fill out the forms.”

When discussing the home life of their student body, Jennifer shared that some of the students come from households that others would not be able to imagine. Specifically, she addresses that several of their students are coming from homes where drug use is heavily present. She spoke of those students saying, “...they’ve seen things that you and I have never seen.” In addition to this, their students are also coming from low-income, divorced, non-working parents, welfare-dependent households. According to Jennifer, many of the students are coming from households where the parents are uneducated. In some cases, she said that this leads to the parents having a lack of value of education. Jennifer said, “...their parents are not educated, so they do not understand or value education beyond—some not even—high school...”

Realizing the number of their student body that is choosing to stay in Fentress County, Michael discussed trying to find new ways to plan for those students. Michael specifically addressed that there has been an increase in females choosing to stay local after graduating high school. He is working to develop a program for the students who are choosing to stay local and/or move back to Fentress County to work. Although he did not discuss the full plan, he did address the need of the student body to have more resources if they are choosing to stay local.

### ***Community and State Involvement***

York Institute is a State Special School. Because of this, York Institute does not have a local school board. Rather, their school board is in the state capital, Nashville. In order to still have community involvement, the school has an advisory council that meets monthly to discuss what is happening in the school. Although the advisory council has no legal say in how the school is operated, it is beneficial for the school to have community involvement and exchange of ideas. Michael felt that having an advisory council helps keep the community in the know and excited about York Institute.

The group did, however, address their concerns for having a non-local school board. Their primary concern was the social disconnect between Nashville and Jamestown. Nashville is a bustling metropolis, while Jamestown is a quiet, rural town. Jennifer explained this by saying, “They don’t work here, and they don’t understand here sometimes. I think sometimes that’s a barrier because they’re living in Nashville in the big city and the way things are there.”

### ***Financial Aid Events and Counseling***

According to Jennifer, the students are given “multiple opportunities” to learn more about and to have assistance with financial aid needs. When it is time for the FAFSA to be filled out, students are given Financial Aid Nights, where they will have assistance with completing the FAFSA. In addition to this, students are also offered one-on-one sessions for assistance with financial aid-related questions. These events have been offered to students for several years.

In addition to receiving assistance with the FAFSA, students are also given opportunities to learn about scholarships and grants that are available to them. This information is given to students during grade-required classes to ensure that all the targeted students receive the information. Every graduating senior is required to apply for the TN Promise scholarship, even if they do not plan to use it. Christopher gave the example that a student who was admitted to a top-tier university was still required to fill out the TN Promise scholarship form, which only applies to technical schools and community colleges. The reason for this is to ensure every student has the potential to receive financial aid for their post-secondary education. Students are also given information on an as-needed, last-resort basis for using student loans to pay for their post-secondary education.

In order to help students beyond high school, the students are also given information regarding how to stay eligible for state-funded grants and scholarships. Both Michael and Christopher addressed the eligibility requirements for keeping certain state-funded scholarships. Michael shared that he was concerned for the retention of first year college students who lose their state-funded scholarships due to the GPA requirements. Adding to this, Christopher stated that the GPA requirements for such state-funded scholarships can be too high, especially for students in Science, Technology, Engineering, and Math (STEM) fields.

### ***Post-Secondary Education Opportunities***

In order to help the student body plan for post-secondary education, York Institute allows upperclassmen the opportunities for school visits. Juniors are allowed one visit, and seniors are allowed two visits. This does not include school-led trips, which the staff takes students on regularly. Interested students are taken on trips to the local community college campuses, local technical schools, and a four-year university. According to Christopher, “Probably 90+ percent of them actually end up going to a place before they graduate.” If a student wants to visit a post-secondary institution but cannot afford to take a trip, York Institute will arrange the trip and provide funding, travel and/or food costs for the trip. In order to broaden the range of schools their students attend, York Institute hangs flyers of schools who send them materials. This is done so that students can see the range of potential post-secondary institutions.

Another way York Institute provides opportunities for students is by offering dual credit opportunities through the local community college and technical school. Christopher approximated that at least forty students take advantage of these opportunities. Dual credit opportunities provide students with college credit to get a head start on their post-secondary education. Students who have these credits, according to Christopher, are more likely to enroll and attend a post-secondary institution.

Several staff members of York Institute hold seats on post-secondary institutional advisory boards. According to Michael, this is a form of strategic planning. By being members of these boards, they are able to intervene on behalf of the needs of their student body.



### ***Post-Secondary Education Completion***

Although excited about the number of students enrolling in post-secondary institutions, Jennifer cautioned that their students struggle to continue their enrollment through completion. Jennifer felt the school's efforts have helped more students enroll in post-secondary institutions, but she is unsure to how to help prepare students after high school graduation. Both Jennifer and Christopher expressed that all the students who enroll in post-secondary duration do so with the intention to complete it. Yet as the student progresses through, he is met with challenges that affect his ability to complete his anticipated degree. Jennifer responded that she felt only six of ten students are truly committed to degree completion. When explaining her reasoning for this, she said, "They say they're gonna do it. But deep down, a lot of them say they're gonna go and finish because their friends are saying they're going to go and finish. But I think that deep down a lot of them have the attitude, 'I'm gonna go for whatever reason...because I don't have anything else to do.'"

In addition to this, the York Institute staff makes sure that their students meet major deadlines for scholarships and other post-secondary deadlines. This again helps with student enrollment, yet once the students graduate high school, they often fall short in meeting necessary deadlines for their individual post-secondary institutions. Christopher suggested this occurrence might stem from students and parents struggling with the online format of many post-secondary forms. Whereas, Jennifer questioned whether the school helps the students too much by not making them independent while in high school.

Christopher spoke about the common occurrence of students purchasing cars right after high school graduation. He said most often that the students who buy new cars, and are making the payments themselves, will end up dropping out of college because they now have to work more to be able to afford their new purchase. Once the students realize the cost of the car payment, gas and insurance, they realize that they have to work more to be able to cover the costs; therefore, going to school becomes a secondary concern. The group expressed that students have many factors influencing their post-secondary completion, rather than simply the academic challenge.

### ***"Cultural Barriers"***

Michael addressed what he referred to as the "cultural barriers" he faces when discussing post-secondary education with the parents of the students. He felt there can at times be misunderstandings and miscommunication with the parents. Michael gave the example of advanced manufacturing versus factory work. He said often the parents and students can get the two confused. Students coming from households where the parents are factory workers often do not realize that advanced manufacturing typically requires a technical certificate. He felt the misunderstandings boil down to the parent working in the factory with a high school diploma, whereas the student wants a technical certificate to do advanced manufacturing. Because the parent did not have a degree, he assumes the student does not need one either.

Another "cultural barrier" Michael is working on addressing is helping students and parents understand that technical schools are also a form of post-secondary education. He is working to help students overcome the "stigma" that technical schools are not college. Which according to Michael, a legislative mandate has required that certain technical schools be referred to as colleges in their names.

Michael added another barrier faced by his Appalachian students in that there is a mentality of students thinking they will not be able to succeed in post-secondary institutions. This mentality can keep students from reaching their full potential. Michael is leading the change of this mentality by working with students and encouraging that they can be successful in post-secondary education. This is a process he feels “really takes time because you have to...get people on board” and help communicate this mentality of success.

### ***Challenges and Fears Faced by Students***

Given that most of their students are considered of Appalachian heritage, the group discussed some of the challenges and fears their students face. Christopher expressed that, “A big thing is if they’re first-generation, the unknown just scares them to death.” To alleviate this fear, Christopher suggested that the students need support and encouragement from home.

Jennifer felt the biggest fears for her students considering post-secondary are money and cost. She said that the school helps to alleviate this fear through educating the students about financial aid opportunities. The school frequently reminds graduating seniors of financial aid deadlines. Jennifer said the school also helps with this fear by making students fill out the form for TN Promise. This helps students be able to see that financial aid is tangible for post-secondary education.

Addressing another fear, Jennifer said, “I think you see some, the fear of just leaving.” Some students have the extra burden of caring for other members of their family, whether financially or physically. For students in this situation, they feel like they need to stay home and take care of them. This situation is amplified for students who live in drug homes, according to Jennifer. Those students frequently do not want to leave their younger siblings alone in the house. Understanding that there is little that staff members can do to fully alleviate this fear, Jennifer said that they try and help by bringing back former students who are in college to talk with the student body. This event brings back students who recently graduated from York Institute and are first semester college freshmen. These students are able to share their experiences in transitioning to college, while also showing current high school students that it is possible to be successful in post-secondary.

In contrast, some students desperately want to leave Jamestown, but do not know how. Jennifer explained that she has noticed a trend in some young women after graduating high school. Describing this, she said, “And I think we see a lot that want away from home, but don’t know how to get away from home. So, getting married and having a baby gets me out of my home...It’s just, they see it as a way out, and then, it affects everything.”

Another challenge faced by students in Fentress County is the lack of development. According to Christopher, the “best and brightest” students move away after high school, and they do not return. Jennifer responded, “It hinders our society from growing and developing.” This creates a vicious circle for the residents of Fentress County because the students are choosing to leave and pursue their careers elsewhere. Which in turn, continues the lack of economic development, which influenced the students to leave in the first place.

### ***Parental Involvement***

Christopher addressed the importance of having parental and family support on student success post-high school. For some students, however, their families are unable to provide that

necessary support. According to Christopher, “It’s not that the parents might not want to. They just don’t know how to.” Christopher also addressed the issue of family influence on paying for post-secondary education. He gave the example of a student who would have received \$20,000 in scholarships for his university, but he needed a total of \$21,000 to cover all his costs. His family refused to take out a student loan for the extra \$1,000, and the student did not attend his university. He expressed that sometimes the parents do not understand how to help their student cover the cost of paying for post-secondary education, which frequently involves the need for a student loan.

Parents also have an influence in what their children choose as a career or education path. Christopher gave the example of a mother who was upset because she felt the school had encouraged her son to go to school for a career that he could not have in Jamestown. Christopher said, “She wanted him living here with her the rest of his life.”

When filling out financial aid forms, parental involvement is a key factor. According to Christopher, parents are frequently afraid of the financial aid forms, especially if this is the first time they are filling one out. Christopher addressed two fears the parents have about the form: the form itself and the possibility of someone finding out how much money they make. Both the online format and the complexity of the FAFSA form causes parents to be fearful when helping their child fill it out. Jennifer and Christopher said that many parents do not come to the school for help filling out the forms due to the fear of staff members knowing their income. Another issue students may have when filling out their financial aid forms is who has custody of the student versus who the student lives with. Jennifer gave the example of a student living with his grandparents, but his mom claimed him on her taxes. Therefore, his grandma was unable to help fill out his financial aid forms with her tax return. Although she said this was an extreme circumstance, sometimes students are unable to fill out their financial aid forms because of their family situation. When this is the case, York Institute staff is able to write an explanation to the student’s post-secondary institution.

To keep parents informed about deadlines and events, the staff at York Institute sends out numerous messages in hopes of reaching the parents. For example, they put out information on the local radio, and they send out automated calls parents’ phone numbers.

### ***Student Action in the Post-Secondary Process***

The group gave several ways in which their school is working to provide resources for their students; however, at the end of the day, it is up to the student to take action. When asked about why some students do not find the school’s resources beneficial, Jennifer responded that many students have the mentality that if someone did not do it for them, then they missed it. For example, when a student hears a deadline on the intercom but does not act on it, they feel that someone else should have acted on it for them. Christopher addressed this, too, in that if 130 students all receive the same information but only fifty acted on this information, then it is the responsibility of the other seventy to take action, too.

The group also discussed the advisement process for students who are using the TN Promise scholarship. For students using this scholarship, they are assigned a mentor who will help them meet deadlines and meeting requirements. In return, the mentors ask that the students at least respond to an email or text message letting the mentor know that they received the information. According to Christopher, too many students are not engaging with their mentors, which leaves the mentor frustrated. In order for the students to be successful in the program, they are expected to interact with their mentor.

### Discussion

This study sought to understand how family dynamics, financial struggle, grit, mental health and academic advising were experienced by first-generation college students from Fentress County, TN. These themes were each significant obstacles for most of the students, with the exception of mental health. Mental health became a less significant theme because many of the students attributed their obstacles to grit and perseverance. The theme of financial struggle separated into two sub-themes of cost of living and cost of post-secondary education (e.g. financial aid). Unexpected themes of transition and localism emerged from the results as significant factors influencing post-secondary decisions for first-generation students in Fentress County. Additionally, the former students provided insight into the possibility of the benefits of a mentorship program, and they gave information they wish they had known prior to beginning their post-secondary education. To have a better understanding of what resources are available to the students at York Institute, the group interview with administrators from the high school focused on what obstacles their student body is facing and what ways the school is able to grow in student development.

The results showed that a majority of the former students did not understand how financial aid worked for them prior to starting their post-secondary education, yet the administrators said that all students have frequent opportunities to learn about financial aid. The discrepancy between the two responses likely comes from the lack of York Institute students attending financial aid events and counseling. For the students who attended the financial aid events and did not find them beneficial, the primary reason was the lack of personalized information. In order for potential first-generation students to receive the financial aid information necessary, they should receive individualized financial aid counseling for their post-secondary options. For example, Adam felt that having someone sit one-on-one and talk about financial aid would have been beneficial for him. However, in order for this to happen, the student must be willing to make time for financial aid counseling. There should be further research regarding the hesitancy of York Institute students to receive additional help from the guidance office and its resources. Possible reasons for this hesitancy could be related to students relying on family and peers for information, as well as the social stigma of going to the guidance office for help.

Additionally, six of the former students reported not knowing how to take out and/or needed more information about student loans, yet five of the students required a student loan to assist with funding for their post-secondary education. The administrators said that they give out information about student loans on an as-needed, last-resort option. Four students who needed a student loan attended a four-year university and one student attended a technical/career school. Students attending a four-year university are more likely to need a student loan than students attending a community college and/or technical school, especially if the student is using the TN Promise scholarship for community colleges and technical schools. Additionally, it is reasonable to assume students from low-income households, where the family is unable to provide funding for post-secondary education, are more likely to need a student loan. Given the this assumption, students at York Institute should receive more information about student loans. This additional information could be explaining the different types of loans available (e.g. federal, private), the difference between subsidized and unsubsidized loans, and how to borrow responsibly. Because of the family influences of deciding to take out student loans, parents of potential first-generation students should also receive information about student loans. This could have been beneficial for Taylor, whose father did not want her to take out a student loan for her education. Talking about

post-secondary education as an investment in a student's future could open a discussion for student loans, which are often necessary. Information of student loans needs to be personalized with the understanding of how Appalachians perceive having debt.

Given the influences of family on the student pursuing post-secondary education, the family financial situation was an expected factor influencing college completion for the former Fentress County students. Three of the former students spoke about the carrying the burden of family finances, even after moving away for college. This came from students where their families offered to help them financially when they needed to, yet the students said they often declined or felt guilty about taking from their families. This demonstrates that first-generation students from Fentress County still hold family financial responsibilities on their shoulders. Even if the student is not expected to contribute to the finances, the student still carried a responsibility of the family finances, regardless of the family's actual expectations of the student.

The family financial situation was also expected to contribute to the type of post-secondary institution that the former students chose. Because of low cost being a popular reason for choosing community college (Fike & Fike, 2008), students who are low-income were expected to choose a community college. Five of the former students attended a community college, but only two of them identified as a low-income student. Low-income students were also expected to attend college using part-time status, but all ten former students were enrolled in their post-secondary institutions as full-time enrollment. Nine of the former students reported working at some point during their post-secondary education, with some working multiple jobs. The expected reason for the former students maintaining full-time enrollment is that a student risks losing financial aid for dropping to part-time status. This leads to many low-income students having to balance working with taking college courses.

Post-secondary completion for the former students was also heavily influenced by their family dynamics. Based on the literature claiming that Appalachian families value education less than family responsibilities (Tang & Russ, 2007), this research expected to find a lack of family support for students choosing to attend post-secondary institutions. Of the ten interviewed students, all reported experiencing support from their families, and some even had expectations from parents to attend college. The administrators expressed that some families of their students do not value education due to the lack of their personal education levels. While this may be true in some cases, the research has shown that families do support their children attending post-secondary institutions. Parents understand the value of education in terms of achieving a career. For example, majoring in education allows a person to graduate ready for a career in teaching. There is value in this type of post-secondary education because the education becomes tangible. However, there is a lack of value in obtaining education for the sake of gaining knowledge. Students are expected to go to college so that they can have a good paying job, not so that they can simply obtain knowledge.

Obtaining higher education was expected to cause family tensions, but only three former students reported tensions. All maintained that the tensions were minor. Further research should be completed prior to making a conclusion on whether this phenomenon occurs in families of first-generation college students in Fentress County. Based on a study from Tang and Russ (2007) the interviewed students were expected to put family responsibilities over educational pursuits. None of the interviewed students reported experiencing this; however, the administrators reported it is an occurrence they see some student facing. No conclusion could be formally made based on this

research; however, given the responses from the administrators, it is a topic that should be researched further.

Family influence was also expected to influence the choice of post-secondary institution, as well as choice of career path. Appalachian families are hesitant to send their children to institutions that might prepare them to leave the region (Tang & Russ, 2007). Some of the former students did imply that family influenced their decisions; however, none directly attributed their decisions to their family. The lack of direct attributions could be from some of the former students deciding to attend a post-secondary institution because it is local. Remaining local implies remaining near family. The interview with the administrators did reveal that family does have an influence over students choosing post-secondary education. Students from Fentress County often consider family to be a significant influence when making decisions about their futures after high school, even if they do not explicitly acknowledge the influence.

Because of the relationship between student success and academic advising (Young-Jones, et al., 2013), academic advising was expected to be a significant factor influencing degree completion from first-generation college students in Fentress County. The students expressed a need for an academic advisor who was able to provide a personalized academic experience. Because of the uncertainty of the college experience first-generation students face, there is a need for them to have an individual focused on their success and outcome. One of the students with the most satisfying academic advising experiences met with his advisor four times a semester, and his advising was focused on his career goals. Students who had unsatisfactory experiences cited a lack of communication with their advisor. The research shows the need for proper academic advising for first-generation students in Fentress County. These students are often coming from households where they are the trailblazers trying to navigate the college experience. Parents of first-generation college students often want to help their child while in post-secondary, but the parents do not always know how to help. Having a concerned individual on campus allows for a personal connection and accountability that first-generation students from Fentress County need.

Mental health was expected to be a significant influence on degree completion for first-generation students from Fentress County based on research that first-generation, low-income students are more likely to experience mental illness (Eisenberg et al., 2009). Although two students reported experiencing significant mental health concerns during their post-secondary enrollment, this research is unable to give a conclusive answer about the impacts of mental health for first-generation students in Fentress County. Only a few students were directly asked about how mental health impacted their studies. For two students that were asked, the interviewee seemed uncomfortable answering the questions and responded in brief answers. Two other students who were asked responded openly. This is likely due to the taboo of mental health in Fentress County. In order to continue smoothly with the interviews, the mental health questions were combined with the questions about grit. Interviewees were more open to answering questions about grit, rather than questions where the phrase “mental health” was used. This occurrence opens the door to further research that should be completed.

Because first-generation students from Fentress County have odds stacked against them, they need to be able to develop ways of overcoming challenges; therefore, having grit was a theme that was expected to play a significant role in a student’s ability to complete a post-secondary degree (Wolters & Hussain, 2014), especially for students who experience compounded difficulties. All ten students reported feeling they demonstrated grit in their post-secondary studies.

Only two students reported opportunities in their post-secondary institutions to develop grit. Giving students opportunities to develop an understanding of the importance of having grit prior to starting post-secondary education would be beneficial. York Institute already has a successful program in which they are bringing back first semester college freshmen to talk about transitioning to college. Based on the interview with the administrators, this program shows current York Institute students the practical aspects of enrolling in a post-secondary institution.

Developmental courses were expected to attribute to students not completing their degrees based on literature from Bailey (2009). Students were expected to need more grit to complete developmental courses in community college. According to Fike and Fike (2008), first-generation students enrolled in community college are most likely to need grit to complete their degree, yet they are also the least likely to have it. This research was unable to reach a conclusion because of the limited number of participants who took developmental courses and who did not complete their degrees. This research expected that more students would be required to take developmental courses, but only three students had to do so. This is a trend that should be further studied with individuals who were required to take multiple developmental courses in community college and/or did not complete their anticipated degree.

Transitioning to college life was not a theme intended to be studied in this research; however, several of the former students discussed the impacts of their transition to college. Of the four students who moved away for college, three reported feeling significant homesickness. The transition from leaving their families in Fentress County to moving away for college proved to be difficult for three students. The administrators also discussed seeing their former students struggle with transitioning away from Fentress County for college. This struggle of transition is likely connected to Appalachian culture of having strong connections to family, community, and location (Wilson & Gore, 2009).

Additionally, students wanting to remain local became a popular theme in the research. Although localism was not expected to be a significant theme, it is understandable as to why it emerged given that Appalachians have a strong connection to their geographic location and to their families (Wilson & Gore, 2009). Remaining local could also stem from pressure to stay near family and/or to frequently visit family after moving to college. All the former students attended post-secondary institutions that are considered local. For those who attended a four-year university, they were still within a one-to two-hour driving distance.

## **Limitations**

This study was met with possible limitations. The first limitation has to do with the participant pool. Due to the COVID-19, recruitment methods for former students were primarily via personal social media. At the time of recruitment, a majority of businesses were closed, which gave difficulty in meeting potential participants in-person for recruitment. In order to keep this from being a significant limitation, the interview period was extended to allow for more participants. Once local businesses were opened, I posted flyers around town and put an advertisement in the local newspaper. Additionally, I sought interviews with York Institute administrators to further discuss challenges for Fentress County students. A smaller number of participants allowed for more in-dept conversation about each one's experiences while enrolled in post-secondary institutions. The only direct concern of a small number of participants was that the

role of developmental courses in degree completion was unable to reach a conclusion based on the results.

### **Future Research**

In order to get the full picture of the challenges faced by first-generation students in Fentress county, more research needs to be completed. While this study sought the perspective of students who had attempted and/or completed their post-secondary education, research should also be completed with current high school students considering college. Having this perspective would allow for deeper understanding of factors influencing post-secondary enrollment in Fentress County, which will also correlate with factors influencing degree completion.

Additionally, this research was left without a conclusion on the roles of development courses and of mental health in post-secondary degree completion. Based on the literature, these are two potential factors influencing college completion for first-generation students (Baily, 2009; Eisenberg et al., 2009). Furthermore, the results of the mental health section leaves questions surrounding the perceived mental health taboo in Fentress County. Completing research on this topic could allow for more understanding of factors influencing college completion, but it could also bring light on the perception of mental health in Central Appalachia.

### **Conclusion**

The results from this study contribute to the knowledge-base of information about college completion for first-generation students in Central Appalachia. Instead of viewing Appalachian culture as a barrier to post-secondary success, the challenges of being a first-generation Appalachian college student should be addressed to potential students, while encouraging that these challenges are possible to overcome. The most significant factors influencing post-secondary degree completion for Fentress County students are family dynamics, family financial situations, having grit, and having proper academic advising.

The interviews with the former students and the current administrators each showed the influence of family in post-secondary education decision-making. Whether it is deciding about how to pay for school or what degree to major in, parental influence is heavily considered. In addition to this, the family financial situation continues to be a factor for students, even after they move away for college, as students still feel the burden of their families' finances. All ten of the former students demonstrated grit while pursuing their degree, which gave them the motivation to reach completion. Lastly, having proper academic advising is very important for first-generation students from Fentress county because they are coming from households that are unable to help with navigating college life. Having proper academic advising helps the students feel connected to the college campus, while also providing individualized academic plans.

Although the odds seem stacked against them, first-generation college students from Fentress County have the potential to be successful in post-secondary institutions. Increasing student success in Fentress County can begin by starting intentional programming at the secondary level. By preparing students for the challenges ahead of them, they can be more equipped to overcome them and achieve their post-secondary goals.



### **Suggestions for Fentress County Secondary Institutions**

The research and its implications seek to provide opportunities for growth for secondary institutions in Fentress County with the intentions of promoting post-secondary degree completion. It appears that Appalachian culture is seen as a barrier to student success in Fentress County. This should be reframed to show students how to use the aspects of their culture to benefit them. In order for this to happen, students should have opportunities to develop an understanding of their Appalachian heritage and culture. An example of how Appalachian culture could promote student success could be to teach students about viewing their education as an investment in themselves and their community. Students may have to move away temporarily for their post-secondary education, but this would mean they would move back to Fentress County with a new skill set that could boost the economic and social development of their community. This example allows Appalachians to hold on to their sense of community and location, but it also would teach students the importance of working to develop their community.

Based on the interviews with former students, I would also suggest implementing a new mentorship program designed for first-generation students in Fentress County who anticipate obtaining a college degree. This idea of potential mentorship was popular amongst the former students. A program such as this could vary based on resources and funding available. An example of mentorship at the secondary level could have a cohort of students eager to achieve a bachelor's degree. Allowing the group to be compiled of students who want to take advantage of its resources would ensure student participation. This program should allow participants the opportunity to speak with former students who have successfully completed their post-secondary degrees. Having a mentor who has a similar background as the student could serve as encouragement and as a way for the student to see that degree completion is a possibility. I would also suggest a program such as this should work with the students to find post-secondary programs and institutions that fit their educational goals. Additionally, this would help the students to find post-secondary institutions that provide programs and opportunities specifically for low-income students (e.g. federal TRIO programs).

Through intentional programming, potential first-generation students would be provided much needed resources. These resources would serve to promote post-secondary degree completion. For far too long, students of Fentress County have felt surrounded by their limitations. Instead of defining these students by their statistics, it is time to actively engage in their futures, which inevitably will affect the future of Fentress County.

### Works Cited

- Appalachian Research Commission. (n.d.) Socioeconomic Data: Fentress County. [online]  
Available at: [https://www.arc.gov/reports/socio\\_report.asp](https://www.arc.gov/reports/socio_report.asp). [Accessed 01 July 2020]
- Bailey, T. (2009). Challenge and Opportunity: Rethinking the Role and Function of Developmental Education in Community College. *New Directions for Community Colleges*, 2009(145), pp.11-30.
- Bickel, R., Weaver, S., Williams, T., and Lange, L. (1997). Opportunity, Community, and Teen Pregnancy in an Appalachian State. *The Journal of Educational Research*, 90(3), 175.
- Duckworth, Angela Lee and Quinn, Patrick D. (2009). Development and Validation of the Short Grit Scale (Grit-S). *Journal of Personality Assessment*, 91(2) pp.166-174.
- Eisenberg, D., Golberstein, E. and Hunt, J. (2009). Mental Health and Academic Success in College. *The B.E. Journal of Economic Analysis & Policy*, 9(1) pp.1-35.
- Fike, D. and Fike, R. (2008). Predictors of First-Year Student Retention in the Community College. *Community College Review*, 36(2), pp.68-88.
- Kelchen, R. (2015). Financial Need and Aid Volatility among Students with Zero Expected Family Contribution. *Journal of Student Financial Aid*, 44(3/2), pp. 179-201.
- London, H. (1989). Breaking Away: A Study of First-Generation College Students and Their Families. *American Journal of Education*, 97(2), pp.144-170.
- Marshall, L., Thomas, L., Holmes, G., Arcury, T., Randolph, R., Silberman, P., Holding, W., Villamil, L., Thomas, S., Lane, M., Latus, J., Rodgers, J., and Ivey, K. (2017). Health Disparities in Appalachia: The First Report in a Series Exploring Health Issues in Appalachia. *Creating a Culture of Health in Appalachia: Disparities and Bright Spots*, pp. 163-168.
- Mowbray, C., Megivern, D., Mandiberg, J., Strauss, S., Stein, C., Collins, K., Kopels, S., Curlin, C. and Lett, R. (2006). Campus Mental Health Services: Recommendations for Change. *American Journal of Orthopsychiatry*, 76(2), pp.226-237.
- Pollard, K., Jacobsen, K., and Population Reference Bureau. (2019). The Appalachian Region: A Data Overview from the 2013-2017 American Community Survey Chartbook. [online]  
Available at: [https://www.arc.gov/research/researchreportdetails.asp?REPORT\\_ID=159](https://www.arc.gov/research/researchreportdetails.asp?REPORT_ID=159) [Accessed 05 May 2020].

- Tang, M. and Russ, K. (2007). Understanding and Facilitating Career Development of People of Appalachian Culture: An Integrated Approach. *The Career Development Quarterly*, 56, pp. 34-46.
- Thayer, P. (2000). Retention of Students from First Generation and Low-Income Backgrounds. *The Journal of the Council for Opportunity in Education*, [online] pp.1-9. Available at: <https://eric.ed.gov/?id=ED446633> [Accessed 19 Jul. 2019].
- Wallace, L. and Diekroger, D. (2000). The ABCs in Appalachia: A Descriptive View of Perceptions of Higher Education in Appalachian Culture. [online] pp. 138-149. Available at: <https://eric.ed.gov/?id=ED464796> [Accessed 01 July 2020]
- Wilson, S. and Gore, J. (2009). Appalachian Origin Moderates the Association between School Connectedness and GPA. *Journal of Appalachian Studies*, 15(1/2), pp.70-86.
- Wolters, C. and Hussain, M. (2014). Investigating Grit and Its Relations with College Students' Self-Regulated Learning and Academic Achievement. *Metacognition and Learning*, 10(3), pp.293-311.
- Young-Jones, A., Burt, T., Dixon, S. and Hawthorne, M. (2013). Academic advising: Does It Really Impact Student Success?. *Quality Assurance in Education*, 21(1), pp.7-19.

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## Gratitude in the Face of Crisis

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## Abstract

*Positive emotions have been noted to broaden one's cognition, giving individuals more flexibility in thought and as a result, this allows one to build or create personal resources to increase well-being (Cohn et al., 2009; Fredrickson et al., 2008; Fredrickson, 1998, 2003, 2009; Waugh & Fredrickson, 2006). Specifically, the positive emotion of gratitude is noted as a prevalent medium to increase one's well-being (Emmons & Stern, 2013). In this study, 27 participants completed a longitudinal study where they completed a pre-test to assess their well-being and participated in five days of gratitude journaling. Upon completion of the five days of journaling, participants responded to a post-test. Both the pre- and post-tests assessed well-being using the 23-item PERMA-Profile; life satisfaction using the Satisfaction with Life Scale; stress levels with the Perceived Stress Questionnaire; and stress in regard to COVID-19. The results of this study are inconclusive and neither support or refute past gratitude research.*

Emotions have been referred to as a subset of an affective experience along with moods, attitudes, and traits (Garland et al., 2010). Garland et al. (2010) also noted that one typically appraises emotions as good or bad. "Good" emotions typically refer to emotions that are enjoyable or positive to feel, while "bad" emotions are the emotions that one does not enjoy feeling or what one deems as negative. "Bad" emotions are typically the emotions one tries to downregulate or suppress the ego from experiencing. However, the difference in perception of these emotions may be a result of socialization or evolutionary process; more so, specific emotional expressions due to socialization are noted differently across gender (Brody, 1999, 2000; Chaplin, 2015).

Additionally, Fredrickson (1998) introduced her broaden-and-build theory as a way of conceptualizing what positive emotions can do for one's whole person. Positive emotions have been observed to broaden one's cognitive and behavioral functions and as a result, build biopsychosocial resources that aid in coping and the overall flourishing of individuals (Cohn et al., 2009; Fredrickson, 1998, 2003, 2009; Fredrickson et al., 2008; Garland et al., 2010; Waugh & Fredrickson, 2006). Specifically, the positive emotion gratitude has been noted to increase one's positive affect and promotes overall well-being (Emmons & McCullough, 2003; Emmons & Stern, 2013; McCullough, Emmons, & Tsang, 2002).

## Broaden-and-Build Theory

Within her research on positive emotions, Fredrickson (1998) advanced psychologists' understanding of positive affect using the broaden-and-build theory. Fredrickson's broaden-and-build theory states that positive emotions have the ability to broaden one's cognition, giving individuals more flexibility in thought and as a result, this allows one to build or create personal resources for themselves that produces increased resilience, mindfulness, improved social relationships, greater physical health, and an increase in overall well-being (Cohn et al., 2009; Fredrickson et al., 2008; Fredrickson, 1998, 2003, 2009; Waugh & Fredrickson, 2006). Essentially, positive emotions broaden one's momentary thought-action tendencies. By opening one's mind, increased cognitive scope can lead to one taking actions that build enduring personal resources like resiliency, mindfulness, improved social relationships, and physical resources. As a result, these personal resources can increase one's overall well-being (Cohn et. al, 2009; Fredrickson et al., 2008; Fredrickson, 1998, 2003, 2009; Waugh & Fredrickson, 2006). Consequently, these personal

resources provide an evolutionary advantage by increasing one's likelihood of survival (Fredrickson, 1998, 2003, 2009; Garland et al., 2010).

Positive emotions have been reported to counteract or undo the effects of negative emotions (Fredrickson, 1998; Garland et al., 2010). Specifically, positive emotion has been reported to increase one's cardiac recovery time resulting in increased physical health (Fredrickson & Levenson, 1998; Garland et al., 2010). Individuals who are able to generate positive emotions within themselves in the midst of adversity or challenge appeared to have an active component congruent with resilient coping (Garland et al., 2010). Consequently, positive emotions have been observed as possessing a neuroplasticity effect that perhaps changes the structure of one's brain, which, as a result, can produce more adaptive ways to think and behave to stress (Garland & Howard, 2009). Thus, positive emotion has been noted to account for greater resilience in the face of crisis, as well as decrease depressive-like symptoms (Garland et al., 2010). Individuals who scored high on ego-resilience surveys (Block & Kremen, 1996; Garland et al., 2010) were more able to maintain focus on present circumstances and worry less about the future. As a result, Garland et al. (2010) reported on the effects of the broaden-and-build theory through self-generated positive emotion to reduce the negative effects of depression, anxiety, and schizophrenia. To do this, Fredrickson and Losada (2005) suggested that understanding one's affective texture or overall well-being is represented by one's positivity ratio, the ratio of one's positive to negative emotions experienced over a period of time. According to Fredrickson and Losada (2005), two lawful asymmetries between positive and negative emotions dictate positivity ratios consistent with overall well-being will need to surpass 1-to-1. Essentially, one's positive experiences must outweigh one's negative experiences. Fredrickson and Losada (2005) support the 3-to-1 ratio as essential for individuals to experience the effects of the broaden-and-build theory and also experience overall well-being or flourishing. Meaning, three positive experiences are needed to counteract or undo one negative experience.

### **Gratitude**

The positive emotion of gratitude has been cited as a prevalent medium to increase one's mental health (Emmons & Stern, 2013). The long-term benefits of gratitude have included lowering blood pressure, improving immune function, promoting happiness, and well-being, as well as increasing prosocial behavior. In addition, gratitude reduces the likelihood of depression, anxiety, and substance abuse disorders (Emmons & Sterns, 2013). Gratitude is defined as a cognitive-affective state or feeling that occurs in interpersonal exchanges when one person acknowledges receiving a perceived valuable benefit from another person. Additionally, gratitude is often perceived when one does not intentionally seek out, deserve, or earn what has been given to them. Rather, the feeling of gratitude comes from the perception that the person giving the benefit of sorts is doing so out of good volition (Emmons & McCullough, 2003; Emmons & Sterns, 2013). Emmons and Stern (2013) noted the word gratitude is derived from the Latin *gratia* meaning favor, and *gratus*, meaning pleasing. Thus, gratitude encompasses the giving and receiving of kindness and generosity based on one's good volition. Consequently, gratitude regulates and strengthens relationships. Gratitude is a universal expression seen across various cultures. In addition, because of gratitude's relational nature, it possesses a healing affect among individuals (Emmons & McCullough, 2003; Emmons & Stern, 2013). Emmons and Stern (2013) also noted that individuals who are grateful experience higher levels of mental health and life satisfaction leading to increased

joy, enthusiasm, love, happiness, and optimism. In turn, gratitude serves as a buffer between perceived negative emotions such as envy, resentment, greed, and bitterness. Grateful people are able to cope with everyday life stressors better than those who are not grateful, experience an increase in resilience, and recover more quickly from illness, and experience better physical health overall (Emmons & McCullough, 2003; Emmons & Stern, 2013).

### **Gratitude Journaling**

A prevalent means of cultivating the experience or expression of gratitude is through gratitude journaling. In experiments conducted by Emmons and McCullough (2003), as well as Emmons and Stern (2013) journaling exercises were used to cultivate gratitude. The results of their study found that when individuals were randomly assigned to keep gratitude journals on a weekly basis, these individuals exercised more frequently, reported fewer physical symptoms, experienced greater life satisfaction, and experienced more positive affect when thinking about upcoming weeks in comparison to those who only recorded negative or neutral life events. Keeping a gratitude journal resulted in higher levels of alertness, enthusiasm, determination, attentiveness, and energy among young adult participants (Emmons & McCullough, 2003). Individuals who recorded gratefulness in their gratitude journals engaged in more prosocial behavior, slept better and longer, and increased their time exercising (Emmons & McCullough, 2003; Emmons & Stern, 2013). More so, individuals who experience gratitude are seen as more helpful, outgoing, optimistic, and trustworthy (Emmons & Stern, 2013; McCullough, Emmons, & Tsand, 2002). Additionally, Emmons and Stern (2013) noted the benefits of gratitude expand further than self-report measures go. That is, they noted how family members, friends, partners, and others who surrounded those who practiced gratitude journaling reported these individuals experiencing greater levels of happiness as well.

### **The PERMA Model**

Additionally, Seligman (2012) noted the presence of positive emotion as a necessary component for one to experience overall well-being or flourishing. In his concept of flourishing, Seligman (2012) identified five necessary components an individual must have to be considered flourishing: positive emotion, engagement, positive relationships, meaning, and achievement. Positive emotion is defined as one's happiness and life satisfaction, while engagement is one's level of mindfulness. Positive relationships are the absence of solidarity but the harmonious effect of other people for the sake of companionship. Meaning is one's sense of belonging or ability to serve something more than just the self. Though subjective, meaning must meet three criteria: meaning must contribute to one's own well-being, pursued for one's own sake, and be measured independently of the other components of well-being. Accomplishment is one's sense of achievement that does not benefit positive emotion, meaning, or relationships. All elements are considered to contribute to well-being when they can function independently of another (Seligman, 2012).

Historically, PERMA has been used as an effective well-being measure. In a study conducted from Australian private school employees, Seligman's PERMA model was used to assess employees' well-being, employees' life satisfaction, physical health, and professional thriving (Kern, Waters, Adler, & White, 2014; Seligman, 2012). In another study, Seligman's PERMA model was used in a cross-sectional and longitudinal study to assess well-being and

flourishing among college students' physical health and college success from sophomore to senior year (Coffey, Wray-Lake, Mashek, & Branand, 2016). The results from both studies indicated high levels of positive emotion, engagement, meaning, relationships, and accomplishment correlated to better health and higher levels of life satisfaction, higher job satisfaction, higher commitment to one's organizations, better relationships with one's coworkers. In addition, the PERMA model served as a reliable predictor of college students' physical health and college success (Coffey et al., 2016; Kern et al., 2014; Seligman, 2012).

Similarly, in a study conducted by Mellis (under review) the PERMA model was used to correlate intrinsic and extrinsic religiosity to overall well-being among Amazon MTURK Workers. Participants who were intrinsically religious demonstrated higher levels in positive emotions, positive relationships, meaning, and achievement. Notably, participants who identified as intrinsically religious did not exhibit higher levels in engagement (Mellis, under review). Since the PERMA-Profiler is not a religious affiliated survey, one cannot say with certainty if the measures of PERMA result from religious practices. However, it can be noted that the PERMA model continues to be a reliable predictor of one's overall well-being.

### **Hypothesis**

Within the literature, Fredrickson's broaden-and-build theory is noted to manipulate one's positive affect using gratitude journaling in numerous publications. In the current study, the researcher wants to further Fredrickson's findings on the effectiveness of gratitude journaling, as well as Seligman's (2012) research on well-being. Within this study, participants' positive affect will be manipulated using gratitude journaling and then measured alongside Seligman's (2012) components of PERMA. Fredrickson et al. (2008) have done similar studies where they manipulated participants' positive affect using meditation to show how increasing positive affect leads to greater life satisfaction. In this study, however, the researcher will explore manipulating one's positive affect using gratitude journaling to better understand the relationship of positive affect on one's overall well-being using the five specific components of PERMA (positive emotions, engagement, relationships, meaning, and accomplishment). Additionally, participants in the control group will complete a traditional journal entry where gratitude will not be assessed. The researcher predicts the implementation of gratitude journaling will increase all five components of PERMA, yielding an increase in overall well-being within the sample population.

### **Method**

#### **Participants**

Eighty-one participants volunteered to complete a survey on Prolific.com. Participants were compensated approximately \$2.80 after completion of the study. Upon each phase of the study completed participants were compensated approximately \$0.23. However, the data reported only represents 27 participants who completed both the pre- and post-tests along with corresponding journals. The data from the other 54 participants' data will not be reported here due to attrition and failure to complete multiple journals, as well as the final post-test. Within this sample size, there were 12 females (44.4%) and 15 males (55.6%). The average age of each participant was 27.5 ( $SD=10.8$ ). Twenty-one participants (77.8%) identified as White/Caucasian; one participant (3.7%) identified as Black/African American; two participants (7.4%) identified as Hispanic/Latinx; and three participants identified as Asian/Asian American. Additionally, two participants (7.4%)



identified as Christian; nine participants (33.3%) identified as Nonreligious; three participants (11.1%) identified as Atheist; six participants (22.2%) identified as Agnostic; and seven participants (25.9%) identified as Other. Of this sample, 24 participants (88.9%) identified as heterosexual and three participants (11.1%) identified as bisexual.

### Procedure & Materials

Participants were asked to complete a survey via Prolific. After participants provided consent to participate in the longitudinal study, they took part in a pre-test. Participants' overall well-being was assessed using the 23-item PERMA-Profiler (Butler & Kern, 2016), and subjective well-being and subjective happiness was assessed using the Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985). Participants' stress levels were measured with the Perceived Stress Questionnaire (Levenstein et al., 1993). Additionally, participants recorded their stress levels in regard to COVID-19.

Upon completion of the pretest, participants were randomly assigned to either the experimental or the control group to complete five days of journaling. Participants in the experimental group were asked to journal for approximately five minutes each day and record five things they were grateful for five days. Participants were instructed to reflect on their days and pick any five things to record for each of the five entries. Each journal entry could be as long as the participant desired but had to be at least one word. Participants in the control group however, were asked to record any five things that happened during the corresponding day for five days.

Upon completion of the study, participants were asked to take a post-test that was similar to the pre-test. However, both the experimental and control journals were accidentally disseminated to members of the experimental group for four of the five days. Therefore, the control group only completed one of the five journals. Participants in the control group were excluded from this dataset, as well as participants in the experimental group who only completed the experimental journal. Due to the sample size disparity, the researcher could not compare the two group means within this dataset. Only data from participants from the experimental group who completed both the gratitude journal and the control journal are reflected in this dataset.

### Results

Upon completion of the post-test, participants' data was analyzed using jamovi (Version 1.2), to test the researcher's hypothesis to determine the effectiveness of journaling as a way of increasing overall well-being. A paired samples *t*-test was run between participants' pre-test versus post-test scores for PERMA,  $t(23) = -1.74$ ,  $p = .095$ ; life satisfaction,  $t(24) = -1.51$ ,  $p = .144$ ; perceived stress,  $t(24) = -2.01$ ,  $p = .056$ ; and the effect(s) of COVID-19,  $t(24) = -2.03$ ,  $p = .053$ . Together, the results from the *t*-tests suggest there are no significant differences between the pre- and post-test means for overall well-being, life satisfaction, perceived stress, and stress associated with COVID-19.

Additional *t*-tests were run with each subscale of PERMA. There was not an increase in positive emotion,  $t(24) = -1.344$ ,  $p = .191$ ; engagement,  $t(24) = 1.141$ ,  $p = .265$ ; relationships,  $t(24) = -.582$ ,  $p = .567$ ; or meaning,  $t(24) = -1.953$ ,  $p = .063$ . However, there was an increase in participants' sense of accomplishment from the pretest to the post-test,  $t(24) = -2.102$ ,  $p = .046$ .

In addition, as participants completed more journals throughout the course of the study, they reported a lower degree of well-being,  $r = -.420$ ,  $p = .037$  and life satisfaction,  $r = -.447$ ,  $p =$

.025, on the post-tests. However, there was no significant correlation between one's perceived stress,  $r = -.087$ ,  $p = .679$ , or the stress related to COVID-19,  $r = .035$ ,  $p = .867$  upon gratitude journaling.

### Discussion

The researcher predicted those who experienced gratitude journaling would experience higher levels of overall well-being, higher levels of life satisfaction, as well as decreased levels of perceived stress in comparison to those who only journaled about their day. However, both the experimental and control journals were accidentally disseminated to members of the experimental group for four of the five days. Additionally, the control group only completed one of the five journals along with the pre-test. Only participants who completed both the gratitude and control journal are represented in this dataset. Due to the sample size disparity the researcher could not compare the means within this dataset. There was a negative, moderate relationship between the number of gratitude journals completed and overall well-being and life satisfaction. However, there were no significant statistical differences between perceived stress and COVID-19.

Results from these analyses also suggest that as participants completed more journals during the study, they reported experiencing lower levels of well-being as well as life satisfaction. These results perhaps suggest gratitude journaling decreases one's well-being as life satisfaction. However, upon analysis of the dependent samples *t*-test, there was no significant difference in well-being from the pre-test to the post-test. The results of this correlation is likely a spurious one, which suggests the presence of a confounding variable such as time or various life situations that could impact these results. Consequently, we cannot conclude at this time that journaling leads to lower well-being or life satisfaction. Additional *t*-tests were completed to between each subscale of PERMA from the pre- to the post-test. There was not an increase in positive emotion, engagement, relationship, or meaning. However, there was an increase in participants' sense of accomplishment upon completion of the study.

Due to the confounds in this study, there is no definitive way this research supports or refutes previous research. However, in past research gratitude has been noted as a positive emotion which, according to Fredrickson, should broaden one's cognition, giving individuals more flexibility in thought. This would allow one to build or create personal resources that produce increased resilience, mindfulness, improved social relationships, greater physical health, and an increase in overall well-being (Cohn et al., 2009; Fredrickson et al., 2008; Fredrickson, 1998, 2003, 2009; Waugh & Fredrickson, 2006). However, the current study is inconclusive to support or refute Fredrickson's past research. Gratitude has been reported to lower blood pressure; improve immune function; increase positive affect such as: happiness, joy, enthusiasm, love, happiness, and optimism; increase overall well-being; increase prosocial behavior; produce higher levels of mental health by reducing the likelihood of depression, anxiety, and substance abuse disorders; provide overall life satisfaction which serves as a buffer between perceived negative emotions such as envy, resentment, greed, and bitterness; increase resilience (Emmons & McCullough, 2003; Emmons & Stern, 2013; McCullough, Emmons, & Tsand, 2002). Overall, gratitude increases one's physical health to provide quicker recovery times for those with illnesses, as well as produce an increase in alertness, enthusiasm, determination, attentiveness, energy levels, and trustworthiness (Emmons & McCullough, 2003; Emmons & Stern, 2013; McCullough, Emmons, & Tsand, 2002). The researcher's findings did not coincide with past gratitude research nor did any data support the

effectiveness of gratitude journaling. However, due to the various confounds within the study, the data cannot refute past research as well.

Limitations of this study include, but are not limited to, sample size disparity as well as flawed methodology resulting in the lack of internal consistency. Additionally, due to the length of this longitudinal study, significant levels of attrition were observed. More so, the identification numbers Prolific participants receive are difficult to distinguish due to their similarity. This ultimately led to the experimental group completing both the gratitude journal, as well as the control journal. More so, using the novel surveying platform, Prolific platform proved to be more difficult than the researcher had first intended.

Further studies will include a more meticulous methodology to decrease the amount of errors in subsequent research. Additionally, the researcher would like to repeat this study to examine the effects of gratitude on one's overall well-being when a consistent control group is in effect.

## References

- Block J., Kremen A.M. (1996). IQ and ego-resiliency: Conceptual and empirical connections and separateness. *Journal of Personality and Social Psychology*, 70, 349–361.
- Brody, L. R. (1999). *Gender, emotion, and the family*. Cambridge, MA: Harvard University Press.
- Butler, J., & Kern, M. L. (2016). The PERMA-Profiler: A brief multidimensional measure of flourishing. *International Journal of Wellbeing*, 6(3), 1-48.
- Chaplin, T. M. (2015). Gender and emotion expression: A developmental contextual perspective. *Emotion Review*, 7(1), 14-21.
- Coffey, J. K., Wray-Lake, L., Mashek, D., & Branand, B. (2016). A multi-study examination of well-being theory in college and community samples. *Journal of Happiness Studies*, 17(1), 187-211.
- Cohn M.A., Fredrickson B.L., Brown S.L., Mikels J.A., Conway A.M. (2009) Happiness unpacked: Positive emotions increase life satisfaction by building resilience. *Emotion*, 3, 361-368.
- Diener, E., Emmons, R.A., Larsen, R.J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49, 71-75.
- Ekman, P. (1992). An argument for basic emotions. *Cognition & emotion*, 6(3-4), 169-200.
- Emmons, R. A., & McCullough, M. E. (2003). Counting blessings versus burdens: Experimental studies of gratitude and subjective well-being in daily life. *Journal of Personality and Social Psychology*, 84, 377–389.
- Emmons, R. A., & Stern, R. (2013). Gratitude as a psychotherapeutic intervention. *Journal of Clinical Psychology*, 69(8), 846-855.
- Fredrickson B.L. (1998). What good are positive emotions? *Review of General Psychology*, 2(3), 300–319.
- Fredrickson B.L. (2003). The value of positive emotions: The emerging science of positive psychology is coming to understand why it's good to feel good. *American Scientist*, 91, 330–335.
- Fredrickson B.L. (2009) Positivity: Groundbreaking research reveals how to embrace the hidden strength of positive emotions, overcome negativity, and thrive. New York: Crown Publishing Group.
- Fredrickson B.L., Cohn M.A., Coffey K.A., Pek J., Finkel S.M. (2008). Open hearts build lives: Positive emotions, induced through loving-kindness meditation, build consequential personal resources. *Journal of Personality and Social Psychology*, 95(5), 1045–1062.
- Fredrickson B.L., Levenson R.W. (1998) Positive emotions speed recovery from the cardiovascular sequelae of negative emotions. *Cognition and Emotion*, 12, 191–220.
- Fredrickson B.L., Losada M.F. (2005). Positive affect and the complex dynamics of human flourishing. *American Psychologist*, 60(7), 678–686.
- Garland, E. L., Fredrickson, B., Kring, A. M., Johnson, D. P., Meyer, P. S., & Penn, D. L. (2010). Upward spirals of positive emotions counter downward spirals of negativity: Insights from the broaden-and-build theory and affective neuroscience on the treatment of emotion dysfunctions and deficits in psychopathology. *Clinical Psychology Review*, 30(7), 849-864.

- Kern, M. L., Waters, L., Adler, A., & White, M. (2014). Assessing employee wellbeing in schools using a multifaceted approach: Associations with physical health, life satisfaction, and professional thriving, 5, 500-513.
- The jamovi project (2020). *jamovi*. (Version 1.2) [Computer Software]. Retrieved from <https://www.jamovi.org>.
- Levenstein, S., Prantera, C., Varvo, V., Scribano, M. L., Berto, E., Luzi, C., & Andreoli, A. (1993). Development of the Perceived Stress Questionnaire: a new tool for psychosomatic research. *Journal of psychosomatic research*, 37(1), 19–32.
- McCullough, M. E., Emmons, R. A., & Tsang, J. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*. 82, 112–127.
- Mellis, H.J., Poole, B.D. (under review). Hashtag thriving: Religiosity in harmony to flourishing. *The Psi Chi Journal of Psychological Research*.
- Seligman, M. E. (2012). *Flourish: A visionary new understanding of happiness and well-being*. Simon and Schuster.
- Waugh C.E., Fredrickson B.L. (2006). Nice to know you: Positive emotions, self-other overlap, and complex understanding in the formation of a new relationship. *The Journal of Positive Psychology*. 1(2), 93–106.

Summer 2020

## Analysis of the Intrinsic Fluorescence of a Dityrosine Tag in Super-Folder Green Fluorescent Protein (sfGFP)

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*Under the guidance of Dr. Brent Ferrell*

## ABSTRACT

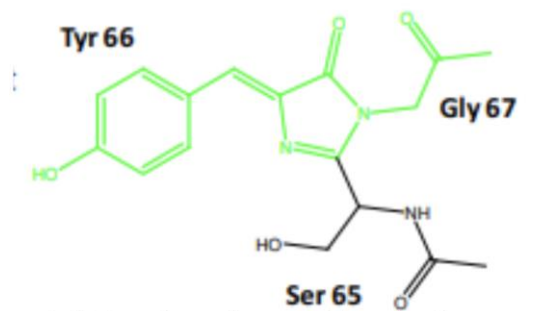
*Fluorescent proteins have been used for decades, serving as biological markers that can provide insight into conformational changes and interactions within the proteins themselves. This study seeks to investigate the intrinsic fluorescence of covalently bonded dityrosine (diY) linkages within super-folder green fluorescent protein (sfGFP) under various oxidation conditions. In theory, dityrosine could be genetically tagged onto any protein to aid researchers in tracking proteins through oxidizing conditions via its intrinsic fluorescent properties. To investigate this theory, we genetically cloned a short peptide tag containing two tyrosine residues into at the C-terminus of sfGFP and purified the tagged protein. Next, we subjected the purified proteins to various concentrations of horseradish peroxidase (HRP) and hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) to oxidize the protein and allow diY to form. We assessed the intrinsic fluorescence of sfGFP and the diY linkages using a fluorometer that measured the intensity of both the GFP and diY signals. Three different oxidizing conditions were tested, and the results indicate that the intrinsic fluorescence of sfGFP varies with each condition. We were unable to reach a conclusion on which oxidation condition allowed for the most dityrosine formation. During our study, we also began the cloning work with another fluorescent protein, mCherry, with the end goal of oxidizing it for dityrosine formation. In future studies, we plan to utilize this approach with a variety of other model proteins to test the viability of each protein under oxidizing conditions.*

## INTRODUCTION

Fluorescence occurs when a molecule containing electrons that are excited by a photon of light move from a lower energy level, called the ground state, to a higher energy level, called the excited state. Fluorophores take the energy from the change in state and re-emit it as visible light (Helmenstine 2018). Fluorophores have been used in various fields of study to track and quantify protein interactions, observe conformational changes, and study enzymatic changes within proteins and other molecules (Toseland 2013).

Green fluorescent protein (GFP) is derived from the Jellyfish species, *Aequorea victoria*. GFP exists in the jellyfish alongside another protein, aequorin (Kremers et al. 2011). When induced by the presence of calcium, GFP and aequorin work together to produce a green fluorescent color that illuminates the jellyfish. The structure of GFP consists of a beta barrel encompassing an alpha helix which contains a fluorophore at its center. The structure of the fluorophore can be viewed

in Figure 1. The fluorescence emitted by GFP occurs when the conjugated double bond forms between the R-group tyrosine and the peptide backbone.

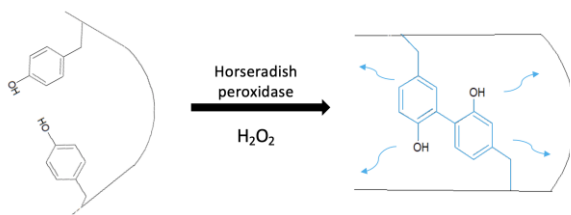


**Figure 1.** GFP's fluorophore. The highlighted region displays the part of the fluorophore responsible for the molecule's fluorescence.

We also began working with an additional protein, mCherry, a variant of red fluorescent protein (RFP). RFP is derived from the mushroom anemone species, *Discosoma* (Kremers et al. 2011). mCherry has a similar structure to GFP, with its fluorophore also being located in the center of a beta barrel.

A previous study conducted by Minamihata and colleagues showed that two or more protein molecules can be conjugated by forming dityrosine in the presence of oxidizing conditions (Minamihata et al. 2011). HRP and  $H_2O_2$  were used to conjugate their proteins, and they discovered dityrosine formation alongside consistent protein structure integrity. Our study aims to build upon their findings by working with fluorescent proteins encoded with a tyrosine containing peptide tag to form dityrosine linkages within a single protein molecule while maintaining its structure.

Dityrosine, a covalent bond, produces a unique fluorescent signal that can be detected 409 nm. *Figure 2* illustrates the process of dityrosine formation within a single protein molecule. When formed, its fluorescence becomes an intrinsic part of the protein that can be tracked for many of the purposes of fluorophores listed above. Dityrosine formation within a single protein would allow future researchers to track individual protein molecules, which would allow the protein molecules to operate normally without further modification. This technique could also be used to encode any protein gene, not just fluorescent proteins, to be tracked through oxidation.



**Figure 2.** Covalently bonded, dityrosine formation within one protein molecule through oxidation by HRP and  $H_2O_2$ .

## METHODS

### Cloning and Sequencing

Plasmids (pET-28) containing the genes for green fluorescent protein were purified from *E. coli* and tagged with a short peptide tag containing two tyrosine residues at the C-terminus of sfGFP. We tested three different variants of GFP: wild-type, C-tag (CYSDPRCAFRY) and Y-tag (YSDPRSAFRY). The procedure we used to clone DNA, culture and express GFP, and oxidize the protein for dityrosine formation was modeled after the Minamihata et. al. study (2011).

To tag GFP, we added the desired tag to the GFP gene at the C-terminus and multiplied the product using the FastCloning method (Li et al. 2011). The product was subsequently digested using the restriction enzyme, Dpn1 and inserted into pET28B (+) plasmids. We transformed the plasmids into two types of competent cells. BL21(DE3), for purifying the tagged GFP, and DH5 $\alpha$ , for purifying plasmids. Before growing up cultures of the tagged GFP, we purified plasmids from the DH5 $\alpha$  cells using the ThermoScientific GeneJET Plasmid Miniprep Kit and sent samples off for Sanger DNA sequencing to verify proper cloning sequences.

### Purification and Expression

Upon receiving a result indicating correct sequencing, we grew up individual colonies of each both of the tagged proteins, as well as the wild type, in 5 mL of kanamycin positive (K+) LB media overnight at 37 °C. Following overnight culture, we inoculated the cells in 300 mL of LB broth until the optical density was between 0.4 and 0.6. At this point, we induced the culture with IPTG to induce gene expression in the plasmids containing the gene for GFP and let the culture shake at 37 °C for 4-5 hours.

To purify the protein, the cells were pelleted via centrifugation at 4°C and resuspended in lysis buffer. Then the suspension was sonicated for 20 s intervals



with 20 s periods of rest in between for a total of 3 min. The lysate was centrifuged, and the supernatant was purified using a Ni-NTA column. After purifying the protein from the supernatant, it was dialyzed in a phosphate buffer (pH 8) to remove the imidazole.

### ***Oxidation and Measurement***

The protein samples were then diluted to a concentration of 0.2 mg/mL. Each variant of GFP was subjected to each of the oxidation conditions outlined in *Table 1*. H<sub>2</sub>O<sub>2</sub> was added over 10-minute increments in a 37 °C water bath. After the entire amount of H<sub>2</sub>O<sub>2</sub> was added, the samples were incubated at 37 °C overnight.

Condition	Sample Size (0.2 mg/mL)	HRP (0.1 mg/mL)	H <sub>2</sub> O <sub>2</sub> (500 µL)
1	100 µL	4 µL	4 µL x 5
2	100 µL	4 µL	2 µL x 5
3	100 µL	10 µL	4 µL x 5

**Table 1.** Reagent Volumes for Conditions of Oxidation Reactions. H<sub>2</sub>O<sub>2</sub> was added in small increments every ten minutes to maintain protein integrity.

All fluorescence measurements were taken using a UV-Vis USB2000 Ocean Optics fluorometer. Both the untreated and oxidized samples of each type of GFP were analyzed to assess the intrinsic fluorescence of sfGFP before and after being subjected to oxidizing conditions.

## **RESULTS**

Upon excitation, the emission peak of GFP is observed around 509 nanometers. We observed that condition 2 had the most intense

intrinsic GFP signal, as outlined in *Table 2*, indicating that this condition allowed sfGFP to remain the most functional. Condition 2 was the least harsh oxidation condition due to its reduced volume of H<sub>2</sub>O<sub>2</sub>. When compared with the fluorescence of oxidation conditions 1 and 3, condition 2's fluorescence peak did not decrease in intensity as much as the other two. In *Figures 3, 4, and 5*, the intrinsic fluorescence of GFP can be observed for wild-type, C-tag, and Y-tag, respectively.

	wtGFP	C-tag GFP	Y-tag GFP
Unoxidized	3087.2 2	3146 4	3799.4 4
Oxidation 1	3263.6 6	2865.5 5	3612.5 5
Oxidation 2	3471.2 2	2916.7 8	3757.4 4
Oxidation 3	3069.5 5	2493.3 9	3599.6 1

**Table 2.** GFP peak intensity measured at a wavelength of 512 nm. When subjected to oxidation condition 2, GFP remained the most intact.

### ***mCherry Progress***

This summer we were able to tag mCherry and successfully transform its purified plasmids into *E. coli* DH5α cells (*Figure 7*). After sending plasmids for sequencing, we received a negative result indicating a problem with the primers we designed for PCR. Moving forward, we will investigate the sequencing result we received to determine where our primers resulted in an incorrect product.



**Figure 7. mCherry Colonies.** We successfully transformed tagged mCherry into *E. coli* DH5 $\alpha$  cells.

## DISCUSSION

Our study focused on forming dityrosine within a single protein molecule while maintaining the protein integrity while being subjected to varying oxidation conditions. We found that oxidation condition 2 produced the brightest fluorescence signal and allowed the protein to remain intact. As the oxidizing conditions became harsher, the intrinsic fluorescence of GFP dropped. Over the course of our study, we failed to observe dityrosine fluorescence in our oxidized protein samples. Further research must be conducted to determine which oxidation condition allowed for the most dityrosine formation.

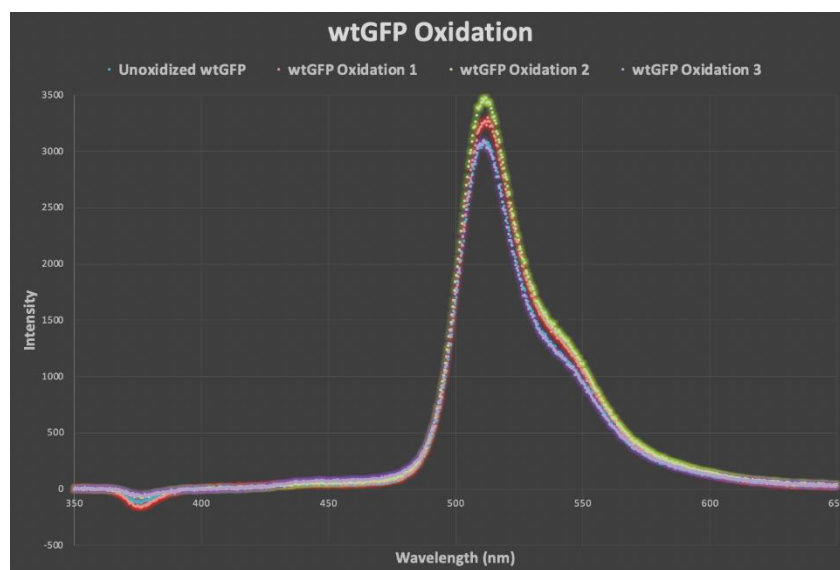
Several factors could have contributed to our inability to detect the fluorescence of dityrosine. One possibility could be that the short peptide tag was not flexible enough to allow for dityrosine formation within a single protein. Another contributing factor could be that our oxidation conditions were not harsh enough to form dityrosine. Although we used the same oxidation conditions which were published in a previous study (Minamihata et. al. 2011), our goal was different. We were seeking to produce a dityrosine linkage intramolecularly. This requires that the short

peptide tag insertion is able to fold back on itself to allow the two tyrosines to come into close proximity. Unfortunately, in the present study, we were unable to detect that this linkage formed. However, there are some additional steps that could be undertaken to ensure a better chance of success moving forward.

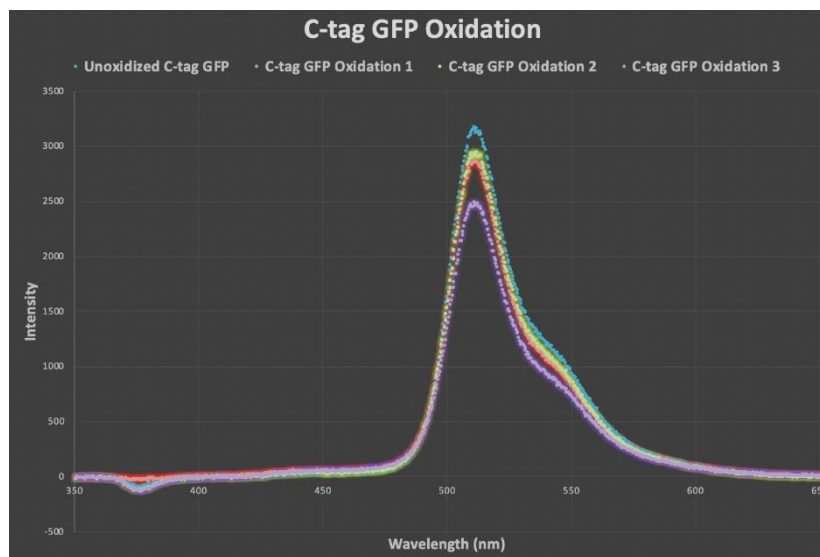
In future studies, different concentrations of HRP and H<sub>2</sub>O<sub>2</sub> could be tested to determine the most optimal oxidation condition for maintaining protein integrity and maximizing dityrosine formation. Also, additional peptide tags need to be tested to further optimize the formation of dityrosine formation. Once optimized for sfGFP, the same process can also be repeated with additional fluorescent model proteins and enzymes to discover a universal method for tagging proteins.

## REFERENCES

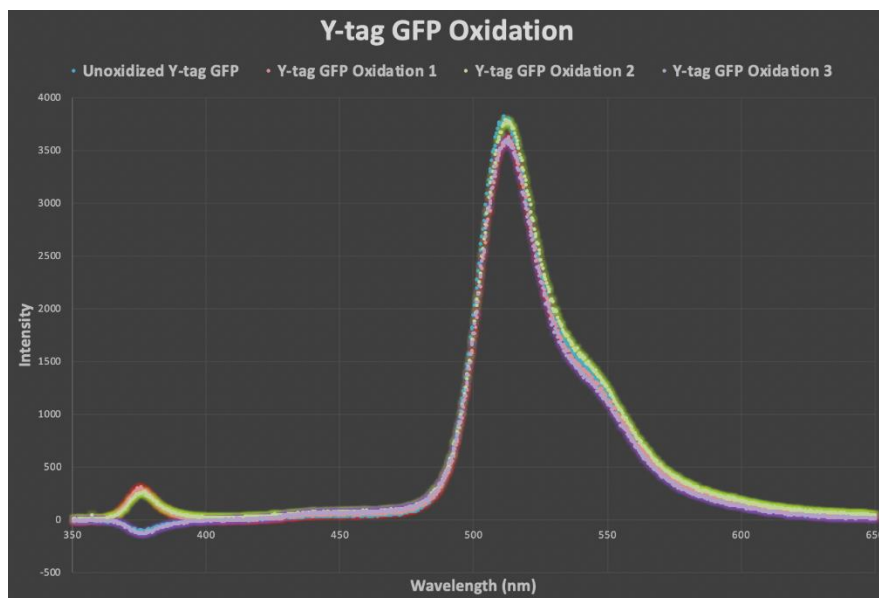
- Helmenstine, A., Ph.D. (2018, July 28). What Is Fluorescence? Retrieved July 23, 2020, from <https://www.thoughtco.com/definition-of-fluorescence-604467>
- Li, C., Wen, A., Shen, B., Lu, J., Huang, Y., & Chang, Y. (2011) FastCloning: a highly simplified, purification-free, sequence- and ligation-independent PCR cloning method. *BMC Biotechnology*, 11(92).
- Minamihata, K., Goto, M., & Kamiya, N. (2011). Protein heteroconjugation by the peroxidase-catalyzed tyrosine coupling reaction. *Bioconjugate chemistry*, 22(11), 2332-2338.
- Kremers, G.J., Gilbert, S. G., Cranfill, P. J., Davidson, M. W., & Piston, D. W. (2011). Fluorescent proteins at a glance. *Journal of cell science*, 124 (Pt 2), 157-160.
- Toseland, C.P. (2013). Fluorescent labeling and modification of proteins. *Journal of chemical biology*, 6(3). 85-95



**Figure 3. Analysis of the Intrinsic Fluorescence of wtGFP in Unoxidized and Oxidized Samples.**



**Figure 4.** Analysis of the Intrinsic Fluorescence of C-tag GFP in Unoxidized and Oxidized Samples.



**Figure 5.** Analysis of the Intrinsic Fluorescence of Y-tag GFP in Unoxidized and Oxidized Samples.

Summer 2020

# Written Bodies and Minds in Augustine of Hippo and Rufinas of Aquileia

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*Under the guidance of Dr. Aaron Johnson*

## Abstract

*Within many written lives of martyrs, an author's reliance on physical depiction communicates torture to commodify the trials of the body and highlight the piety of the soul. As the author makes narrative use of the threat of sexual violence or torture on the bodies of women, certain motifs demonstrate specific concerns with a Christian woman's modesty, lifestyle, and public reputation. This presentation will compare two late antique texts as they utilize female bodies undergoing physical torture and sexual subjugation to establish one pious mindset over another. In most cases, the text surveyed will address the question of whether or not a Christian woman should follow the "Lucretia paradigm" and commit suicide while under the threat of rape, or after a rape has been perpetrated. The primary texts translated and used will be Rufinus of Aquileia's Latin translation of Eusebius's *Historia Ecclesiastica* (402/3), sections 9 and 12 and St. Augustine of Hippo's *City of God* (410), Book I, chapters 16-19. Both these authors offer differing views on the ethics of suicide, and use the bodies and minds of violated women to demonstrate their viewpoints. In doing so, they display the complexity of the developing Christian discourse on women and the body in the context of the Classical tradition.*

"In the very processes [torture] uses to produce pain within the body...it bestows visibility on the structure and enormity of what is usually private and incommunicable, contained within the boundaries of the sufferer's body." - Elaine Scarry

Within the lives of saints and martyrs, a rhetorical reliance on physicality communicates the materiality of suffering. Here Rufinus of Aquileia, translating Eusebius's *Historia Ecclesiastica* from Greek to Latin, describes the tortures of those persecuted in early fourth-century Egypt: "*pro unglius testas fictilium vasculorum adhibebant tortores, quibus omne corpus eo useque lacerabant, donec totam carnis traherent cutem.*"<sup>1</sup> The visual depiction of the tortures endured, by Rufinus's own admission, "overwhelms every narrative" as the level of violence described overwhelms the senses engaged with the narrative.<sup>2</sup> The violence enacted within the borders of the body overwhelm and suffuse the narrative with strong details; this, Elaine Scarry argues, is how the author might consolidate power within torture rhetoric as "the pain, continually amplified within the person's body, is also amplified in the sense that it is objectified, made visible to those outside the person's body."<sup>3</sup> With the torturers in Egypt as his nominative, he consolidates power over the senses by describing the weapons they used, shards of pots, pulling so much skin from the body all flesh is removed. He then tells of

mulieres quoque nudas, ita ut ne pudenda quidem contegerentur, arte quadam compositis machinis uno pede in excelsum suspensas et capite in terram demersas indignissimo spectaculo expositas pendere et per diem continuum sinebant.

<sup>1</sup>"The torturers were applying the pot shard in place of claws, with which they were lacerating all of the flesh right up to that point, when they should drag all the skin from the flesh." Rufinus 8, 9, lines 6-7.

<sup>2</sup>"*Apud Thebaida vero omnem narrationem superat agitata crudelitas.*" Rufinus 8, 9, line 5. Interestingly, Rufinus refers to the narrative itself in Latin while Eusebius refers directly to the tortures the martyrs faced: "It would be impossible to describe the outrages and tortures which the martyrs in Thebias endured."

<sup>3</sup>Scarry, Elaine. *The Body In Pain: The Making and Unmaking of the World*, pg. 15.

[They were allowing the women too, having been suspended aloft by one foot, to be naked in such a way that even their parts to be ashamed of were not covered, on cranes having been put together by a certain skill, and they were allowing them to be plunged down head-first, in a most undignified spectacle, after having been exposed to hang throughout the day.]<sup>4</sup>

With the torturers still the subject of the sentence to literarily externalize the pain felt within the apparent subjugation of the body, Rufinus raises the late antique Christian concern with a woman's modesty within this section, as he overpowers empathetic sensibilities through the description of the vicious torture designed to attack their modesty. Suspending naked bodies, revealing their *pudenda*, exposes the women undergoing the torture to a sense of intolerable shame and those feelings would no doubt carry on to the Greek or Latin audience forced to visualize the "most undignified spectacle." The bodies of women are often used by late antique authors such as Rufinus to overwhelm a narrative that serves to externalize events surrounding the martyrs for the purpose of "corporeal commodification, that seeks to appropriate the spiritual force of martyrs by subsuming...a power that is most effectively concretized by means of a metaphors of textualized femininity."<sup>5</sup> Rufinus first relays details from Eusebius's account so that he can "name the various forms of torment," forcing the Latin reader to picture the weapons used against bodies.<sup>6</sup> He then centers on the destruction of a woman's sense of modesty and chastity, emphasizing a sense of femininity within the text that overwhelms the senses the reader as he, loosely following Eusebius's account, shifts from mentions of tortures faced to a specific story about three Christian women in Antioch who drowned themselves before they could be assaulted by soldiers.<sup>7</sup>

Rufinus will turn to the story of three women and in so doing it will allow him an opportunity to shift his narrational approach in fascinating ways as he turns away from general types of persecution against untold numbers of victims to individual (though unnamed) sufferers of violence. Each text surveyed in this paper depicts an instance of violence perpetrated against late antique women, with the purpose of evaluating how a male author depicts the body and the mindset of the woman in question, as well as the form of violence or tool of subjugation used against her. In most cases, the violence enacted will be a discussion of any certain female martyr's suicide as she undergoes the threat of sexual assault. The primary purposes in evaluating these texts will be to cast a comparison between Rufinus's account of Christian martyrdom to Augustine's discourses on the same topic in *City of God* I.16-19, as it appears that Rufinus, among other male authors, depicts suicide in a favorable light when pious women are threatened with the spectre of sexual contamination, whereas Augustine contrasts this trope with specific concerns about the damnation of suicide.

### *Mimesis*

In order to contextualize the rhetorical style of physical representation used in both Rufinus and Augustine, it is imperative to discuss the literary theory devised by Erich Auerbach. In chapter

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<sup>4</sup>Rufinus 8, 9, lines 7-11.

<sup>5</sup>Ross, Jill, pg. 50.

<sup>6</sup>Christensen, pgs. 70-71.

<sup>7</sup>Rufinus 8, 12, section 3-5. Unnamed in the accounts of Eusebius, Rufinus, and Ambrose, they came to be associated with the Eastern saints Bernike, Prosdoke, and Domnina by John Chrysostom. Further research would need to be conducted in order to understand why they went unnamed in other accounts and were profiled in others.

one of *Mimesis*, Auerbach argues that a concept within Homer's poetry is to "externalize phenomena in a fully realized form, visible and palpable in all their parts, and completely fixed in their spatial and temporal relations."<sup>8</sup> These archaic aesthetic goals of poetry that depict actions and thoughts through indicative discourse and direct expression would be repeated by late antique Roman writers. However, Auerbach notices a sharp contrast exists contemporaneously between pagan and Scriptural accounts of physical action, indication, and syntax; the former reaches out through passages of speech to materialize and externalize the non-real narrative, so that aesthetics might seem as vivid as reality, and the latter orients its depictions toward reality, but toward truth.<sup>9</sup> From Homeric narratives to the rhetoric of late antiquity that models itself after this method, descriptions of violence "become an independent and exclusive present" that lock each character as the active or passive recipient of violence. Auerbach then draws the contrast to writers of the Scripture; they relate to violence, humiliation, and subjugation with an overall orientation toward "divine will." The heroes of Scripture are fallible, subject to misfortune and humiliation, and in the midst of misfortune and in their humiliation, all actions depicted and words said reveal the transcendent majesty of God."<sup>10</sup>

Orienting himself toward Latin writings, Auerbach discusses the influence of Homer and Scripture on significant late antique historians, poets, and clergymen, fixating comparatively on Christian and Greco-Roman pagan texts. Both exist to cover phenomena in motion through similar methods of ancient literature (viewpoint, rhetorical organization, and the "heart of the hero" trope) but, as within the Homeric method, "specimens of realistic presentation" moving within pagan rhetoric are catapulted to their end-goals to materialize and externalize a narrative that orients them within a spatial or temporal framework, whereas Christian authors force readers to look beyond physical depictions to a "figural meaning" oriented towards God's truth.<sup>11</sup> This is what Auerbach refers to as antagonism, which he defines as an intermingling of sensory immersion and a loaded context of meanings. Grotesque depictions of bodies under humiliation and subjugation in the Bible carry specific meanings that translate each physical aesthetic beyond their spatio-temporal ordering. When pagan historians of antiquity concern their rhetoric with the idea of the grotesque, particularly emphasizing sensory dehumanization rather than a primary focus on externalizing thoughts and emotions, they still orient their subjects with direct action and direct reference to the spatio-temporal ordering.

Auerbach notices that Ammianus Marcellinus, a fourth-century historian, depicts each of his subjects with a close attention to the "sensory-graphic" details of their bodies and physical attributes, as "his world is somber, it is full of superstition, blood frenzy, exhaustion, fear of death, and grim and magically rigid gestures."<sup>12</sup> He carefully diagrams how Ammanius's Latin specifically reflects the gestural and the sensory, as Ammanius forcibly depicts visceral descriptions of events through stylized methods of Roman rhetorical sophistication, and when Auerbach compares the diction and style of Ammanius's powerful and distorted Latin to the fourth-century writings of Jerome and Augustine, he notes the same "glaringly pictorial realism" of

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<sup>8</sup>Auerbach, Erich, pg. 6. He closely describes Odysseus's scar and the conversations the women in the room have with Odysseus; all thoughts are shared through dialogue or internal narrative.

<sup>9</sup>Ibid., pg. 14.

<sup>10</sup>Ibid., pg. 18.

<sup>11</sup>Ibid., pgs. 38-49.

<sup>12</sup>Ibid., pgs. 54-55.



Ammanius written “in the elevated style.”<sup>13</sup> Thus when Auerbach evaluates a section of Augustine’s *Confessions*, he notes how Augustine’s subordinate clauses which parallel each other throughout his discourse, along with his figures of speech and antitheses, are used to demonstrate a dominance of the classical style that nonetheless incorporates the Latin of Scripture writers and highlights a “passionate pursual and investigation of conflicting and united inner forces” that ultimately represents a purely Christian struggle, contending with the perspective of the everyday man, rather than the ancient perspective from above that forces externalization.<sup>14</sup>

Auerbach calls this a “Christian mixture of styles” as it struggles to deal with the classical mindset and the Judeo-Christian focus on figural meaning and antagonism; while strongly evident in Augustine among other church fathers, he notes that there is always a preoccupation with theological polemics and historical contexts; thus, the moving aesthetic pieces within their rhetoric serve as evaluations or interpretations of Roman history within the broad truth that lies beyond the spatio-temporal framework.<sup>15</sup> Real human events and concerns are forever at interplay with a chain of “Divine Providence, which alone is able to devise such a plan of history and supply the key to understanding.”<sup>16</sup> The concern with the “eternal, omni-temporal” overshadows the fragmentary spatio-temporal earthly event; Augustine, Auerbach notes, is overly aware of this and promotes the nexus of the mixture of styles in all his rhetoric, through his classical system of literary language.<sup>17</sup>

The figural, antagonistic form of this “two-styled” rhetoric superimposes a certain agenda on the language and literary outlook of the Latin and Greek church fathers that will be evaluated in this paper. Although Auerbach does not explicitly deal with the depiction of women’s bodies in his text, the figural depiction of their physical struggles with sexual violence occurs across a platitude of both classical and late antique Christian writings in ways that relate to either the externalization of modes of thought through direct speech and action to push the narrative outside of the boundaries of bodies on to the senses of the reader, as well as the Augustinian method of pathologizing narrative subjects for the purpose of looking to a greater theological polemic. Within either form, women might serve as narrative emblem to motivate our aesthetics of pleasure that link men to an understanding their own self control in situations of sexual temptation, or in certain authors women might be rooted in a “persuasive moral language” that served to “amplify the tension between a man’s private interests and loyalty to those who might place their trust in him.”<sup>18</sup> Therefore, narrational depictions of women could shame men into pursuit of the societal common good, and within the Christian framework, more virtuous women could shame men into rigorous, ascetic lifestyles that included celibacy and self-punishing treatments of the flesh.<sup>19</sup> The figural depiction of women as moral emblems, especially contextualized in Christian rhetoric, becomes even more troubling when their bodies are utilized in writings on rape.

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<sup>13</sup>Ibid., pg. 63.

<sup>14</sup>Ibid., pgs. 68-71, 56-57

<sup>15</sup>Ibid., pg. 73.

<sup>16</sup>Ibid., pg. 74.

<sup>17</sup>Ibid., pg. 74.

<sup>18</sup>Cooper, pg. 11-12. She mentions Eve in the garden of Eden and the judgement of Paris to allude to how audiences of men might value rhetorical women in specific moral or aesthetic situations.

<sup>19</sup>Cooper, pg. 12; Brakke, David, pg 28.; Clark, Elizabeth, pg. 29.

### Lucretia's Figuralism

The rape of women underwrites the foundation of the late antique Roman society. The legend of Romulus and Remus, the first kings of Rome, lauds them as the products of the rape of Rhea Silvia by the god of war, Mars. In later Roman history, following the mass abduction and rape of the Sabine Women, Rome's freedom from the tyrannical monarchy of the Tarquins hinges on the rape of Lucretia, whose suicide after her violation solely sets in motion the chain of events that lead to founding of the republic of Rome. Outside of these legendary accounts, there is a great history of "populace-ravaging" warfare in antiquity that included rape as a form of martial aggression, in which soliders would be ordered to seek out groups of women for the purpose of rape, whether generally survivable (for the purpose of impregnation) or lethal in intent and practice (gang rape, etc).<sup>20</sup> The issue of consent was also loaded with social context; many note that it was almost virtually impossible for one of even high social standing to be able to claim she had been raped when charged with the crime of adultery.<sup>21</sup> Marrying a woman off increased the wealth of her father, who acted as proprietor of her virginity until her husband could take ownership over her assets; when a woman was abducted, she had to marry the man that had raped her and her social reputation as a profitable virgin was destroyed; thus, she was held accountable in both the laws made by Constantine and Justinian.<sup>22</sup> In the context of martial rape, virgin women that had been assaulted were thus forced by outsiders to lose all sense of social dignity.

These accounts burden both Greek and Roman history and myth in such a manner that the contextualization and use of female bodies to service a rhetorical or political agenda consistently occurs across historical accounts, poetry, and the discourses of the church fathers. Especially in tracing the proud history of the Roman Republic to the rape and subsequent suicide of the chaste, beautiful, and noble Lucretia, early Roman historian Livy (d. 12 AD) and the poet Ovid (d. 17/18 AD) "exploit, appropriate, and reformulate the tale," as the tragedy of her rape and virtue of her subsequent suicide allow each to promote specific literary goals.<sup>23</sup> In Book I of Livy's *Ab Urbe Condita*, Lucretia is depicted as the ideal of a Roman wife of valuable and rare moral character, as Livy displays all of his "heroic characters" with the intention of promoting a strict moral temperament in the face of "luxury, greed, and personal ambition."<sup>24</sup> Sextus Tarquinius, "mala libidio Lucretiae per vim stuprandae capit" and "amore ardens" [seized with a wicked desire to debauch Lucretia by force] [burning with passion], forces the chaste Lucretia through deceit and manipulation to give into his greedy desires:

*Cum pavida ex somno mulier nullam opem, prope mortem imminentem  
videret, tum Tarquinius fateri amorem, orare, miscere precibus minas,  
versare in omnes partes muliebrem animum. Ubi obstinatam videbat et ne  
mortis quidem metu inclinari, addit ad metum dedecus: cum mortua*

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<sup>20</sup>Gaca, pgs. 306-8.

<sup>21</sup>Clark, Gillian, pgs. 35-38.

<sup>22</sup>Ibid., pgs. 30-38. Constantine sees that the woman be held accountable; Justinian fairly shifts the blame to the man who had abducted the woman and caused her to sin, but Justinian's amnesties differed for women based on social status.

<sup>23</sup>Newland, pg. 148; Glendinning, pg. 62.

<sup>24</sup>Jaeger, pg. X.

*iugulatum servum nudum posturum ait, ut in sordido adulterio necata dicatur.*<sup>25</sup>

[In affright the woman started out of her sleep. No help was in sight, but only imminent death. Then Tarquinius began to declare his love, to plead, to mingle threats with prayers, to bring every resource to bear upon her woman's heart. When he found her obdurate and not to be moved even by the fear of death, he went farther and threatened her with disgrace, saying that when she was dead he would kill his slave and lay him naked by her side, that she might be said to have been put to death in adultery with a man of base condition].<sup>26</sup>

The disturbing aesthetic of dead and naked bodies assaults the senses; as the immoral motives of Sextus Tarquinius are, in classical style, entirely externalized through speech, yet the actual act of the rape shows Lucretia's *pudicitia* itself victimized by Tarquinius's *victrix libido*, not her body or mind.<sup>27</sup> Lucretia herself makes no speech; her resistance is merely viewed by Tarquinius and externalized through the imperfect verb *videbat*. After the assault, Tarquinius departs "*ferox expugnato decore muliebri esset*," [exulting in his conquest of a woman's honor]. This sentence, written in Livian military-literary style, uses the noun *ferox* as its nominative, which literally means "cruel" to portray the notion of capturing a woman's propriety in warlike conquest.<sup>28</sup> Like most of Livy's writing, the Latin within this section locks each character inside situational or temporal *cum* and *ubi* clauses, forcing the reader to view the events depicted with an eye on these static shadows of the past, aided by Livy's use of perfect and infinitive verbs.<sup>29</sup> Overall, Lucretia's suicide on her bed contextualizes the most important Roman political revolution, as "female sexual status is the civic status of the male body politic," and such a defiling act symbolizes the need for revolt against the monarchy.<sup>30</sup>

Within Ovid's poetry in *Fasti*, the sexual violence enacted on Lucretia transgresses the political revolution as it mingles with erotic pathos and the suffering of individuals.<sup>31</sup> Ovid's Lucretia sits near a wool basket as her servants spin wool, rather than Livy's Lucretia spinning wool herself. She sits positioned "*ante torum calathi lanaeque mollis erat*" [before whose couch were baskets of soft wool]<sup>32</sup>, which connotes her as a "sexual being."<sup>33</sup> Indeed, after a speech made in which Lucretia begins to cry as she faithfully awaits for news of her husband in war (no doubt drawing allusions to Andromache), her tears "*deciuit: lacrimae decuere pudicae*," [It became her: becoming, were her modest tears], yet the Latin actually denotes with the forms of the verb *decere* that it is proper and chaste for a wife to cry for her husband.<sup>34</sup> Sextus Tarquinius watches as her

<sup>25</sup>Livy, 57, 10, 58, 3-5.

<sup>26</sup>Translation by Foster, B.O.

<sup>27</sup>Ibid., 5.

<sup>28</sup>Ibid., 7.

<sup>29</sup>Jaeger, XX.

<sup>30</sup>Witzke, pg. 254.

<sup>31</sup>Newland, pg. 147.

<sup>32</sup>Translation by Kline, A.S.

<sup>33</sup>Ibid., pg. 149; Ovid, *Fasti*, book 2, line 742.

<sup>34</sup>Ibid., line 757.

husband's embrace revives her spirit and he becomes enflamed with lust; interestingly, he seems also to be watching their eroticized embrace as Lucretia picks up the wool from the basket and drapes the material around her husband's neck.<sup>35</sup> Indeed, Ovid depicts her physical form while Tarquinius burns for her "*forma...niveusque color flavique capilli*" [her shape and white skin and yellow hair].<sup>36</sup> The act of the rape, however, follows Livy's account as Tarquinius deceitfully externalizes his motives again through threats, and forces her to act to his immoral will. Lucretia again remains speechless while the threat of assault and the act itself is perpetrated, yet Ovid again switches to a depiction of the pathos of sexual aesthetics rather than pointing to her chastity itself:

quid faciat? pugnet? vincetur femina pugnans.  
 clamet? at in dextra, qui vetet, ensis erat.  
 effugiat? positis urgentur pectora palmis,  
 tunc primum externa pectora tacta manu.<sup>37</sup>

[What could she do? Fight? In battle a woman loses.  
 Cry out? But the sword in his right hand restrained her.  
 Fly? His hands pressed down hard upon her breast,  
 A breast that had never been touched by a stranger's hand.]

He emphasizes her virginity and moral complexity as the crime of adultery "bears down" upon her. Ovid's rhetorical focus thus shifts from Livy's interest in casting moral aspersions from above to poetic nuances that channel suffering, speech, and physicality through passive constructions. However, a similar thread remains constant within the two: the violation against her body, not the "*mentem peccare*" [to sin in the mind], is ultimately used literarily by these writers to depict the struggles of men, whether political or sexual.<sup>38</sup> Lucretia thus emulates a legendary piece of political and sexual rhetoric that makes a suggestion to both Roman men and their wives.

Lucretia makes suggestive cameo appearances in the writings of church fathers such as Tertullian and Jerome, with the former writing to extol and exhort martyrs in the heat of Christian persecution at the hands of the empire, and the latter responding to a critique of sexual asceticism. Lucretia, a pagan woman, bravely killed herself even though she was not blamed by the men she was related to, writes Tertullian, but Lucretia had killed herself for her own glory rather than the glory of God, so any suicidal intention of Christian martyrs was therefore much more valiant and worthy.<sup>39</sup> Jerome indicates that her suicide after her rape was a commendable act.<sup>40</sup> Interestingly, both men seem to see Lucretia as an exemplary lesson in piety for both Christian men and women, yet the discourse that surrounds her violation and suicide are explicitly gender-coded in antique expectations for women. Whereas her body and intention, in preceding pagan accounts, represents the disciplined body and chaste mind all Roman women should aspire to fill, Lucretia's suicide becomes a tool to shame both men and women; despite her pagan identity she did not fear death,

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<sup>35</sup>Need ref here

<sup>36</sup>Ibid., line 762.

<sup>37</sup>Ibid., lines 801-804.

<sup>38</sup>Livy, 58, 9.

<sup>39</sup>Glendinning, pgs. 69-70.

<sup>40</sup>Ibid., pgs. 70-72.

only corruption by violation. Her mindset could be emulated by Christians with the difference of holy intent.

### *Rufinus*

The Lucretia paradigm occurs again when chaste Christian women, committed to virginity for life or bound to their husbands, were threatened with the disgrace of sexual violence during persecution or wartime. At the start of this paper, we took a quick look at the Latin of Rufinus as he exhibited the tortures of persecution; in order to further contextualize the external methodology involved in lauding the suicide of rape victims to draw a final comparison to Augustine's *City of God*, it will be important to look at the way Rufinus depicts the suicides of the sainted martyrs Bernike, Prosdoke, and Domnina, as they follow the Christianized-Lucretia paradigm.

Before he begins to translate Eusebius's narratives about specific characters, he details more instances of general persecution. After an embellished description of the naked bodies of women suspended aloft for hours on end, Rufinus describes another torture with such grotesque depiction that it successfully brutalizes the senses of the reader:

*Alias sicubi vicinae sibi duae arbores inveniebantur, vi quadam ab utraque inflexis contra se invicem ramis eisque singulis singulos pedes martyris obligantes subito ramos, quos vi inflexerant, relexabant. Qui cum ad situm suum naturali impetu referrentur, discerptis despiciatisque visceribus avulsa secum membra rapiebant.*<sup>41</sup>

[At another time, wherever two trees were found next to each other, with the branches having been bent in turn against their roots from each side by a certain force, these torturers, tying each foot to each branch, suddenly releasing the branches, which they had bent in by force, and when they were being brought back to their own place by natural impulse, they were yanking the body parts having been pulled apart with the mangled and scorned innards.]

A strong sense of Rufinus's use of Latin can be garnered here. Like Ammanius, he purposefully structures alliterations (*singulis singulos pedes, discerptis despiciatis, visceribus avulsa*) to create a "gestural sense" that forces the Latin reader to view and feel, through active verbs of quick motion (*inflexerant, relexabant, rapiebant*), to demonstratively feel the vividness of what is being described. Indeed, Rufinus successfully creates an atmosphere of "blood frenzy, exhaustion, fear of death, and grim and magically rigid gestures" so prevalent in grotesque treatments of physicality.<sup>42</sup> Rufinus's Latin differs from the Greek at many odds in its lengthier, more complicated descriptions of physicality, as comparative readers notice immediately that Rufinus took many liberties as a translator, yet his Latin rendering was much more popular in the West than Eusebius's throughout the Middle Ages.<sup>43</sup> Perhaps his reliance on physical descriptions, and, as he moves the narrative along, characterizing the victims of persecution through direct

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<sup>41</sup>Rufinus, pg. 757, 8, 9, 2, lines 11-15.

<sup>42</sup>Auerbach, Erich, pg. 68.

<sup>43</sup>Christensen, pg. 10.

discourse, when Eusebius only uses speech in indirect quotations, popularized the Latin account for its strong grasp on external reality.

One of the longest differentiations from the Greek occurs when Rufinus focuses on the three martyred saints, all three of whom are unnamed in these two accounts.<sup>44</sup> Eusebius's abbreviated accounts follows "a certain holy person" and her religious daughters, recounting the story in a small paragraph. But Rufinus, after an expansive translation wherein he parallels the sufferings of various martyrs at different locations across the whole of the Roman world with more grotesque descriptions like those in 8,9 ("*ubi crura frangi dei cultoribus iubebantur...ubi Christianos suini tergoris more singulis manibus pedibusque suspenso amarissimo fumo...ubi obstruncatis auribus atque inhonesto vulnere naribus, manuum quoque ceterorumque membrorum summatibus amputatis truncum sinebant abire derisum*")<sup>45</sup>, he shifts from spatio-temporal clauses to focus on the characterization of the mother. She and her daughters are among those martyrs numbered in Antioch, Rufinus notes, who were preserving their faith through the choice to die rather than be tortured into denouncing it. The mother, he writes, is "*pulchritudine pariter et pudicitia formosa*" [equally shapely in beauty and in modesty], and her virgin daughters strive to mirror their mother's "appearance and habits" that are modeled after divine precepts so that Rufinus claims they are "*moribus aemula sibi probitate certantes*" [competing for a moral uprightness that rivals to her own].<sup>46</sup> The envy that appears to begin in their own home translates out into the public for reasons undisclosed by Rufinus, but it appears that Rufinus is loosely following Eusebius's well-established focus on jealousy, a destructive force that he claims had made the Christian church vulnerable to persecution by the fourth-century.<sup>47</sup> However, whereas Eusebius merely stated that the envy from the public forced the women to leave Antioch, Rufinus claims there is an internal struggle for who might be the most pious in both appearance and habits inside the family dynamic. A loose focus on spatio-temporal events and the direct parties responsible sees the women escape out of Antioch from the public's persecution, yet "*agitur omni intentione, ut earum praesentia fieret. Missi in hoc ipsum milites repertas eas venire Antiochiam cogunt*" [It was being conducted with every intention that their presence should be made. The soldiers that had been sent onto this very mission forced those women that had been found to come to Antioch].<sup>48</sup> When captured, the mother makes a long speech to her daughters that culminates in the decision to commit group-suicide:

...*Et quod pudicitiae et castitatis bonum ita mecum pariter dilexistis, ut ne oculus quidem vester unquam, sicut vobis conscia sum, lascivior fuerit*

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<sup>44</sup>As stated, further research would be required to discover the link between Chrysostom's named saints and the unnamed women written about in *h.e.* Their entry in the *Acta Sanctorum* seems to be calculating the link on their placement at Antioch under the persecutions of Diocletian, which is the most general answer I have found.

<sup>45</sup>"where the legs belonging to the worshippers of God were being ordered to be broken...where they used to kill with undignified tortures the Christians, who were suspended by individual hands and feet in the manner of a hog's back... Where, they were allowing the trunk of the body to expire after it was being derided, with its ears having been cut down to a stump and the nose with a dishonorable wound, and also with the tips of the hands and the other limbs having been amputated. Rufinus, pg. 767, 8, 12, 1, lines 10-12, 16-18.

<sup>46</sup>*Ibid.*, 12, 3, lines 28-30.

<sup>47</sup>Christensen, pg. 15.

<sup>48</sup>*Ibid.*, 12, 3, lines 36-37.

*maculatus aspectu...Videtis, quod ista omnis vis aut a deo nos studet aut a pudicitia separare. Prostituentur ergo publicis lupanaribus membra, quae aer paene ipse publicus habuit incognita? Ne, quaeso, filiae, quia nec tam parva nobis in deo fides est, ut mortem pertimescamus, nec tam despecta pudicitia, ut vivere etiam cum turpitudine cupiamus...praeveniamus impuras carnificum manus et impudicorum praeripiamus incursus mundumque hunc, qui nos ad impuram et impudicam compellit ac petrahit vitam, pura et pudica morte damnemus.*<sup>49</sup>

[...and you know that you have loved the good of modesty and chastity like me, in such a way that your eye in fact, just as I am aware, was never tainted by a rather lustful glance...You see that all this force is striving to separate us either from God or from modesty. Will our bodies therefore be prostituted within public brothels, your bodies which the open air had scarcely known? No, I ask, daughters, because our faith in God is not so small that we should fear death, nor is our modesty so despised that we should desire to live even with disgrace... Let us circumvent the impure hands of the torturers, and let us anticipate the attacks of these immodest people and the pollution, which compels us, towards an impure and immodest life, with a pure and modest death.]

Through this episode of direct discourse, the mother externalizes the defense of chastity and modesty under threat in every line quoted; there has never been an instance where the daughters did not wish to pursue sexual modesty, and to be separated from their chastity would be equal to separation from God, as the function of *aut* in the *quod* clause “*aut a deo...aut a pudicitia seperare*” correlates the two on equal levels. Death is nothing to fear if they truly trust God, and to live with the stain of martial rape on their reputation would forever cause them shame, so there is no need to continue living. Rufinus thus effectively makes a narrativial argument that promotes the good of suicide in martyrial contexts like theirs; he also uses the external thoughts of the mother to *praevenire*, circumvent, the recorded actions from the “impure hands” of the torturers at 8.9. And whereas Rufinus had constantly referred to limbs, flesh, and body parts torn apart and degraded in public spaces in multi-layered subordinate clauses throughout 8.9 and 12, he depicts the actual suicide with a description only of the garments they were wearing, not their bodies: “*adductis diligentius hinc inde vestibis minacis se fluvii rapidis iniecerunt fluentis*” [with their garments having been drawn up rather diligently here and there, they cast themselves into the rapids of the menacing, flowing river].<sup>50</sup> The image of women carefully lifting their garments as they step into the river is overtly feminine, and when juxtaposing this death scene in comparison to Rufinus’s onslaught of graphic torture scenes, the overt tenderness of the motion *adductis* overcomes the narrative with a sense of modesty and nobility. Because their celibacy and modesty is unharmed, their womanhood remains intact and vibrant, which circumvents the impurity of the torturer’s hands. There is a prevalence of individual agency within the more discrete descriptions of clothing that contradicts the passivity of naked, swinging bodies; their instinct of modesty superimposes an

<sup>49</sup>Ibid, 12, 3, lines 4-16.

<sup>50</sup>Ibid., 12, 4, lines 20-21.

image of purity over the grotesque descriptions of bodies adhered to trees and massacred by torturers. The worst violence, rape, as it affects both the purity of the mind and the body, has been evaded; therefore, the bodies are “*aer paene ipse publicus habuit incognita*.” We must now understand why the arguments of the mother made within Rufinus's text for preservation by suicide rather than further destruction is exactly what Augustine is trying to disprove in Book I of *City of God*.

#### Augustine

Augustine, writing in the fifth-century after Alaric's sack of Rome, indirectly addresses pagan critics of Christianity in Book I, chapters 16-20, with captured Christian women that have experienced sexual violence as his subject:

*Magnum sane crimen se putant obicere Christianis, cum eorum exaggerantes captivitatem addunt etiam stupra commissa, non solum in aliena matrimonia viginesque nupturas, sed etiam in quasdam sanctimoniales.*<sup>51</sup>

[They think that they lay a truly great accusation against the Christians when they, exaggerating the captivity of them, add that even violations were committed not only against the marriages of others and virgins about to be married, but also, against certain consecrated virgins.]

Not only will Augustine “attend to” the great claims that there were sexual violations perpetrated against both married women and consecrated virgins, as he says shortly after (“*nec tamen hic curamus alienis responsionem reddere, quantum ipsis nostris consolationem*”), but he also claims that pagans have exaggerated the number of captured Christian women (“*eorum exaggerantes captivitatem*”). With these ideas in mind, he proceeds to discuss the implications of sinful acts committed on the body of a person with a virtuous mind:

*Sit igitur in primis positum atque firmatum virtutem, qua recta vivitur, ab animis sede membris corporis imperare sanctumque corpus usu fieri sanctae voluntatis, qua inconcussa ac stabili permanente, quidquid alius de corpore vel in corpore fecerit, quod sine peccato proprio non valeat evitari, praeter culpam esse patientis. Sed quia non solum quod ad dolorem, verum etiam quod ad libidinem pertinet, in corpore alieno perpetrari potest: quidquid tale factum fuerit, etsi retentam constantissimo animo pudicitiam non excutit, tamen pudorem incutit, ne credatur factum cum mentis etiam voluntate, quod fieri fortasse sine carnis aliqua voluptate non potuit.*<sup>52</sup>

[Therefore in the first place it should be put forth and established that virtue, by which one lives rightly, commands the members of the body from the seat of the mind and the body is made holy by the practice of a holy will, which, when it remains unshaken and stable - whatever another

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<sup>51</sup>S. Augustine, *De Civitate Dei*, I.16, pgs. 27-28, lines 29-1.

<sup>52</sup>Ibid., pg. 28, XVI, 6-17.



has done with the body or in the body, provided that it can't be avoided without committing a sin, involves no blame to the sufferer. But because what pertains not only to pain but in fact what pertains to pleasure can be perpetrated on the body of another, whatever such a thing has been done, although it does not destroy the modesty maintained by a very stable mind, nevertheless, it strikes at the sense of shame - lest it be believed that it was done also with the will of the mind, which perhaps could not have happened without some pleasure of the flesh.]

Strong, dramatic verbs such as infinitives like *imperare* and *perpetrari*, alongside constructs like *non valeat*, *non excutit*, and *incutit*, help to portray a contrast between internal action *commanded* "from the seat of a [stable] mind" through "virtue...by which one lives rightly", and acts *perpetrated* from outside upon the body such as *fecerit*, *fuertit*, and *factum* to depict these events as non-consensual acts done with or within the body.<sup>53</sup> Interestingly, Augustine raises a discussion of "pleasure" in a structure with "pain", admitting that his discussion will concern violence in the context of sexual assault on the body. Shame might be felt even by "unshakeable and stable" minds, he contends, if it is believed that the mind consented to rape through the feeling of carnal pleasure.<sup>54</sup> If we are to understand the hypothetical use of the passive subjunctive verb "*credatur*" as a belief imposed most likely by external accusers of Christian women, it appears that Augustine is relaying the general belief mentioned that "it makes no difference whether the woman claims she was overpowered or the abductor claims that she consented."<sup>55</sup> As mentioned, even women of social status had no legal protection based on the argument of consent, and the situation was even worse for female slaves, some of whom were no doubt Christians.<sup>56</sup> Thus, Augustine's enormous task to prove the value of consent, or what he will also call *intentio*, to deter accusations and encourage those women who had not killed themselves, relies on analyzing and comparing the external and internal motivations of Lucretia's suicide to place the precedent of God's divine judgement above the universal beliefs of those that are "laying great accusations against Christians," and no doubt, some Christian contemporaries of his own pedigree who would have exhorted women toward suicide, like Rufinus.

As mentioned, Christian contemporaries to Augustine like Jerome utilized Lucretia as a tool to point, through shame, both Christian men and women toward harsh ascetic practices and martyrdom, as she was a pagan who nevertheless set a strong pious precedent.<sup>57</sup> Augustine inverts the narrative tool of Lucretia's well-recorded chastity and purity to establish a more important conceptual standard of what Elizabeth Clark calls "divine shaming", which encapsulates Auerbach's notation on Augustine's concern with "Divine Providence."<sup>58</sup> Chrysostom and

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<sup>53</sup> *de corpore vel in corpore fecerit*

<sup>54</sup> The present passive subjunctive verb "*credatur*" most likely implies a belief imposed externally rather than believed about themselves. Henry Bettenson translates lines 16-17 as "it may be believed that an act, which perhaps could not have taken place without some physical pleasure, was accompanied also by a consent of the mind," implying a universal, hypothetical suggestion rather than a self-imposed belief.

<sup>55</sup> Clark, Gillian, pg. 36. She summarizes the law of Constantine in the given quote to show that the law held no amnesties for women raped.

<sup>56</sup> Witzke, pg. 261.

<sup>57</sup> Clark, Elizabeth, pgs. 223-225.

<sup>58</sup> *Ibid.*, pg. 235.

Tertullian, Clark notes, were well-practiced in the rhetoric of shame; they regularly drew comparisons between the struggles of men in the Bible to women in their own times to shame the contemporary male audience.<sup>59</sup> Yet Augustine's rhetoric contrasts these authors again, possibly because Augustine associated the feeling of shame with original sin.<sup>60</sup> He positions God as the "ultimate shamer" in that God sees all internal affairs of humankind, as God has at every specific point of history and also looks into the future; therefore, God is fit to judge every action on the account of once-hidden thoughts and intentions that only God can make unshrouded. This style of "antagonistic" rhetoric not only allows Augustine the function to defend Christian women from dominant societal accusations that force women to be held accountable for their own rape, instituting for once the importance of consent, it also allows him to freely oppose the defenses made for martyr suicide by his contemporaries. As a whole, when women opted not to marry in order to remain celibate, it was a public ordeal that could harm the wealth and therefore the reputation of their families; yet great bulks of Christian women (Chrysostom records three thousand virginal women in Antioch alone) devoted their lives to celibacy despite societal pressure.<sup>61</sup> Augustine himself encouraged and celebrated both men and women for the decision to be celibate throughout their lives and also not to remarry after divorce; he also praises St. Perpetua and St. Felicity, two female martyrs who famously died with no fear or aversion to a public execution in the gladiatorial arena, while shaming men who admire the graphic and physical nature of the tale rather than the example set by the martyrs.<sup>62</sup> His chastisement of those who value the aesthetics of female martyrdom rather than the moral principle of this particular passion account more directly relates to his greater point within chapters 16-20.

To further pardon women who have not killed themselves despite undergoing sexual shame, he begins chapter 18 with a rhetorical question with a complicated answer: "*Ac per hoc et quae se occiderunt, ne quicquam huius modi paterentur, quis humanus affectus eis nolit ignosci?*" The clause "*ne quicquam huius modi paterentur*" seems to be answering the final line of chapter 18, in which Augustine refers to the question of inadvertent consent through feeling carnal pleasure.<sup>63</sup> Anyone of "human friendly feeling" would be moved to pardon certain unspecified women who killed themselves, seemingly after the rape took place; no doubt, those who would pardon these dead women would not only be the pagan accusers Augustine seems to be addressing, but the argument in this section would also extend to Augustine's contemporaries like Rufinus or Ambrose who celebrated the martyrs that killed themselves before sexual shame.<sup>64</sup> He carefully

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<sup>59</sup>Ibid., pgs. 220-25. Chrysostom compares our saints Bernike, Prosdoke, and Dominina to Abraham in his homily; the man feared death and opted to whore out his wife Sarah to the Egyptians while these women chose to die rather than be raped.

<sup>60</sup>Wu, Tianyue, pgs. 1-3.

<sup>61</sup>Clark, Gillian, 51. *The Life of Christina of Markyate* is a great hagiographical example that depicts a young girl tormented by her whole family for refusing to marry. At certain points in the narrative, her family attempts to force her husband to rape her; therefore, Christina's shame would be bound to marry him.

<sup>62</sup>Clark, Elizabeth, pgs. 226, 235. Tilley, pg. 47.

<sup>63</sup>Henry Bettenson's translation appears to be referring back to this line, as he translates lines 20-21 as "Some women killed themselves to avoid suffering anything of the kind, and surely any man of compassion would be ready to excuse the emotions which led them to do this."

<sup>64</sup>Ambrose discusses St. Pelagia as well as the three unnamed women Rufinus garners from Eusebius's account in *On Virgins*, III.

establishes how a person that survived martial rape would garner more shame through the sin of murder if they killed themselves, first by setting forth a great claim which he proves with comparison to Judas:

*Nam si Iudae factum merito detestamur eumque veritas iudicat, cum se laqueo suspendit, sceleratae illius traditionis auxisse potius quam expiasset commissum, quoniam Dei misericordiam desperando exitiabiliter paenitens nullum sibi salubris paenitentiae locum reliquit: quanto magis a sua nece se abstinere debet, qui tali supplicio quod in se puniat non habet! Iudas enim cum se occidit, sceleratum hominem occidit, et tamen non solum Christi, verum etiam suae mortis reus finivit hanc vitam, quia licet propter suum scelus alio suo scelere occosis est.*<sup>65</sup>

[For if we rightly detest the deed of Judas and if the truth judges that he, when he hung himself by a noose, increased rather than expiated the committing of that wicked betrayal, because he, being penitent in a destructive manner, by despairing of the mercy of God, left no room for himself for salvific repentance, how much more ought [she] to abstain from [her] own death, who, by such a punishment, does not have the guilt which [she] should punish in [herself]! Indeed Judas, when he killed himself, killed a wicked man, and yet, not only did he end this life guilty of Christ's death but in fact, his own death, because, granted, on account of his own crime, he was killed by his own crime.]

The detested, wicked betrayal of Judas made him directly guilty for the death of Christ, a great sin, and his subsequent suicide only made the sin more grievous rather than “expiating” it. The legal verb *iudicat* in line 29 is paralleled to another verb with a direct legal meaning, *licet* in line 9; with truth, *veritas*, as the subject nominative of *iudicat*, Augustine orients the culmination of this matter toward the divine will, as Auerbach noted.<sup>66</sup> Indeed, he uses the rhetoric of shame to compare the suicide of the killer of Christ to women that had been raped successfully and dramatically diminishes the nonexistent “sin” of accidental consent. As Elizabeth Clark points out, the rhetoric of shame serves male authors often to extol the struggles of female martyrs over the struggles of men in the Bible; the *veritas* that divinely judged Judas's crimes and fate must logically judge these women innocent, if there is no such comparable guilt and shame in them. Indeed, chapter 18 further looks into their *animus*, *mens*, and *consensio*, as Augustine writes many two-styled sentences that purposefully separate the physical treatment of the body with the internal configuration of the mind. If there is anything grotesque within the body of a raped women, it is

<sup>65</sup>S. Augustine, pg. 28, XVII, lines 29-30, 1-9. To easily understand the context and distinguish between Judas and the women Augustine refers to, I used feminine pronouns although the Latin uses masculine, While Augustine makes it clear that he is referring to women in chapter XVI, it seems he is switching to use of masculine pronouns to address a less specific audience. Other authors such as Jerome did this as well when addressing Christian audiences.

<sup>66</sup>Our use of *licet* is loose. Bettenson translates lines 5-9 with loose legal language: “For when Judas killed himself, he killed a criminal...one crime led to another,” whereas Loeb Classical Library also loosely adapted the clauses used with *licet*: “because, though he was killed to atone for his own crime, the killing itself was another crime of his.” I have very little doubt that Augustine used *licet* to purposefully parallel its use with *iudicat*, but the direct use is uncertain.

one's own lustful, twisted inner state, and to reflect this, he makes a simple, paralleled statement at the start of chapter 18: “*Non polluet si aliena erit; si autem polluet, aliena non erit.*”<sup>67</sup> [It will not pollute if it be another's; but if it pollutes, it will not be another's.]

To prove this short statement, he ventures into long, complex indirect questions and even depictions of physical acts of touch, *adtactu* and *manu*, as a woman's hymen is “ruined” while a midwife checked her virginity, probably while her marriage was being arranged.<sup>68</sup> His portrayal of harmful medical touch, however, serves not to depict the grotesque with plain, direct language as evaluated in Rufinus, but rather to further the logical points of his argument: “*Non opinor quemquam tam stulte sapere ut huic perisse aliquid existimet etiam de ipsius corporis sanctitate, quamvis mebris illius integritate iam perdit.*”<sup>69</sup> [I do not think that anyone is so stupid that he would suppose that anything is lost to that person, even with respect to the sanctity of the body itself, however much the integrity of that body part has already been lost.] Like medical errors, violence enacted on bodies “*adtactu*” or by the “*adprehensa et oppressa carne sua exerceatur et expleatur libido non sua*” does not change the integrity of a person's soul, mind, or consent.<sup>70</sup> Indeed, Augustine makes an interesting claim fixated on the dualism between the holiness of bodies and minds:

*Si autem animi bonum est, etiam oppresso corpore non amittitur. Quin etiam sanctae continentiae bonum cum immunditiae carnalium concupiscentiarum non cedit, et ipsum corpus sanctificatur, et ideo, cum eis non cedere inconcussa intentione persistit, nec de ipso corpore perit sanctitas, quia eo sancte utendi perseverat voluntas et, quantum est in ipso etiam facultas.*<sup>71</sup>

[But if [purity] is a good of the mind, it is not lost even when the body is oppressed. Yes, in fact, the good of holy self-restraint, when it does not yield to the foulness of carnal desires, sanctifies the body itself, and therefore, with unshakable intention when it persists in not yielding, sanctity does not perish from the body itself, because the will of using it in a holy manner endures, and, insofar as in it lies the capacity also.]

To suggest that “holy self-restraint” sanctifies the body after the flesh has undergone a sexual assault raises many concerns. If Augustine is again implying that there is some sort of sexual pleasure garnered from rape, and the only way the body might overcome a “carnal temptation” like this is through “*inconcussa intentione*,” it seems he is describing a sense of willfulness with the act that de-moralizes the women that faced the assault. However, Webb claims that Augustine's primary purpose within these chapters is to enforce that a “woman's testimony of conscience is sufficient data for shaping a society's view of her chastity in the aftermath of rape.”<sup>72</sup> The sanctity of self-restraint, *sanctae continentiae*, and the dirtying, lustfulness of carnal desires, *immunditiae*

<sup>67</sup>S. Augustine, pg. 29, 19, lines 15-16.

<sup>68</sup>Ibid., pg. 30, lines 14-16.

<sup>69</sup>Ibid., pg. 30, lines 16-19.

<sup>70</sup>“By wounds”; “a lust that is not their own was activated and fulfilled on their own flesh, which was taken and oppressed”, pg. 30, line 11; pg. 29, lines 24-26.

<sup>71</sup>Ibid, pg. 30, lines 3-9.

<sup>72</sup>Webb, pg. 61.

*carnalium concupiscentiarum*, appear in the same sentence as genitives to parallel each other, showcasing the internal desires of each party; therefore, if holy intentions and a perfect conscience transcend another person's wantonness, it should also transcend that holy person's own shameful desires, which are ultimately unprovable by anyone other than God. This sentiment refers back to his simple statement in lines 15-16: "It will not pollute if it be another's; but if it pollutes, it will not be another's." Chapter 18 therefore answers the internal concern that ended 16: "*tamen pudorem incutit...quod fieri fortasse sine carnis aliqua voluptate non potuit*," as the sense of shame must be overwrought, in Augustine's mind, by the understanding of one's own holy mindset. To finally close his case on the internal will overcoming another's external action, Augustine discusses Lucretia's suicide in chapter 19.

Augustine orients his argument again in chapter 19 "*contradicere audebunt hi, contra quos feminarum Christianarum in captivitate oppressarum non tantum mentes, verum etiam corpora sancta defendimus*"<sup>73</sup> [those men will dare to contradict against the Christian women whom we are defending, not only their minds, but also their consecrated bodies oppressed in captivity], yet his evaluation of Lucretia's chasteness at death contradicts the writings of aforementioned Christian men. Therefore, Augustine swiftly recants Livy's account of the story and asks specific rhetorical questions, positioned to forcefully demand a verdict:

*Quid dicemus? Adultera haec an casta iudicanda est? Quis in hac controversia laborandum putaverit?...Sed quid est hoc, quod in eam gravius vindicatur, quae adulterium non admisit?...Si ergo ad vestrum iudicium quisquam deferret hoc crimen vobisque probaretur non solum indemnata, verum etiam castam et innocentem, interfectam esse mulierem, nonne eum, qui id fecisset, severitate congrua plecteretur?*<sup>74</sup>

[What will we say? Should she be judged an adulterer or chaste? Who will have thought that it needs to be labored at in this controversy?... But what is this, which is avenged more grievously on her, who did not commit adultery?...If, therefore, anyone should defer this crime to your trial, and it should be proved to you that a woman, not only unjudged, but also chaste and innocent, had been killed, would you not punish the one who had done that with the according severity?]

Rhetorical questions are a common tactic in classical Latin, and Augustine uses specific indirect "*quod*" clauses to raise several dissenting points about the character of Lucretia to both externalize her as a real person from history who should have been judged accordingly for her self-murder and to externalize her internal motivations. After raising these concerns about Lucretia's suicide, Augustine finally demands that the "*leges iudicesque Romani*" "pronounce the sentence" on her homicide. His intense rhetorical questioning proceeds, as he uses a quote from the poet Virgil about Lucretia's place in the Underworld to prove his own point about her suicide.<sup>75</sup>

*An forte ideo ibi non est quia non insontem, sed male sibi consciam, se peremit? Quid si enim (quod ipsa tantummodo nosse poterat) quamvis*

<sup>73</sup>S. Augustine, pg. 31, XIX, lines 9-12.

<sup>74</sup>Ibid., pg. 31, lines 19-20; 28-29; pg. 32, 2-6.

<sup>75</sup>Ibid., pg. 31, lines 32-1; pg. 32, lines 8-9; 15-20.

*iuveni violenter inruenti etiam sua libidine inlecta consentit idque in se puniens ita doluit ut morte putaret expiandum?*<sup>76</sup>

[Perhaps, for that reason, she is not there because she, not innocently, but conscious to her evil, killed herself? What if (but only she herself was able to know) although the young man violently attacked her, she consented with her own enticed lust and in punishing herself was so grieved that death was supposed to be the atonement?]

Here Augustine fully evaluates Lucretia's internal motivations in a way both Livy and Ovid glided over as they depicted Tarquin bearing his will down upon her, and made her later thoughts realized in the narrative through direct speech. The results may have been disastrous for Christian women, writes Tianyue Wu, if Augustine had not built for Lucretia a fallible throne of social shame, dependent on her "*deos falsos*" and the God of the Christian women, who "*Habent quippe intus gloriam castitatis, testimonium conscientiae; habent autem coram oculis Dei sui nec requirunt amplius.*"<sup>77</sup> [Indeed they have within the glory of chastity, the testimony of conscience; they have it also before the eyes of their God and require nothing more.] The conscious use of *castitatis* here implies a shift from the "social edifice" of *pudicitia*, which had been used in Book I until the end of chapter 19, again to fully elaborate on the difference between these Christian women and those considered pious and chaste by ultimately destructive prior social evaluations of shame.<sup>78</sup> Here he uses *pudicitia* directly in the context of social normatives: "*Quod ergo se ipsam, quoniam adulterum pertulit, etiam non adultera ocidit, non est pudicitiae caritas, sed pudoris infirmitas...Unde ad oculus hominum testem mentis suae illam poenam adhibendam putavit, quibus conscientiam demonstrare non potuit.*"<sup>79</sup> [Therefore, because she killed herself, though not an adulteress, she endured an adulterer, she had no love of chastity but irresolute shame...hence she thought that applying the penalty would be a witness of her own mind to the eyes of men, to whom she could not exhibit her conscience.] In Livy's account, Lucretia's dead body bears witness to not only her chastity, but also to the morals of an ideal Roman society; Augustine makes the claim that only a woman with true modesty living within her mind would choose such a dramatic effect to externalize her conscience to men. Whether or not a Christian woman consented to rape is revealed "before the eyes of God," thus they do not need to enact the destruction of their bodies as a public testimony to their chaste internal conscience in the way that the women in Rufinus's story did.

### Conclusion

Evaluating the translation of Rufinus against Augustine's City of God raises several interesting polemics on "mimesis" methodology. For Rufinus, grotesque depictions on passive victims served as a pathway to externalize methods of torture to draw on sensory empathy; thus, the long lists that forced the reader to visualize bodies suspended aloft and pulled apart by trees overwhelmed the narrative from the page to the realm of sensory realism. These impure tortures and graphic details can only be subdued by the modest femininity of the three women who killed themselves in the river, rather than give themselves over to the threat of sexual assault and the

<sup>76</sup>Ibid., pg. 32, lines 21-25.

<sup>77</sup>Wu, pg. 8; S. Augustine, pg., 32, 19, line 27; pg. 33, lines 28-29.

<sup>78</sup>Webb, pg. 77.

<sup>79</sup>S. Augustine, pg. 33, 19, lines 14-16; 20-22.

destruction of their reputation, as Lucretia portrayed nobly in Livy and Ovid. However, for Augustine, the only grotesque, disturbing, and violent problems seem to stem from the internal world of the sufferer. If someone's mind is marred with lust, their body is as well; Lucretia, the victim, served as his mimetic touchstone so that he could direct his claims to both the pagan men he was arguing and the audience of Christians idolizing Lucretia contemporarily to him. The paradigms within this texts can inform for us how men in late antiquity might portray women both externally, by portraying violence on their bodies, and internally, by pathologizing about their secret consensual instincts for the purpose of glorifying a certain godlike state of mind.

## Bibliography

- Auerbach, Erich. *Mimesis: The Representation of Reality in Western Literature*. Princeton and Oxford: Princeton University Press, 1946.
- Augustine. *City of God, Books I-III*. Ed. by G.P. Goold. Translation by McCracken, George. Loeb Classical Library. London; Cambridge: Harvard University Press, 1995.
- St. Augustine: Concerning the City of God against the Pagans*. Translated by Bettenson, Henry. London: Penguin Books, 1972.
- Brakke, David. "The Lady Appears: Materializations of "Woman" in Early Monastic Literature." In *The Cultural Turn in Late Ancient Studies: Gender, Asceticism, and Historiography*, ed. by Martin, Dale B. and Miller Patricia Cox, 25-39. Durham; London: Duke University Press, 2005. doi:10.2307/j.ctv11cw2nz.5.
- Christensen, Torben. *Rufinus of Aquileia and the "Historia Ecclesiastica", Lib. VIII-IX, of Eusebius*. Munksgaard; Copenhagen, 1989.
- Chrysostom, St. John. *The Cult of the Saints: De St. Droisis, De St. Bernike, De St. Prosdoke, De St. Domnia*. New York: St. Vladimir's Seminary Press, 2006.
- Clark, Gillian. *Women in Late Antiquity: Pagan and Christian Lifestyles*. New York: Oxford University Press, 1993.
- Cooper, Kate. *The Virgin and the Bride: Idealized Womanhood in Late Antiquity*. Cambridge and London: Harvard University Press, 1999.
- Die Lateinische Übersetzung des Rufinus*, ed. by Mommsen, Theodor. In Schwartz, Eduard, *Eusebius Werke. Zweiter Band: Die Kirchengeschichte*. Leipzig: J. C. Hinrichs'sche Buchhandlung, 1908, (8.9.1; 8.12.3-5).
- Dombart, Bernardus, Kalb, Alfonsus, eds. *Sancti Aurelii Augustini Episcopi De Civitate Dei Libri XXII*. Stuttgart and Lipsia: Teubner, 1993, 1.16-20.
- Gaca, Kathy L. "Martial Rape, Pulsating Fear, and the Sexual Maltreatment of Girls (παῖδες), Virgins (παρθένοι), and Women (γυναῖκες) in Antiquity." *The American Journal of Philology* 135, no. 3, 2014: 303-57. [www.jstor.org/stable/24560257](http://www.jstor.org/stable/24560257).
- Glendinning, Eleanor. "Reinventing Lucretia: Rape, Suicide and Redemption from Classical Antiquity to the Medieval Era." *International Journal of the Classical Tradition* 20, no. ½, 2013: 61-82. [www.jstor.org/stable/24716488](http://www.jstor.org/stable/24716488).
- Jaeger, Mary. *A Livy Reader: Selections from "Ab Urbe Condita"*. Illinois: Bolchazy-Carducci Publishers, 2011. [https://www.google.com/books/edition/A\\_Livy\\_Reader/IJvKvUY6OUoC?hl=en&gbpv=0](https://www.google.com/books/edition/A_Livy_Reader/IJvKvUY6OUoC?hl=en&gbpv=0)
- Livy: History of Rome, Books I-II*, ed. by Foster, B.O. Massachusetts; London: Harvard University Press.
- Newlands, Carole E. *Playing with Time: Ovid and the "Fasti"*. New York: Cornell University Press, 1995. [www.jstor.org/stable/10.7591/j.cttq45n8](http://www.jstor.org/stable/10.7591/j.cttq45n8).
- "Ovid: Fasti, Book Two." *Poetry In Translation*, ed. by Kline, A.S, 2004. <https://www.poetryintranslation.com/PITBR/Latin/OvidFastiBkTwo.php>
- "P. Ovidius Naso: Ovid's Fasti., ed. By Sir James George Frazer." London; Cambridge: William Heinemann Ltd.: Harvard University Press, 1933. *Perseus Digital Library*, Tufts University. <http://www.perseus.tufts.edu/hopper/text?doc=Perseus:abo:phi,0959,007:2>.
- Ross, Jill. *Figuring the Feminine: The Rhetoric of Female Embodiment in Medieval Hispanic*



- Literature*. Toronto; Buffalo; London: University of Toronto Press, 2008.  
[www.jstor.org/stable/10.3138/9781442688100](http://www.jstor.org/stable/10.3138/9781442688100).
- Scarry, Elaine. *The Body In Pain: The Making and Unmaking of the World*. Oxford; New York: Oxford University Press, 1985. [http://www.oregoncampuscompact.org/uploads/1/3/0/4/13042698/the\\_body\\_in\\_pain\\_-\\_the\\_making\\_and\\_unmaking\\_of\\_the\\_world\\_-\\_introduction\\_\\_elaine\\_scarry\\_.pdf](http://www.oregoncampuscompact.org/uploads/1/3/0/4/13042698/the_body_in_pain_-_the_making_and_unmaking_of_the_world_-_introduction__elaine_scarry_.pdf)
- Webb, Melanie. "'Before the Eyes of Their Own God': Susanna, Rape Law, and Testimony in City of God 1.19." In *Reading Scripture as a Political Act: Essays on Theopolitical Interpretation of the Bible*, ed. by McClain, Daniel Wade and Tapie, Matthew A., by Fowl Stephen E., 57-82. Minneapolis: 1517 Media, 2015. doi:10.2307/j.ctt155j37g.7.
- Witzke, Serena S. "Violence against Women in Ancient Rome: Ideology versus Reality." In *The Topography of Violence in the Greco-Roman World*, ed. by Fagan, Garrett and Riess, Werner, 248-74. Ann Arbor: University of Michigan Press, 2016.  
[www.jstor.org/stable/10.3998/mpub.8769247.13](http://www.jstor.org/stable/10.3998/mpub.8769247.13).
- Wu, Tianyue. "Shame In the Context of Sin: Augustine On the Feeling of Shame In "De Civitate Dei"." *Recherches De Théologie Et Philosophie Médiévales* 74, no. 1, 2007: 1-31.  
[www.jstor.org/stable/26172287](http://www.jstor.org/stable/26172287).

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## ***Democracy and a Transcendent Good***

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*Under the guidance of Dr. Thomas Pope*

## Abstract

*This research paper sought to define justice for American democracy in light of several philosophical works. It was intended to be an overview and analysis of the major philosophies on democracy and justice that dominate the American political sphere that would aide a larger thesis dedicated to understanding what is considered to be the American identity and how that shapes both the legal and social systems that ungird America's polis today and how it has affected the American identity. It must be noted that this project was more of a literature review and prospectus seeking to understand the literature and commentary behind this question to ask a further question of how exactly this vision of justice was implemented within America's political society. For example, John Rawls, in his books *A Theory of Justice* and *Justice As Fairness: A Restatement*, asserts that justice as fairness. This particular vision of justice has greatly influenced America's current political society, however, other theories have also had a significant impact on America's vision of justice so much so that there is no one definite answer that can be given. Contrastingly, much of the literature on democracy and justice discusses the idea of justice and a transcendent good. Alasdair MacIntyre, author of *After Virtue*; Alexis De Tocqueville, author of *Democracy in America*; and President Abraham Lincoln imply that man inadvertently finds that justice can only be found through human flourishing and that democracy is the collective pursuit of this transcendent good. These two major visions of justice reflect an existing debate within political philosophy between the ancients and the moderns that has yet to be resolved. This literature review brings a modern light to this philosophical debate. Overall, this research project was unsuccessful in adequately defining in light of democracy but, it successfully reviewed the literature surrounding a philosophical debate that implicitly affects much of today's political life and literature.*

American democracy has begun to decay. Despite numerous warnings from voices such as Plato and Tocqueville, democracy has been shifting dangerously towards tyranny. The virtues of democracy—liberty, individualism, dialectic, and freedom—have become vices of excess and are ruled by materialistic passions; their meanings now are obscure and empty. This obscurity stems from America's inability to reason about a transcendent good and human flourishing collectively. Society purposely avoids the question about what it means for a political community to collectively flourish as it has rejected the idea that all individuals in a political community are to strive toward becoming human, which is done through deliberation within the community. As a consequence, modern democracy has unintentionally discarded deliberation, which protects against tyranny. Deliberation was once a central component of our democracy that has been discarded in favor of easy answers and simple solutions for comfortable, materialistic, and individualist living.<sup>1</sup> The argument is that because we cannot know the good as it is an impossible and unattainable task, a political society should focus on creating laws that focus on comfortability and survival. Within this democracy, individuals live comfortably, but their souls are empty and susceptible to tyranny over thought and enslavement to their desires.<sup>2</sup> This is not surprising given that democracy has a natural tendency to elicit soulless individuals when it is not reigned in. In his work *After Virtue*, MacIntyre highlights that modern society tosses around these words without a

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<sup>1</sup> Deliberation rejects tyranny as it engages dialogue and discussion. Tyranny, however, dominates with the use of rhetoric.

<sup>2</sup> It is the responsibility of a regime to be concerned with the morality of its citizens' souls as they are those who govern the regime and participate in its law-making.

moral foundation to contextualize them.<sup>3</sup> Words like “liberty” and “justice” are meaningless without a transcendent vision of the good attached to them. It is necessary, then, for a democratic society to reason about a transcendent good to preserve and articulate the virtues of democracy and encourage human flourishing. To avoid questions such as these is to allow democracy’s vices to overtake it.

The work of John Rawls reflects modern democracy. In *Justice as Fairness*, Rawls asserts that a democratic society that has a moral conception of the good is oppressive and incompatible with democratic liberties. Therefore, a political conception that has no comprehensive moral doctrine attached to it is the only acceptable and viable option. Thus, he introduces justice as fairness, a theory of justice unattached to a shared conception of the good under reasonable pluralism. For Rawls, in a political community, a particular vision of the good life cannot be democratically agreed upon without an act of tyranny and oppression; therefore, a political conception must do.<sup>4</sup> Rawls claims that there may be a comprehensive moral truth, but it is not the political community’s job to discover it. Rawls’ shallow vision of justice has created a shallow political community that has fallen prey to the wild passions of democracy like materialism, the excess of passions, individualism, and tyranny that Tocqueville highlights in *Democracy in America* and Socrates warns about in *The Republic*. Rawls claims this is the goal of democracy as there is no such thing as a political community given an individual’s inability to consent to that community.<sup>5</sup> His argument is a type of tyranny of the majority that precludes thought and dialectic given that he seeks a unitary, nationalized central vision of life where law-making comes first and reasoning about that law-making is done only in light of material necessity. This stems from Thomas Hobbes’ vision of civil society and the nature of man. Hobbes would petition that the wild passions of democracy are the passions of man. These passions govern their actions and encourage men to form a civil society to pursue comfortably.<sup>6</sup>

If it is true that a political community that reasons about the human condition and its flourishing is what separates humanity from the likes of animals and brings dignity to man, then Rawls’ theory falls distinctly short of that and humans are genuinely nothing but beasts of nature.<sup>7</sup> Hobbes and Rawls would suggest that men are distinct from animals because they have the right to choose this lifestyle, but this answer is not sufficient.<sup>8</sup> When a regime forgets to seek the common good it decays because a morally empty democracy encourages violence and destruction in the lives of the individuals who govern it. A democracy that does not seek to pursue a vision of the good evokes a morally empty regime, which then creates morally empty people. Individuals cannot flourish (even individually) in this type of society. This democracy may live comfortably, but they will give into feverish passions as there is no central moral basis between the individual and their political community. The people must first be morally self-governed before creating a

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<sup>3</sup> FOOTNOTE

<sup>4</sup> It could be said that law is a form of oppression and tyranny. However, law in a democracy is democratically agreed upon by consenting individuals whether given expressly or tacitly.

<sup>5</sup> John Rawls, *Justice as Fairness* (Harvard University Press, 2001), 21

<sup>6</sup> Leo Strauss and Joseph Cropsey, *History of Political Philosophy* (University of Chicago Press:1987), 396-399. Civil society, for Hobbes, achieves human passions but also moderates them.

<sup>7</sup> Hannah Arendt, *The Human Condition* (University of Chicago Press, 1958),176

<sup>8</sup> Peter Lawler, “James Madison and the Metaphysics of Modern Politics,” *The Review of Politics* 48, no. 1 (Winter 1986): 92-115, 93

self-governing political society.<sup>9</sup> Therefore, the individual must know first where they come from and their moral role within the community. A critical problem within a democracy is how to be diverse whilst having a collective identity in which the good life can be sought. Therefore, there must be a unifying theme of democracy that can be expressed in different forms. Democracy, when left unattended, desires to dominate souls and thought, which goes against deliberation.<sup>10</sup> Contrastingly, it is at its best when it engages in dialogue about the common good. Jaffa, in his work *Crisis of A House Divided*, posits that president Lincoln considered democracy as a community of individuals dedicated to discovering truth through reason and dialogue, which is deliberation. Therefore, “the idea of a popular sovereignty divorced from a universal conception.... is a complete absurdity.”<sup>11</sup> Law, then, must express the moral conviction of the people who follow it by aiming at an abstract conception of the good. Jaffa asserts that Lincoln harkens Americans back to an “ancient vision” that guided the morality of the people. This vision then guided their governing. Liberty for the individual is found in the community as they pursue this ancient vision.<sup>12</sup>

This vision of the good articulates and frames common meanings like “liberty,” “justice,” and “freedom.” Without this background, these words are meaningless and become unrestrained vices of excess. Macintyre implies that philosophies like Rawls, Hobbes, and Locke solve practical problems, but they cannot answer normative problems like questions of the individual’s role within their political community. Practical positive solutions solve the right-now issues like positive law, but do not answer long-term issues like if those laws are just or “right.” While solving practical solutions is the requirement of all legislative bodies, they must be accompanied by mores. Tocqueville highlights this in *Democracy in America* when he discusses laws, mores, and circumstances. A political society develops its mores from their circumstances they find themselves in. These mores then influence and guide their laws, which then create their new circumstances. Education and religion, then, are essential factors required for a healthy democracy. Any type of religion remedies and tames the vices of democracy while education emboldens political activity. Tocqueville asserts that religion provides a moral foundation that supplements the human soul and is a direct source of their mores.<sup>13</sup> Furthermore, religion tames the passions because, in a democratic society, “everything is permitted in the interest of society,” but religion prevents this excess of freedom through moderating it.<sup>14</sup> Religion specifically tames materialism by appealing to man’s natural desire for the transcendent. Both then, encourage civic engagement and a shared transcendent belief within the community. However, a state-sponsored

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<sup>9</sup> This moral self-governing will be reflected in their law-making and statesmanship. Their political society will be improved because their “habits of the heart” (discussed on page five), will guide this law-making and its accompanying institutions.

<sup>10</sup> Harry Jaffa, *Crisis of the House Divided* (University of Chicago Press, 1959), 186

<sup>11</sup> Jaffa, *Crisis of the House Divided*, 349, 359

<sup>12</sup> This vision is a vision of the ancient philosophers who believed that there was a transcendent good that man should always be in pursuit of. Therefore, humanity is found in their becoming rather than what they already are.

<sup>13</sup> Mores for Tocqueville are “habits of the heart” that form the habits of the mind. He explains this briefly in *Democracy in America* on page 275

<sup>14</sup> Alexis De Tocqueville, *Democracy in America* (), 278, 280

Both Tocqueville and Socrates specifically warn against an excess love of freedom.

religion is inconsistent with the American Constitution; therefore, our political society requires a different type of religion. Lincoln asserts that a civil religion written on the hearts of the people is the perfect combination of education and religion. Civil religion, a moral framework with a distinct vision of the good, would be considered the mores of a political society that then influences the laws democracy creates. These factors tame the vices of modern democracy, and without them, it cannot last as it erodes the soul of the common man.

To begin to understand what justice means for a particular political society, it must be seen through the lens of a transcendent good. Otherwise, it is meaningless. This transcendent good may be unknowable, but it is in this pursuit that flourishing is found. This vision of the good life extends past political society; however, political society must engage with it to preserve its institutions. Though questions about the common good are unclear, to refuse to seek it out because it is unknowable is a disservice to our political community. One perfect vision of the good is impossible and unnecessary in a democratic society. However, given the United States unique federalism, multiple visions of the good life within pockets of a political community preserve democracy. Macintyre, Plato, Tocqueville, and Lincoln imply that man inadvertently finds human flourishing and the good life through this communal pursuit.

## Bibliography

- Arendt, Hannah. *The Human Condition*. 2nd ed. University of Chicago Press, 1998.
- Hobbes, Thomas. *Leviathan: with Selected Variants from the Latin Edition of 1688*. Edited by E. M. Curley. Hackett Pub. Co., 1994.
- Jaffa, Harry V. *Crisis of the House Divided: An Interpretation of the Issues in the Lincoln-Douglas Debates*. University of Chicago Press, 1959.
- Lawler, Peter Augustine. "James Madison and the Metaphysics of Modern Politics." *The Review of Politics* 48, no. 1 (1986): 92–115. <https://doi.org/10.1017/s0034670500037529>.
- MacIntyre, Alasdair C. *After Virtue: A Study in Moral Theology*. 2nd ed. Univ. of Notre Dame Press, 1984.
- Plato. *The Republic of Plato*. Translated by Allan Bloom. Basic Books, 2016.
- Rawls, John, and Erin Kelly. Essay. In *Justice as Fairness a Restatement*. Harvard University Press, 2001.
- Strauss, Leo, and Joseph Cropsey. "Thomas Hobbes." Essay. In *History of Political Philosophy*, 3rd ed., 396–420. The University of Chicago Press, 2006.
- Tocqueville, Alexis de, Harvey C. Mansfield, and Delba Winthrop. *Democracy in America*. University of Chicago Press, 2000.

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# Uncertain Fermata: Gendered Grieving and Lament During the COVID-19 Pandemic

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## Abstract

*Since the end of 2019, the world was awakened with new challenges brought forth by COVID-19, an unexpected deadly virus that swept the world. Three months after the World Health Organization declared a global pandemic, there were over 3.2 million cases confirmed globally and 230.1 thousand deaths (WHO, 2020). In the United States, there were with 1.1 million cases in the US with 64.2 thousand deaths (CDC, 2020). With televised deaths and day to day documentation, the world is seeing a new trend of hysteria among people who are both directly and indirectly affected by this phenomenon. Some are unable to bury their dead or attend funerals. Others can only watch the devastation and misfortune of others from a distance. Even more so, mass graves are being televised and corpses are left on the streets, such as cases in Ecuador, as a way to deal with overburdened health care systems. However, grieving from a distance and virtually has become a norm for many people. Yet, there is lack of documentation in how such exposure to public remorse are affecting individuals privately. The purpose of this paper is to explore the gendered ways of grieving virtually during the COVID-19 pandemic, looking at variation between ethnicity, race, and class. Using a survey this project will test theories of loss and grief sociologically.*

## Introduction

Since November 2019, there are over 100,000 dead in the United States from the COVID-19 Pandemic, and nearly 400,000 confirmed deaths worldwide as of June 2020 (CDC, 2020; WHO 2020). The images of death and fear of death found throughout social media create feelings of fear and grief in the general population. Researchers, like Judith Butler, note that images inspiring grief and panic have created a global anxiety that will manifest in socially significant ways (Yancy, 2020). The safety measures put in place to prevent the spread of COVID-19 also create an isolation from others in which people must recreate or reimagine how they practice and cope with grief and disruption social norms and traditions surrounding death (Wallace et al., 2020). Many people feel uncertain of the future and worry about the collapse of the economy along with other structural systems, leaving society in a general state of anomie. This anxiety and worry are particularly notable in vulnerable communities who already face economic hardship and trouble accessing healthcare as they are disproportionately affected (Yancy, 2020). Communities that have histories of marginalization, discrimination, and exclusion, such as the African American and LGBTQIA+ community, have particular experiences of collective grief that are carried into and complicated by the effects of the COVID-19 pandemic (Butler, 2009; Wallace et al., 2020). Protests following the recent deaths of George Floyd and Ahmaud Arbery have also led people to question the role of political activism in grief and its ability to move people to action (Al'Uqdah & Adomako, 2018; Blake, 2020).

Even though we see the large social impact of COVID-19, studies on collective grief within the current context of pandemic are not readily available. Most research on grief looks at its psychological dimensions and impacts, and research on its impact on minorities, particularly in times of crisis, is scarce. The role of media and the rise of virtual grieving methods in a time of social isolation is also unexplored within current literature.

### *Purpose Statement*

The purpose of this study is to examine collective forms of grieving during the pandemic, specifically in relation to race and gender. In this study, we hope to examine the impacts of social media and images on the ways people grieve during times of social isolation where traditional forms of handling grief are not viable.

### *Research Question*

This study asks the question, “How do people process grief socially within the current guidelines of social isolation, social distancing, masking, and other forms of no-contact interaction? Given the influx of images in a virtual post-modern time, how do Americans process grief within pandemic? Specifically, what are the gender and racial performances of grief in this modern time of pandemic?”

### *Significance of study*

The COVID-19 pandemic has created a state of anomie has disrupted and changed how we see and process death as a society. The circumstances which restrict traditional mourning and circumstances where sudden and unexpected death has become more a norm has created mass disenfranchised grief that cannot be handled or treated the same as traditional grief and is more likely to lead to mental health complications and complicated grief (Wallace et al., 2020). It has also exposed and further compounded the struggles of vulnerable populations and led to cries for significant political change (Yancy, 2020). A study on grief in COVID-19 is a study that examines the much larger conversations we are having as a society and the ramifications of the aftermath of the virus that will shape our collective future.

## **Review of literature**

### **Notions of Grief**

Verma & Neimeyer (2020) argues that grief can and does happen over any type of death or non-death loss – bereavement, disappearance, separation, divorce, loss of relationship, miscarriage, trauma, sickness, loss of health, calamity and violence. Traditionally, dealing with grief involves an expectation of “moving on” on the part of the mourner (Rae 2006). Belief in the afterlife present in many cultural and religious settings gives the dead a life and social context beyond the present, however this is juxtaposed by modern notions of “moving on” and acceptance of death as final. Ord (2009) further argues that the ways in which we grieve are performative. If we behave in this prescriptive way, we will get better and we will ‘be over’ our grief. We perform our grief by engaging in grief appropriate behavior and reinforce the dominant discourses on grief without intention or awareness.

However, further continuing a relationship with the dead that does not equate to “moving on” is pathologized and considered unhealthy by recent standards (Mitchell et al., 2012). Therefore, the paradigm has shifted to one that psychological or a problem resulting in a need for professional intervention. Berns (2011) posits that the closure frame limits the possibilities for how we think about grief and fails to capture the experience of many who face death or some other loss. The traditional goal of “moving on” are being challenged as this view stigmatizes grief and can even be

seen as a form of emotional “betrayal” to the person who has passed (Rae, 2006). Bereavement services, for example, have emerged as “a psychological solution for managing grief” (Ord, 2009). Central to the variety of ways that grief has been conceptualized as a process is an effort to define grief as a universal experience and have a concrete understanding of it so it can be “managed” and “controlled” (Ord, 2009).

### *Medicalization of grief*

But the modern construct of grieving also revolves around control. The medicalization of grief has been used to certain levels of social control, to decide what is “normal” and “abnormal” grief and ignore the natural level of variability that can be found in how people grieve (Ord, 2009). Constructions of grief are institutionalized in state-controlled grieving practices such as the length of time one allots to grief and the type of mourning that can be displayed” (Ord, 2009).

### **Modern notions of Grief**

Mourners “taking responsibility for the other person before [they] consider them in relation to [them]self” has become an unwritten directive in modern grieving (Rae, 2006). “Implicit in [a] discourse of humanization is the question of grievability: whose life, if extinguished, would be publicly grievable and whose life would leave either no public trace to grieve, or only a partial, mangled, and enigmatic trace?” (Butler, 2009). Public mourning creates an environment where we are forced to ask difficult political and social questions about what has created said environment and to the degree that different groups are affected over lines of social inequality (Yancy, 2020; Rae, 2006).

### **Psychological dimension of grief**

Sani (2019) explained that the relationship and the quality of the relationship established with the deceased following death are some of the fundamental processes that constitute the work of mourning. Attachment styles to the living also have an impact on relationships in death as some people cling to others and have a strong support network during the grieving process while others are more likely to internalize things and force themselves to move on (Captari et al., 2020). A person’s mental state prior to loss is important in how they react, and those who experience depression before the loss often require different invention than from those who develop it afterwards (O’Connor, 2019). There is also evidence that grief recovery may be further complicated by the extent to which the loss challenges a bereaved person’s self-concept and leads to identity confusion or the sense that a part of oneself has died with the deceased (Bellet et al., 2020).

Cases of complicated loss [negated loss] can trap someone in a state of severe and prolonged grief (Verma & Neimeyer, 2020). “For those without family, friends, or a supportive community, the ensuing sense of loneliness—sometimes accompanied by feelings of abandonment—can be overwhelming” (Pies, 2020). Boulware & Bui (2016) argue that the criteria to what is now most often termed ‘complicated grief disorder’ or ‘prolonged grief disorder’ includes “separation distress, persistent yearning and pre-occupation with the loss, and traumatic distress.” These disorders now appear in the Diagnostic and Statistical Manual-5 (O’Connor, 2019). When left without treatment, those with grief related disorders are likely to develop a variety of additional health issues such as cardiovascular problems, cancer, suicidal ideation, substance abuse,

depression, anxiety, and an inability to function in life overall (Milman et al., 2019). There are distinctive differences between depression and grief, “the psychological pain in ‘normative grief’ emerges from loss of the ‘other’ – and self-esteem is almost invariably preserved in the early stages – while the central characteristic of depressed states is compromised self-worth” (Parker, 2013).

### *Processing Grief*

Current psychological research looks at attachment theory and cognitive stress theory to understand the process of loss (O’Connor, 2019). Cognitive Stress Theory suggests that cognitive evaluations of one’s particular grief should be emphasized in creating an understanding of loss and coping strategies that may be created (Boulware & Bui, 2016). Particularly after traumatic loss, where there is dissonance with a sense of reality and meaning. Research suggests that an effective strategy for recovery is the reconstructing of reality or “making meaning” which is inherently social process in where family, friends, faith, and mental health professionals can all help in the grieving process (Captari et al., 2020). Making meaning works on a “reconstruction paradigm” that believe that people understand and respond to the world based on a series of orienting beliefs that give them meaning and guidance. When this system is disturbed by something that does not fit within it, the person will struggle to move forward. Making meaning helps to expand and/or change current paradigms to develop further perspectives to accommodate for the loss (Milman et al., 2019). “Meaning making” within grief therapy is appealing because it encourages and underlines a multitude of understandings and expressions of reality and experiences according to what works for an individual (Milman et al., 2019). “Grief and its complications can set the stage for growth when approached with openness, validation of pain and willingness to discover collateral beauty” (Verma & Neimeyer, 2020).

Spiritual belief and practice can act as significant coping mechanisms in dealing with loss. Positive religious coping gives one a sense of spiritual connectedness with others and a sense of greater purpose, but negative religious coping leave people feeling abandoned, punished, doubtful, and in a state of confusion that takes meaning and purpose from them (Boulware & Bui, 2016). “Religious rituals have always responded to bereaved parents’ emotional needs, comforting them through funeral rites for the body and spiritual concepts such as the idea of paradise. They, therefore, assume a supporting and preventive role in possible psychological diseases related to loss (i.e. complicated grief disorder, depression, Post-Traumatic Stress Disorder, etc.)” (Sani, 2019).

Support from others is one of the key aspects in helping one recover from grief and its absence often leads to disenfranchisement and further consequences (Hazen, 2008). Social support is stressed and promoted on the psychological front as a way to encourage and create resiliency and can be looked at from varying angles such as perceived vs. actual support, size of support network, familial vs. nonfamilial support, and number of adverse relationship that could negatively impact support (Boulware & Bui, 2016). “Social support may decrease the negative impact of stressful life experiences, and thus bereaved individuals who have more available social support experience less depressive and somatic symptomatology” (Boulware & Bui, 2016). “Patients and families who are provided opportunities for cognitive and emotional acceptance of death show better outcomes in quality of life for bereaved family members six months after the loss” (Wallace et al., 2020).

## **Social dimensions of grief**

Perspectives on grief and death in times of pandemic changes in important social ways and some suggest they even take a political nature (Yancy, 2020). Butler (2009) asserts that after the attacks of 9/11, we encountered in the media graphic pictures of those who died, along with their names, their stories, the reactions of their families. Public grieving was dedicated to making these images iconic for the nation, which meant of course that there was considerably less public grieving for non-US nationals, and none at all for illegal workers (Butler, 2009). Thus, the experience of trauma has another layer: the culturally defined and performative expression of mourning (Earle, 2017).

### *Public loss, private grief*

COVID-19 has exasperated feelings of powerlessness, grief, loneliness, mistrust, and displacement that lead and feed into further psychological trauma on a societal scale (Pies, 2020). Under quarantine conditions, losses are forced to be mourned in private as everyone is stuck in one place and deprived of public gatherings and traditional outlets of public loss and mourning where loss is shared and part of a communal process (Yancy, 2020). Judith Butler points out that “learning to mourn mass death means marking the loss of someone whose name you do not know, whose language you may not speak, who lives at an unbridgeable distance from where you live” (Yancy, 2020). Sontag states that photographs can lead to an, “invitation ... to pay attention, reflect ... examine the rationalizations for mass suffering offered by established powers” (Butler, 2009). Open grieving is bound up with outrage, and outrage in the face of injustice or indeed of unbearable loss has enormous political potential (Butler, 2009).

## **The collective COVID-19 scare**

The effects of COVID-19 remained consistent on panic and anxiety after measures taken during the early stages of the outbreak (Wang et al., 2020). Polls conducted in the United States in January and February showed that 66% of those that responded thought that COVID-19 posed a real threat and 56% were directly concerned with the pandemic spreading in the U.S. with 26% saying that the U.S. government was not pulling its weight to stop the spread. Another poll from late January taken when there were only five reported cases in the U.S. reported that 25% of its respondents were more worried about COVID-19 than the 2014 Ebola outbreak (Asmundson and Taylor, 2020).

The collective effects of the COVID-19 pandemic extend to people with pre-existing mental illnesses who may also be considered a vulnerable part of the population as the role of stress is a prime indicator of new episodes or relapses (Grover et al., 2020). This is further complicated by the lockdown where many are at risk of running out of important medications, have trouble staying in one place, or are unable to take the regular precautionary measures against COVID-19 (Grover et al., 2020).

## **The socially vulnerable**

Minority communities, the poor, migrants, incarcerated people, disabled people, trans and queer people, and those with preexisting illnesses as well as chronic and continuous medical conditions highlights disparities in vulnerability during this pandemic due to structural systems (Yancy, 2020). “If certain lives do not qualify as lives or are, from the start, not conceivable as

lives within certain epistemological frames, then these lives are never lived nor lost in the full sense” (Butler, 2009). The common denominator among these groups suggests increased vulnerability among those for whom healthcare is neither affordable by economic means or otherwise inaccessible (Yancy, 2020). Butler (2009) expounds this clearly:

“How I am encountered, and how I am sustained, depends fundamentally on the social and political networks in which this body lives [...] So the norms of gender through which I come to understand myself or my survivability are not made by me alone.”

Isolation in both sickness and in death complicate traditional methods of support and coping (Wallace et al., 2020). COVID-19 disrupts the standard experiences of regular uncomplicated grief and requires us to rethink the way we approach supporting our daily losses (Wallace et al., 2020).

The most common form of death in a medical setting is anticipated, and therefore brings anticipatory grief, where people are prepared for loss. However, with COVID-19 deaths rapid increase, medical personnel and families are expected to experience death on an unseen scale where there is no preparation (Wallace et al., 2020). A conversation of grief during COVID-19 is often a conversation of disenfranchised grief, when public grief is not acceptable or possible in the larger community. Due to safety guidelines, many families are unable to grieve in a traditional sense or even attend the burial itself. Funeral providers, as private businesses in the US, have discontinued or greatly limited their staff and services they provide, leaving families with less options. Further complications in grief can come from people who have not followed the guidelines to prevent exposure. Complicated feelings of anger and blame can become tied in the grief tied to their loss (Wallace et al., 2020). The public sphere of the pandemic in current times has become the internet which fundamentally shifts how we mourn as we channel public grief in new ways on a mass scale (Yancy, 2020).

### **Grieving the images of death**

According to Butler (2009), photographs show that a life, however seen in the moment, was, and therefore creates a space for the grievability of life that is preserved through time and context. It reiterates and continues the event, postdates the event, and its very status a reality. “The indefinite circulability of the image allows the event to continue to happen and, indeed, thanks to these images, the event has not stopped happening” (Butler, 2009). Often the “shock value” fades even as a key component in eliciting outrage (Butler, 2009). The images of bodies, for example, overwhelming hospitals and adequate conditions were not in place to respect the dead are frames of images are things controlled and debatable within public discourse because of their power and ability to regulate emotion, outrage, and an action response (Yancy, 2020; Butler, 2009). The photos are not only shown, but named; the way that they are shown, the way they are framed, and the words used to describe what is shown, work together to produce an interpretive matrix for what is seen (Butler, 2009).

Butler (2009) echoes the sentiments of Minneapolis protestors and elsewhere after the death of George Floyd and Ahmaud Arbery after their death was broadcast all over the media and social media.

We are those photographers to the extent that we share the norms that provide the frames in which those lives are rendered destitute and abject, and are sometimes clearly beaten to death.

Some framing brings us under the light and reveals our fragile and interconnected nature where we can be brought to outrage and others that shut down action through exclusion or the lenses through which experiences are framed (Butler, 2009).

## **Virtual Grief**

The advent of technology has brought significant influences in social interaction and participation in many of local and global events happening in real-time. The internet opens up options and ability to inform and educate ourselves on things happening around the world on a global unprecedented scale (Catania-Opris, 2016). The internet provides what has been called an “absent presence” where someone is technically physically present somewhere, but is completely caught up in a world of technological space (Mitchell et al., 2012). Virtual memorials provide spaces where the dead can live on visually and socially through the networks of their loved ones (Mitchell et al., 2012). The rise in social media as a platform for grief has opened up a valid way to express grief in a communal and public way (Catania-Opris, 2016). Public mourning on social media can involve certain structured and repeated behaviors that act as present-day death rituals and help with the grieving process (Catania-Opris, 2016).

Early internet memorials started in the mid-1990s with limited graphics, but have since heavily expanded into complex, graphic-heavy, easy to produce spaces that provide a variety of options to mourners (Mitchell et al., 2012). Even before the pandemic, virtual grieving practices and methods in China were being pushed by the government since 1992 as traditional physical burials were becoming logistically impossible with the population size (Sani, 2019). The restrictions and social taboos of mourning found in traditional grief settings is circumvented by the internet where many find different avenues to openly express feelings of grief and continue to have forms of attachment and relationship with the dead (Mitchell et al., 2012). “The idea of a ‘continuous bond’ between the living and the dead underlies much of the current marketing and appeal of virtual memorials” (Mitchell et al., 2012). In virtual memorials, the dead receive an online immortality, to be seen and accessed across the world, their images preserved but also managed by others (Mitchell et al., 2012). “Grieving family and friends list ‘communicating with the dead’ as a key reason to visit virtual memorials” (Mitchell et al., 2012).

The growing use of social media has caused grief to become ever more a public affair (Morehouse & Crandall, 2014). Because of the wealth of information and communication accessible online, the public and private realms of life blur along with traditional boundaries and notions of personal and private information (Morehouse & Crandall, 2014). The way that people are informed about death is fundamentally changed by the internet. Originally, the knowledge of death was controlled and personal, signifying that the person learning the information was in some way close to the deceased. However, when someone’s death is noted by a Facebook status, news is fast to spread out beyond one’s family and true friends (Lingel, 2013). The ability to post on social media about loss normalizes what might have been considered rude and invasive in another time or context (Morehouse & Crandall, 2014). “Postings from friends and family allow an outlet for the bereaved to feel that their loss is not forgotten and, in some possibly comforting way, shared” (Morehouse & Crandall, 2014). “A critical affordance of online grief is the ability to craft individual responses to death in an open venue less constrained by still inchoate social and cultural obligations than a funeral home or cemetery” (Lingel, 2013).

## YouTube and documenting death

YouTube serves a similar function to private burial sites but acts as a more public forum to commemorate the dead, garnering interest from those who want to mourn to share their losses publicly and possibly creating communities based on certain kinds of loss (Sani, 2019). The creation of videos, posts, or other public forms of commemoration of the dead across various social media platforms are thought to carry a therapeutic effect for those grieving and serve a similar function to more traditional grieving methods (Sani, 2019). In videos on YouTube done to commemorate the deaths of young or stillborn children, photo before the stillbirth were often done in color while ones in the aftermath tended to be intentionally black and white (Sani, 2019).

A similar effect can be seen on the impact of documenting one's death to incite social movement or protest as in the case of many videoed slayings of minorities in the hands of police in the United States during the time of arrest. The video piecing together George Floyd's last moments and horrific murder at the hands of police was used to spur the Black Lives Matter movement further into the public dialogue, and the time of the video, "8:46," itself was used in videos of solidarity across all kinds of channels and content (Washington Post, 2020; Cut, 2020; Suicide Sheep, 2020). Another lesser known video that sparked outrage was the over three-hour long video footage taken from Aurora's police body cams of murder of Elijah McClain where police can be seen trying to cover up a murder in process while EMTs stand idly by (Aurora Police, 2019).

## Facebook

"Facebook, one of the most famous and used social networks on a world scale, in first months of 2018 had almost 2,2 billion active users each day and 30 million Facebook profiles belong to the deceased (extrapolation calculated with the data of the Center for Disease Control)" (Sani, 2019, p. 3). Facebook, along with other social media platforms, allows its users to communicate across the globe, and in many cases, becomes an essential part of people's lives in their contact with others, blurring the boundary of the virtual and real world (Catania-Opris, 2016). With only a valid email address required to make an account, Facebook offers a variety of functions targeted at communication that is cheap, casual, and easy (Catania-Opris, 2016). In the past, Facebook would delete accounts once notified of a person's death, but after receiving feedback from users, these accounts are now made into *virtual memorials*, allowing Facebook users to engage through commenting, sharing, and visiting the dead's Facebook page (Catania-Opris, 2016). "Facebook administrators were told outright that family and friends *needed* to visit the deceased individuals' pages so that they could continue writing the deceased messages on their Facebook pages and openly share memories about the deceased" (Catania-Opris, 2016). Lingel (2013) explains the need for virtual memorials:

When commenters stressed a need to maintain access to a friend's page after death, they can be understood as desirous of a platform for the continued display of care. These displays can furthermore be read as straddling both private and public rituals of mourning, where there is an interest both in archiving previous records of signaled care and in having a space for collective grief. This invocation of familiarity is important in that Facebook is the habitual site for interaction with friends, and by extension the logical space for responding to a user's passing,



contrasted with the sense of alienation from the traditional, physical sites of mourning, such as a cemetery (p. 193).

## **Grief and inequalities: Race and gender**

### *Race*

Context matters in grieving. It is dictated by culture, ethnicity, religion, location, economic status, gender, and age (Granek & Peleg-Sagy, 2015). “All cultures have developed methods for adaptive coping, grief, and mourning. Subsequently, a lack of sensitivity to these practices by health care professionals may interfere with the necessary grieving processes” (Clements et al., 2003). “Individuals and communities with immigrant, minority, and indigenous backgrounds may be particularly affected by cultural dominance and its association with historical trauma, loss, and grief through generations. [...] Specifically, individuals from immigrant, minority, or indigenous groups may experience cultural incongruity arising from dissimilarity between the beliefs, expectations, and practices in the culture of origin and the dominant culture” (Smid et al., 2018).

Traditional Latino families, for instance, expect women to openly and loudly grieve, while men are encouraged to “be strong” for their families (Clements et al., 2003). Since many Latino families are also Catholic, many burial customs and practices revolve around a belief in the afterlife, and rituals of grief may express belief in a continued relationship to the dead (Clements et al., 2003).

Native Americans’ colonial experiences affect the many differing expression of grief and mourning and cannot be simply summed up into one (Clements et al., 2003). Personal beliefs, the extent and nature of family support, and the status of the deceased in the community affect Native American mourning practices. Tribes may be matriarchal, bilinear, or patriarchal, but in all tribes, the wisdom and experience of elders are honored and respected. In each family or clan, one elder may be designated as the final decision maker (Clements et al., 2003).

On the other hand, African American funerals are more likely to emphasize a celebration of a person’s life, emphasis on the importance of extended family and community, and continue for a considerable time longer than traditional Western funerals (Clements et al., 2003). An extensive history of struggle involving oppression, racism, and systemic poverty has characterized how the African American community views and faces death and grief (Boulware & Bui, 2016). “African Americans have historically lived within a social structure that differentially allocates social resources, opportunities, and rewards on the basis of race” (Boulware & Bui, 2016). Rejecting traditional notions of grief that pathologize and medicalize it, Anne Anline Cheng, a critical race theorist, coined the term “racial melancholia,” to label the feelings of grief that arise from racial discrimination and exclusion that further complicate grief experienced at the loss of a loved one (Clarke, 2017). Reinaldo Walcott (2013) summed it up: “To be black is to be intimately acquainted with mourning. From the trauma of slavery to the violence wrought by racism... ‘Death is not ahead of blackness as a future shared with other humans; death is our life, lived in the present’” (p. 96). The leading causes of death for African American children 1 through 19 are homicide and unintentional injuries, which means their mothers often experience direct trauma from abuse and

crime alongside the unexpected loss of their children (Al'Uqdah & Adomako, 2018). Facing the likelihood of multiple or compounded traumatic experiences, expressions and experiences of grief are unique among African American mothers (Al'Uqdah & Adomako, 2018). In African American communities, motherhood does not just involve biological children but also a responsibility that extends to other children in the community and comradery with other mothers that also extends out and plays into their role in grief (Al'Uqdah & Adomako, 2018). With a history of oppression and inequality in America, death in the African American community can prove to be a galvanizing force for political action against systemic injustice, oversight, and discrimination (Al'Uqdah & Adomako, 2018). Political and public action can act as one of the key ways that African American mother "make meaning" following their loss (Al'Uqdah & Adomako, 2018). "Moving grief to the public sphere to be shared by others allows for agency. This sense of agency is significant in the healing process of African American mothers" (Al'Uqdah & Adomako, 2018).

Online grief can also act as a resource or catalyst for social action if the cause or circumstances surrounding a death are linked to medical or social issues (Mitchell et al., 2012). An increase in political and public activity following a loss is termed "political mourning" and uses the grief of everyday citizens to mobilize for the sake of social accountability and change (Al'Uqdah & Adomako, 2018). "Political mourning asserts that grief and its public expression has social and political implications for the individual and for the marginalized group" (Al'Uqdah & Adomako, 2018). Activism can help individual's psychological well-being by linking them to a larger community or society with active goals that then empower them in a situation where they may feel powerless (Al'Uqdah & Adomako, 2018).

### *Sex and Gender*

Women are by far overrepresented in creating and maintaining virtual memorials and online public grief. Traditionally there are many cultural practices which associate public grief and care of the dead with women along with work that women do to preserve family records in more modern times such as photo albums and scrapbooking (Mitchell et al., 2012). "Mothers have more and durable expression of their sensibility due to young child mourning than fathers, thus generating an increased and explicit need for support and sharing" (Sani 2019). Women tend to show more visible signs of grief than men and are more likely to be diagnosed with a grief disorder than men (Granek & Peleg-Sagy 2015).

After a loss, women tend to report having more perceived and actual social support than men who tends to have higher levels of loneliness and depression compared to women (Stelzer et al., 2019). "Men's decreased opportunities for social support may, in turn, be related to them being less forthcoming about their emotional experiences, and thus making fewer references to emotions and social processes in their grief narratives" (Stelzer et al., 2019).

Among queer community, coming to terms with grief can be a reflection on a complicated interwoven relationship between grief that is experienced in everyday life through ongoing social exclusion and failure to meet social norms and expectations (Clarke, 2017). When one's status is questioned and erased in society, it is much harder for one's grief to be recognized much less understood (Clarke, 2017). "Death haunts queerness, too, through ongoing individual and state homophobic violence as well as the spectre of HIV/AIDS" (Clarke, 2017). People across the

LGBTQIA+ community are more susceptible to a variety of life-threatening conditions that are more common with age. Lesbians are at more risk for breast and endometrial cancer, while gay and bisexual men are at more risk for Hodgkin's disease, and transgender people are more likely to have cardiovascular issues and diabetes (Cartwright et al., 2012). Within the queer community, there is a legacy of loss from AIDS and HIV, which despite advances in medical science, has left its mark. People who survived or were heavily connected to those implicated may suffer from survivor's guilt and struggle with long term damage of their self-esteem and mental health (Cartwright et al., 2012). Queer people also struggle more with having good social networks to rely on in old age, with losses in their own community and rejection from the dominant culture that leave them more vulnerable (Cartwright et al., 2012).

Queer people face many barriers within the healthcare system and in end of life care, where they can feel pressured or threatened by heteronormative and cisgender ideals alongside outright discrimination. There is often an oversight to provide a LGBTQIA+ friendly environment within care and there are risks associated with even asking or disclosing information about one's identity to healthcare providers (Cartwright et al., 2012). Direct or expected discrimination is also a barrier to care. Many transgender people in small towns choose to not access local services over concerns of discrimination, and there are notable examples of many queer and trans people choosing to live in their own communities outside traditional care to avoid potential conflict (Cartwright et al., 2012). Transgender people face particular complications within healthcare as they risk being humiliated and rejected by healthcare providers and family in end-of-life care and death. One transwoman, who lived her life as such yet never had sex reassignment surgery, was forced to live as a man in her religiously run care home. Many trans people struggle to explain their situation and needs to people providing them with care (Cartwright et al., 2012). Disenfranchised grief, grief where the loss is erased or not perceived as legitimate by society, is also more common in the queer community where same-sex relationships are often not recognized by healthcare professionals and family alike or not acknowledged as having a choice or impact in end-of-life care (Cartwright et al., 2012). Being "in the closet" further complicates navigating disenfranchised grief where any kind of public grief or recognition is out of the question and having one's real wishes recognized in end-of-life care and death are next to impossible (Cartwright et al., 2012).

In the COVID-19 pandemic, the LGBTQIA+ community is faced with compounded issues of discrimination and grief (Jean-Charles, 2020). In a national survey taken by the Center for American Progress, a research organization in Washington, D.C., 8% of lesbian, gay, and bisexual adults reported that a health care provider had refused to see them for their queer identity while that number was 29% for people who identified as transgender (Jean-Charles, 2020). LGBTQIA+ people often live in states with high population density such as California, New York, and Washington where they are hit harder by job loss and other economic factors (Jean-Charles, 2020). This leaves them struggling with high rates of unemployment, homelessness, and food insecurity on top of increased rates of health issues stemming from bias. Scout, a trans activist working for an LGBT cancer nonprofit in New York, says:

Imagine if you were in New York City, and you're queer and your partner gets COVID. Your closest hospital might be that one in Central Park that is very anti-LGBT. Can you imagine what kind of fear you might have to send your partner to the hospital knowing you couldn't

visit them again, right, because you can't visit the hospitals. And you can't be there to protect them and to make sure that they get the kind of care they deserve (Jean-Charles, 2020).

Although many states collect data about COVID-19 relating to age, race, and ethnicity, the same cannot be said of sexual orientation and gender identity (Jean-Charles, 2020). Data about the LGBTQIA+ community often comes from activists and organizations who seek to explore the rates of COVID-19 within the community as well as health care disparities stemming from discrimination from medical providers, including being turned away as a direct result of their sexual orientation and gender (Jean-Charles, 2020).

## **Methodology**

### ***Research design***

A mixed methods approach will be used to explore gendered grief performance during the COVID-19 pandemic and the racial unrest after a much-shared videos and coverage of the killings of George Floyd, Ahmaud Arbery, Breanna Taylor, and many others sparking nationwide protest. Mixed methods research uses strengths of qualitative and quantitative data or differing kinds of qualitative data to explore multiple sides and perspectives of the subject being researched (Shorten & Smith, 2017). In this study, both surveys and interviews will be used to evaluate grief and its performances in regard to gender and race.

### ***Participants***

*Survey Participants:* Participants in this research will be students from a liberal arts college, Lee University, taken from the overall student body. And estimate of 500 students will be randomly selected and recruited from core classes across campus. This selection will give this research a pool of representation for the entire student population. Taking the survey is purely voluntary.

*Interviews and focus groups:* Recruitment for interviews and the focus group will be primarily selective sampling from various student groups on campus such as fraternities, sororities, student service clubs, culture clubs, and minority clubs (Black Student Union, Asian Council, etc.). Like the survey, participation in the interviews and focus group will be completely voluntary. Participants in these processes will be identified with the assistance of gatekeepers. In qualitative research, gatekeepers are used to assist the researcher in gaining access and developing trust with the community being studied (Hatch, 2002). As a student of the said university, I personally knew people who have direct connection to many of the student organization leaders and members. These gatekeepers will get in contact with the group that meets the criteria and ask them if they would be interested in participating in the study. If they agree, the gatekeeper will schedule for me to do a "virtual meeting" via ZOOM technology where I will explain to them the purpose of the study and what their participation will entail. The gatekeeper will also be present during this meeting. For this study, data will be collected in the form of semi-structured interviews, a non-participant observation, collection of documents, and a reflective journal.

### **Data**

#### ***Quantitative:***

Data for this study will be taken from a 44-item "Grief Scale" questionnaire developed from previous research to measure experiences of grief and loss (Theut et al., 1991; Prigerson et al., 2008). The previous scales were adapted to measure grief in relation to social media and news

during the pandemic. The questionnaire has three sections, the first uses a 5-point measuring scale, the second is short answer, and the last is open-ended questions looking at the demographics of the participants (Theut et al., 1991; Prigerson et al., 2008). The first 5-point scale, points 1-28, offers statement to which the participant can “agree” or “disagree” using the points on the scale: “1 = Strongly disagree”; “2 = Disagree”; “3 = Somewhat Agree”; “4 = Agree”; and “5 = Strongly Agree” (Theut et al., 1991). The second section, points 29-40, offers open-ended questions asking about social media use. The third section, points 41-44, ask the participants open-ended questions to gather basic demographic information.

#### *Qualitative:*

The qualitative part of this study will be conducted using interviews, focus groups, documents, and reflective journal.

*Interview:* This study will use a semi-structured questionnaire to provide the most openness for the interviewee. Questions will be developed based on relevant information regarding grief and personal experience within the pandemic. Participants will be asked to give permission for an audio recording of the interviews in question and for notes to be taken during the interview. Timing of the interviews will largely be up to the discretion of the interviewee but will aim for lasting about 30 minutes. The interviews will be carefully transcribed and compiled onto a Word document and double checked by the researcher to ensure the authenticity of the transcription where it will then be analyzed. During the interviews, participants will be reminded that breaks are allowed if they feel the need to do so. They will also be informed that to protect their identity, they need to provide a pseudonym to the researcher. Each participant will be provided a consent form in English and told that they might withdraw from the study at any time.

*Documents:* Documents gathered for this study will include news items, video, and pictures that show grief and reactions to the COVID-19 pandemic. This will be a collection of a larger discourse that represents grief during the time of pandemic.

*Reflective Journal:* The last form of data will be keeping a reflection journal and field notes for the researcher to describe their feelings about conducting research in this area. This will add rigor to the qualitative inquiry as an investigator so that they can record their own reactions, assumption, expectation, and biases about the research process. These field notes will provide additional data for analysis.

### **Data analysis**

#### *Quantitative:*

This data will utilize SPSS for Windows 15.0. The significance or alpha level for all analyses will be .05. It is important to address the validity and reliability of the instrument. Pearson product-moment correlations will be computed to provide evidence of convergent and discriminant validity of the instrument. The reliability analysis is a measure of internal consistency and determines if individuals are responding consistently across items.

A MANOVA will be conducted to examine the differences of male and female in their gender expression and racial categories. A separate 2 x 2 ANOVA will also be completed to examine the differences on the instrument based on gender and degree of grief. A composite variable will be created for each person in the sample by computing the sum of each individual's item scores. This score will be based on items retained from the original instrument. The last step in the analysis will determine significant variance in COVID-19 and the disenfranchised grief of

racial injustice. A multiple regression will be used to examine this prediction using the two variables of grieving composite score in racial injustice and COVID-19.

#### *Qualitative:*

The researcher will transcribe all interviews, documents, journal entries, and field notes. The process of transcribing allows the researcher to become acquainted with the data (Reissman, 1993). The researcher will create Microsoft Word files for the interview, observations, documents, and journal entries. All files will be protected by setting a password and saved in the researcher's portable computer that only they have access to. The researcher will use the meaning of analysis context as the unit of analysis for coding and also look for description. This means that the data will not be coded sentence by sentence or paragraph by paragraph but coded for meaning. The researcher will use the qualitative software Atlas.ti 4.52 program for data management and analysis. This study will look for emerging themes grounded from the qualitative data in looking how grief are expressed and performed during the time of pandemic. For the thematic analysis, the researcher will follow Braun and Clarke's (2006) step-by-step guidelines. The authors used the word "guidelines" to highlight the flexibility of this qualitative analytic method. These guidelines are (1) familiarizing yourself with your data, (2) generating initial codes, (3) the researcher thoroughly reads each transcript to immerse themselves in the data, (4) reviewing themes, (5) defining and naming themes, and (6) producing the report (Braun & Clarke, 2006). For this qualitative study, the researcher will follow merging findings procedure. According to Stake (2006), the researcher whose priority is to merge the findings across cases should use this particular method. This method also allows the researcher to make generalizations about the cases.

#### *Validation Strategies*

As the area of qualitative research increases, social and behavioral scientists critique the validity of studies that use qualitative methodology. Thus, qualitative researchers utilize various validation strategies to make their studies credible and rigorous (Creswell & Miller, 2000). Credibility for this study is achieved using the validation strategies of *triangulation*, *researcher reflexivity*, *thick rich description*, and *peer debriefing*. The data will be triangulated with the various forms of data collected in the study (i.e., interviews, documents, reflective journal entries, and field notes). Thick rich description will be achieved by presenting the participants' voices under each theme and by providing detailed description of each of the cases. Finally, the researcher will inquire the assistance of fellow debriefer (i.e. faculty mentor). This individual is familiar with qualitative data analysis.

## References

- Al'Uqdah, S., & Adomako, F. (2018). "From mourning to action: African American women's grief, pain, and activism." *Journal of Loss & Trauma*, 23(2), 91–98. <https://doi.org/10.1080/15325024.2017.1393373>
- Aurora Police. (2019). "Body worn camera regarding the in-custody death of Elijah McClain." Retrieved July 4, 2020, from <https://www.youtube.com/watch?v=q5NcyePEOJ8>
- Asmundson, G. J. G., & Taylor, S. (2020). "Coronaphobia: Fear and the 2019-nCoV outbreak." *Journal of Anxiety Disorders*, 70, 102196. <https://doi.org/10.1016/j.janxdis.2020.102196>
- Bellet, B. W., LeBlanc, N. J., Nizzi, M.-C., Carter, M. L., van der Does, F. H. S., Peters, J., Robinaugh, D. J., & McNally, R. J. (2020). "Identity confusion in complicated grief: A closer look." *Journal of Abnormal Psychology*, 129(4), 397–407. <https://doi.org/10.1037/abn0000520>
- Berns, N. (2011). "Framing grief beyond closure." In *Closure* (pp. 161–172). Temple University Press; JSTOR. <https://www.jstor.org/stable/j.ctt1bw1jks.13>
- Blake, J. (2020). "Black parents wonder if 'the talk' is still effective in keeping their children safe"—CNN. Retrieved June 4, 2020, from <https://www.cnn.com/2020/05/29/us/black-parents-children-safety-talk-blake/index.html>
- Braun, V., & Clarke, V. (2006). "Using thematic analysis in psychology." *Qualitative Research in Psychology*, 3(2), 77–101
- Butler, J. (2009). "Frames of war: When is life grievable?" Verso.
- Boulware, D. L., & Bui, N. H. (2016). "Bereaved African American adults: The role of social support, religious coping, and continuing bonds." *Journal of Loss & Trauma*, 21(3), 192–202. <https://doi.org/10.1080/15325024.2015.1057455>
- Captari, L. E., Riggs, S. A., & Stephen, K. (2020). "Attachment processes following traumatic loss: A mediation model examining identity distress, shattered assumptions, prolonged grief, and posttraumatic growth." *Psychological Trauma: Theory, Research, Practice, and Policy*. <https://doi.org/10.1037/tra0000555>
- Cartwright, C., Hughes, M., & Lienert, T. (2012). "End-of-life care for gay, lesbian, bisexual and transgender people." *Culture, Health & Sexuality*, 14(5/6), 537–548.
- Catania-Opris, C. (2016). "Social grief: A grounded theory of utilizing status updates on Facebook as a contemporary ritual." 124.
- CDC. (2020). "Coronavirus disease 2019 (COVID-19) in the U.S." Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html>
- Clarke, M. P. (2017). "Parade of champions: The failure of black queer grief." *Transition*, 124, 91–98. JSTOR. <https://doi.org/10.2979/transition.124.1.20>
- Clements PT, Vigil GJ, Manno MS, Henry GC, Wilks J, Das S, Kellywood R, & Foster W. (2003). "Cultural perspectives of death, grief, and bereavement." *Journal of Psychosocial Nursing & Mental Health Services*, 41(7), 18–43.
- Creswell, J.W. & Miller, D.L. (2000) "Determining validity in qualitative inquiry; Theory into practice." 39, 124-130.

- Cut. (2020). "I can't breathe | Cut." Retrieved July 4, 2020, from <https://www.youtube.com/watch?v=5a2fns5w8bU>
- Earle, H. E. H. (2017). "Rituals, mourning, and grief." In *Comics, Trauma, and the New Art of War* (pp. 55–74). University Press of Mississippi; JSTOR. <https://doi.org/10.2307/j.ctv5jxpjw.7>
- Granek, L., & Peleg-Sagy, T. (2015). "Representations of African Americans in the grief and mourning literature from 1998 to 2014: A systematic review." *Death Studies*, 39(10), 605–632. <https://doi.org/10.1080/07481187.2015.1047059>
- Grover, S., Dua, D., Sahoo, S., Mehra, A., Nehra, R., & Chakrabarti, S. (2020). "Why all COVID-19 hospitals should have mental health professionals: The importance of mental health in a worldwide crisis!" *Asian Journal of Psychiatry*. <https://doi.org/10.1016/j.ajp.2020.102147>
- Hatch, J.A. (2002). "Doing qualitative research in educational settings." Albany, NY: SUNY Press.
- Hazen, M. A. (2008). "Grief and the workplace." *Academy of Management Perspectives*, 22(3), 78–86. JSTOR.
- Jean-Charles, P. (2020) "Coronavirus: LGBTQ Americans face discrimination, racism amid crisis." Retrieved June 4, 2020, from <https://www.usatoday.com/story/news/nation/2020/05/09/discrimination-racism-fuel-covid-19-woes-lgbtq-americans/3070036001/>
- Lingel, J. (2013). "The digital remains: Social media and practices of online grief." *Information Society*, 29(3), 190–195. <https://doi.org/10.1080/01972243.2013.777311>
- Milman, E., Neimeyer, R. A., Fitzpatrick, M., MacKinnon, C. J., Muis, K. R., & Cohen, S. R. (2019). "Prolonged grief and the disruption of meaning: Establishing a mediation model." *Journal of Counseling Psychology*, 66(6), 714–725. <https://doi.org/10.1037/cou0000370>
- Mitchell, L. M., Stephenson, P. H., Cadell, S., & MacDonald, M. E. (2012). "Death and grief on-line: Virtual memorialization and changing concepts of childhood death and parental bereavement on the internet." *Health Sociology Review: The Journal of the Health Section of the Australian Sociological Association*, 4, 413.
- Morehouse, K. J., & Crandall, H. M. (2014). "Virtual grief." *Media Development*, 61(3), 16–19.
- O'Connor, M.-F. (2019). "Grief: A brief history of research on how body, mind, and brain adapt." *Psychosomatic Medicine*, 8, 731. <https://doi.org/10.1097/PSY.0000000000000717>
- Ord, R. L. (2009). "It's like a tattoo: Rethinking dominant discourses on grief." *Canadian Social Work Review / Revue Canadienne de Service Social*, 26(2), 195–211. JSTOR.
- Parker, G. (2013). "Opening Pandora's box: How DSM-5 is coming to grief." *Acta Psychiatrica Scandinavica*, 128(1), 88–91. <https://doi.org/10.1111/acps.12110>
- Pies, R. W. (2020). "Care of the soul in the time of COVID-19." *Psychiatric Times*, 37(5), 16–17.
- Prigerson, H. G., Vanderwerker, L. C., & Maciejewski, P. K. (2008). "Prolonged grief disorder (PG-13)." *PsycTESTS Dataset*. doi: 10.1037/t67680-000
- Rae, P. (2006). "On mourning: Theories of loss in modern literature (review)." *Modernism/Modernity*, 13(2), 405–407. <https://doi.org/10.1353/mod.2006.0050>
- Real, J.A.D., Samuels, R., Craig, T. (2020) "How the Black Lives Matter movement went mainstream." *The Washington Post*. Retrieved June 10, 2020, from



- [https://www.washingtonpost.com/national/how-the-black-lives-matter-movement-went-mainstream/2020/06/09/201bd6e6-a9c6-11ea-9063-e69bd6520940\\_story.html](https://www.washingtonpost.com/national/how-the-black-lives-matter-movement-went-mainstream/2020/06/09/201bd6e6-a9c6-11ea-9063-e69bd6520940_story.html)
- Riessman, C. K. (1993). "Qualitative research methods." Vol. 30. Narrative Analysis. Sage.
- Sani, L., Laurenti Dimanche, A.-C., & Bacqué, M.-F. (2019). "Angels in the clouds: Stillbirth and virtual cemeteries on 50 YouTube videos." *Omega*, 30222818824732. <https://doi.org/10.1177/0030222818824732>
- Shorten, A., & Smith, J. (2017). "Mixed methods research: Expanding the evidence base." *Evidence-Based Nursing*, 20(3), 74–75. <https://doi.org/10.1136/eb-2017-102699>
- Smid, G. E., Groen, S., de la Rie, S. M., Kooper, S., & Boelen, P. A. (2018). "Toward cultural assessment of grief and grief-related psychopathology." *Psychiatric Services*, 69(10), 1050.
- Stake, R.E. (2006) "Multiple case study analysis." The Guilford Press, New York
- Stelzer, E.-M., Atkinson, C., O'Connor, M.-F., & Croft, A. (2019). "Gender differences in grief narrative construction: A myth or reality?" *European Journal of Psychotraumatology*, 10(1). <https://doi.org/10.1080/20008198.2019.1688130>
- Stratton, J. (2018). "Death and the spectacle in television and social media." *Television & New Media*, 21(1), 3–24. doi: 10.1177/1527476418810547
- Suicide Sheep. (2020). "Curator blackout—#BlackLivesMatter." Retrieved July 4, 2020, from <https://www.youtube.com/watch?v=xrQ32qsvMQk&t=3s>
- Theut, S. K., Jordan, L., Ross, L. A., & Deutsch, S. I. (1991). "Anticipatory grief scale." *PsycTESTS Dataset*. doi: 10.1037/t66647-000
- Verma, N., & Neimeyer, R. A. (2020). "Grief and growth: An appreciative journey." *AI Practitioner*, 22(2), 5–10. <https://doi.org/10.12781/978-1-907549-43-4-1>
- Wallace, C. L., Wladkowski, S. P., Gibson, A., & White, P. (2020). "Grief during the COVID-19 pandemic: Considerations for palliative care providers." *Journal of Pain and Symptom Management*. <https://doi.org/10.1016/j.jpainsymman.2020.04.012>
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., McIntyre, R. S., Choo, F. N., Tran, B., Ho, R., Sharma, V. K., & Ho, C. (2020). "A longitudinal study on the mental health of general population during the COVID-19 epidemic in China." *Brain Behavior and Immunity*. <https://doi.org/10.1016/j.bbi.2020.04.028>
- Washington Post. (2020). "The death of George Floyd: What video shows about his final minutes." Retrieved July 4, 2020, from <https://www.youtube.com/watch?v=FMGUAHBFmjk&t=150s&bpctr=1593898658>
- WHO (2020). "Coronavirus disease 2019." Retrieved May 2, 2020, from <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
- Yancy, G. (2020). "Judith Butler: Mourning is a political act amid the pandemic and its disparities." Truthout. Retrieved May 16, 2020, from <https://truthout.org/articles/judith-butler-mourning-is-a-political-act-amid-the-pandemic-and-its-disparities/>

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## The Correlations of Nonprofit Organization Worker and the Demographics of the Community they Serve

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## Abstract

*The study conducted illustrates the characteristics of the employees that work in a not-for-profit agency to the demographics of the community that they serve. The characteristics that were sought to find are the educational and experiential backgrounds that the employees portray: the way that non-profit agencies operates to serve the community, briefly describe challenges that the nonprofit sector faces, describe the importance of attaining knowledge, the structure of the nonprofit organization and the role of the leadership team. The results illustrate that the nonprofit management to an extent reflects upon the community that the organization serves.*

**Keywords:** Nonprofit Organization, Professional training, leadership, board of directors, funding, mission, knowledge, structure

## Introduction

The main goal of a non-profit organization is to carry forth its mission to serve the community. The people in the community depend on the services that the nonprofit agency provides. A nonprofit organization is an organization that obtains funds to help the goals and objectives of the organization, often set forth by a board of directors. A nonprofit organization does not obtain profit for the owners or shareholders. Each nonprofit agency or organization offers a variety of purpose and characteristics and differs from any other entities that are in the business sector.

In order to achieve the mission intended, the management sets regulations in place to help the employees in their perspective program. Moreover, the board of directors appoints an executive director to oversee the nonprofit agency which also helps the employees to be efficient in such programs. Additionally, the board of directors is challenged to ensure the developing needs of the organization and updated training for the board members. The executive director then puts in place the team members to help the cause of the nonprofit organization. There is an official nonprofit organizational structure that the board of directors needs to approve prior to the opening of the organization as well as a memorandum of understanding. A memorandum of understanding asserts the expectations that each partner should hold. The purpose is to eliminate any misunderstanding that may arise and the responsibilities that each person has in the operations of the organization.

Nonprofit management differs from the other forms of public administration and requires a different educational approach (Cantrell-Bruce & Blankenberger, 2015). The difference is that the nonprofits are required to follow the guidelines that the sponsors set forth to maintain the funding. The organizations also have to follow policies that the laws ordain in order to be recognized as a nonprofit organization. Nonprofits must achieve their mission goals as well as maintaining a healthy financial stability. Rojas (2000) stated that, "In the past, the nonprofit sector has encountered significant organizational pressures, financial challenges, and new demands and has confronted significantly more difficult business conditions. At the same time, the demand for their services continues to increase" (p. 101).

A useful tool to search updated data about nonprofits is to use the online directory, GuideStar (guidestar.org, 2020). Once an organization is searched, GuideStar provides relevant information about the nonprofit. Guide Star also provides a summary of the programs, operations, and the involvement of the board of directors. The programs that the nonprofit implements help them continue to thrive to make an impact in the community. The government utilizes the nonprofit sector to engage in the community, deliver services that are available to anyone, and create

capacities within the sector. Some nonprofit organizations have become an essential part of the government. Van Slyke (2006) stated, “social services are complex services for which government may have some expertise but often requires additional expertise that it must either hire or contract for in order to treat and serve clients” (p. 3).

In order to aid in the nonprofit mission, the importance for the employees to have compassion for all the individuals that they serve is crucial. Employees that move up the organizational structure believe that they can make a difference in coworkers as well as the people that they serve. Most of the workers were interested in the new opportunities and to have a leadership role. In general, the nonprofit sector would hire an individual that has experience in the field and passion over an individual who only has certification. Sixty-one percent of workers stay at the first agency that hired them for their entire careers (Collica-Cox, 2016).

Nonprofits also are essential for pursuing social change and preserving the most important values in society (Worth, 2009). In nonprofit management, new positions open and the existing employees apply for the new position. The existing staff move up the organizational structure of the nonprofit and there is minimal training for the new position. Most of the skill is learned through situations or scenarios.

There have been significant changes in the nonprofit sector. The constant changes make it difficult for the staff to perform their obligations according to the research conducted by Jettner & Brown (2014). The significant changes found in the nonprofit sector are due to the policy environment and the economic downturn that occurred in 2008. (Jettner & Brown, 2014). Jettner & Brown (2014) stated, “it is no secret that ‘change’ appears to be the only constant in the nonprofit sector. The field has changed dramatically over the past several decades, largely due to broad societal factors” (p. 5). The employees stress over the new policy and the notation of the decreased participation of the community that they serve. Young employees often overlook the benefits whereas the individuals that make a career in the nonprofit sector often rely on their relatives or spouses for additional resources. If an individual does not have the financial safety net, then the individual’s life situation can decline and leave the individual in a dire situation. The vitality to maintain the employees in the nonprofit sector has a tremendous impact on society. Connolly stated that “nonprofit organizational capacity is multifaceted and continually evolving.”

“Knowledge is power!” Knowledge is essential in any aspect of the business sector and can provide better opportunities to individuals. Knowledge in the specific field can increase professional development as well as individual advancement (Loveridge, 2004). Honing existing skills can develop cognitive attributes that can help with the operations of the nonprofit organization. The job and educational training for the youth is effective in developing professional skills. The process of policy making is vital to know all the information and utilize the knowledge in the best outcome. Knowledgeable gains have a profound impact through advocational forces (Stone, 2002). Knowledge makes an individual self-empowered to progress in society. When knowledge is applied correctly, knowledge transitions to wisdom. Knowledge is cumulative and is progressively growing to help people in their prospective fields. Knowledge can also enhance the cognitive skill of problem solving for the individuals that work in the nonprofit sector. There is value in learning and attaining knowledge. Siemens (2006) stated that “all knowledge is information, but not all information is knowledge” (p. 6). The desire of knowledge is always growing, and people are curious about how certain things came to be. Knowledge has either been defined as qualitative or quantitative (Siemens, 2006). Learning is interconnected with knowledge.

An individual should work with knowledge characteristics rather than a preconceived perspective. Knowledge is intended to enlighten individual's mind an organizational rather than structural way.

The purpose of this research is to obtain the educational background of the constituents in the nonprofit sector in Alabama and understand the various challenges that the organization faces. Another aspect of this study is to understand the importance of additional trainings for staff as well as the management team and to understand the role of volunteers in the nonprofit sector. Subsequently, this study also obtains data of the demographics of the community that the nonprofit organizations serve.

### **Literature Review**

The nonprofit sector in America is complex and large. There are "1,774,177 organizations in the United States that fall under the Internal Revenue Code section 501 (c)(3)" (IRS, 2019). In Alabama, there are "23,095 organizations that are tax exempt" (IRS, 2019). The United States nonprofit sector employs eleven million people. In any business sector, there has to be efficient managers that can enable the workers to their full capacity.

Nonprofit organizations face many challenges and effective leadership is critical for their survival (Michael et al, 2011). In Michael's (2011) article, he discussed that in the past decade, there is a need of additional training for managerial leadership and that opportunities are scarce. It is apparent that several non-profit organizations provide limited training for managers (Michael et al, 2011). There has been development of training programs for the senior and middle manager to help enhance their capacities in leadership. Burlingame (2009), stated that the "role of leadership was envisioning goals, affirming values, motivating, managing, explaining, serving as a guide and representing the organization externally" (p. 2). The role of leadership is more than just the basic responsibilities that the board lays out, but as Burlingame (2009) mentions, the role of leadership is the representation of the organization both externally and internally.

Based upon the needs assessment, the results illustrated that strategic leadership is lacking among the managerial and the executive staff (Jettner & Brown, 2014). Jettner's (2014) research sought to find the challenges that the nonprofit organization faced as well as adapting to changing contexts. Some of the participants in Jettner's (2014) research reported that the board and the executive lacked strategic management. There must be a training that illustrates how nonprofit leadership can utilize strategic management as well as implementing the teachings in the operation. Paton (2007) asserted that, "There has been a growing recognition that managers have to be capable of making sense of and dealing with complex, fast-changing, and ambiguous situations that involve not just rational management approaches but also new ways of thinking and engaging with the 'emotional' life of organizations" (p. 7). The nonprofit sector has grown and has a need for a more in-depth educational training. Leadership development requires leaders to be able to self-manage, see the broader context, take responsibility for actions taken, and to operate in the organization's own standards (Kegan, 1994).

One of the main challenges a nonprofit organization faces is that of funding. The needs of the people in the community continues to increase as the funding decreases. Sometimes nonprofit organizations compete for funds with other nonprofit agencies due to limitations of funds. The revenue for nonprofit agencies is irregular and limited. The sources that some nonprofits depend on are dwindling as time passes. An example would be the fundraising events that an organization would host in hopes of soliciting funds. The dependency on donors is an issue found in nonprofit

organizations. Sometimes the allocation will be based upon the importance of the services that each nonprofit offers. The decision ultimately comes down to what the sponsor believes is important and the priority that the service may hold.

The idea that an organization's structure and survival depend on the resources they have and the relationships with the external association is called the resource dependence theory. The theory was first introduced by Salancik and Pfeffer in 1978 (Hodge & Piccolo, 2005). Each source that the nonprofit utilizes for the organization's funding consists of the resource dependency theory. Sources of revenue are private contributions, public support, and private sector payments (Hodge & Piccolo, 2005). The private contributions for nonprofits generally fluctuate every year. Due to the fluctuation, the uncertainty with private contributions being the primary source of revenue is unsure.

The most stable out of the sources is government funding, but even then, it is uncertain. Sometimes the funds are delayed, and the organization will be in uncertainty. Most of the government funding is reimbursement based, which means that the agency must spend the money first before they can get the money back. Some agencies do not have that money in their reserve and must scramble to find the money. Hodge and Piccolo (2005) stated that "CEOs of organizations funded by the government tend to structure administrative activities to fulfill the obligations of grant renewal rather than to facilitate fundraising through the board" (p. 175). Some of the donors or sponsors would require the nonprofit to report on service delivered, the financials, and the administrative work. Each source of revenue has various levels of advantages and risks, the agency would adjust the strategy to meet the requirements that the sources outline.

A study of the involvement of the board of directors improved the operating performance of the agency (Hodge & Piccolo, 2005). With increasing help from private institutions in the nonprofit sector, the skills and knowledge obtained through training will equip the rising nonprofit professionals. Blalack (2016) states that the "organization that does not remain aligned with their initial goals and mission poses the risk of losing its original contributors" (p. 5).

Some organizations will struggle with delayed funds from the contracts that they have and must rely on their reserve. Soliciting funds to the same cooperation will be taxing for that company and they will eventually stop contributing to the organization. Soliciting funds will seem as though the only reason that the organization reaches out to the company, while the contrary is what the organization is looking for.

The lack of funding in the nonprofit sector prevented the agencies to hire qualifying individuals for the executive positions. Due to the lack of skilled personnel the agencies are having difficulties with fiscal challenges (Jettner & Brown, 2014). Maintaining the skilled staff that is already in the organization is also a challenge faced. When the employees stay with the non-profit organization, they often must obtain a second job in order to make ends meet (Rendon, 2019). Often, the salaries are low, the benefits are lacking, and there is minimal training for professional development. In most nonprofits there is not even a retirement plan that the employees can utilize for their benefits. Ensuring that the organizations report their program efforts only once rather than duplicating the number on another program has also been a challenge. Volunteers for the nonprofit sector has diminished throughout the years. The cause of the change in volunteers is due to retirement for the older generation being pushed farther and the middle generation is consistently working. Rendon (2019) stated, "this generation of young nonprofit workers is different from those of years past. With higher levels of student-loan debt, they are less likely to put up with low pay and

a dearth of opportunities to build their professional skills and advance. They switch jobs with greater frequency than previous generations, sometimes forsaking nonprofits entirely” (p. 6). Volunteers motivate the employees and have a complementary mission to help the community.

Grant writing is essential to the nonprofit sector due to the opportunity to gain more funding for their cause. Sadly, not many organizations have individuals that are skilled in grant writing. Grant writing was deemed as the most valuable resource that is not financial. Since the funding for nonprofits has become competitive, grant writing is an essential skill for any nonprofit organization. It is imperative that the organization manages the grant funding without sacrificing its mission (Dolnicar & Lazarevski, 2008). According to Dolnicar (2008), there has been scarce research in the public sector of nonprofits but extensive research in the large nonprofit organizations about grant writing. Block Grants, grants that can be utilized for a broader function, can be utilized to support program activities (Keyes et al, 1996). Multiple nonprofits will compete for the same program. A solution for undercapitalization is fundraising and honing the grant writing skills (Hopkins & Hyde, 2002). Grant writing is utilized for stating how an agency would allocate the funds, the plan for the specific program, and how to achieve the desired objective. Grant writing is a skill that many individuals strive to perfect in doing so they obtain more funds for their organization. Grant writing helps reflect the arduous work that the nonprofit puts into the structure and planning of the specific goals outlined. Grants are guaranteed once approved while private contributions fluctuate. The difficulty to write grants close to the deadline will rush the proposal and will lack editing. One huge factor that can affect the grant writing is rejection. The substance and the length of the grant proposal will have to illustrate the precise depth of the contents. Finding the right individual for grant writing can improve various skills for any organization.

When an organization strives to meet its objectives, oftentimes they fail in achieving financial stability. Obtaining financial sustainability, the assets that the organization have, must be sufficient to support their replacement (Bowman, 2011). An organization must have resilience during economic shifts. It is recommended that a nonprofit should have a minimum of three months' worth of expense spending in reserve. Organizations must be aware of the economic situation so that they will be prepared and not be forced to liquidate their reserve. The effectiveness in reducing revenue risk is through diversifying the inflow of income. The diversification can lead to greater stability for the organization. Reliance on one source of income impacts the financial health of the organization as well as the structure. The concept demonstrates that there should be a certain level of expected return with minimal risks. The increase of financial risk is undesirable for a nonprofit organization (Kingma, 1993). There are risks associated with every revenue option that an organization takes. Financial predictability is important to a nonprofit by determining the changes that occur in revenue annually. An organization that is not able to predict the financial stability results in wasted resources. The time that the staff utilized to secure funds and do organizational forms for the government will have a certain expected return (Kingma, 1993). Financial risks vary according to each individual organization. Kim (2016) conducted a research on the relationship of the organization's financial health to the program outcomes. The conclusion that Kim (2016) found was that “nonprofit organizations are likely to perform better when they diversify revenue streams to a large extent and depend less on donations” (p. 26). Tuckman and Chang (1991) identified four characteristics that nonprofit organization have when they are

financially vulnerable. These include insufficient equity balance, administrative expense, minimal revenue streams, and operating margins.

The work that volunteers put in the nonprofit sector is essential and a unique feature of nonprofits. Volunteers vary depending on the size and operations of the organization. Like paid employees, the volunteers are categorized as human capital (Hrafnssdóttir, 2005). Volunteers strengthen the image of the organization. Volunteer work varies from administrative work to implementation of projects. When an agency receives funding from the state, the volunteers usually get more responsibilities. Most grants require in-kind support. In-kind contribution is services donated by individuals to corporations, which are non-monetary contributions to the organization. When volunteers stop working for an organization, the shortage of workflow would be detrimental for the organization. The organization will have to hire in order to make up for the work that the volunteers had to do. If all the volunteers ceased to work at a nonprofit, there will be a loss in revenue. Volunteers are a complement to paid personnel and can simultaneously work together to generate quality or quantity (Bowman, 2009).

In the nonprofit sector, agencies face challenges as to how they can be known by the community, and effectively so. The concept of marketing is always evolving due to the constant changes that happen in society. Marketing is a process that requires the effort of the entire organization. The implementation tactics often suffer due to inconsistency. Marketing is a complex social strategy and results may vary according to the approach taken (Mottner & Ford, 2005). The marketing concept should be a part of strategic planning which also acknowledges the limitations of marketing. Marketing is a great way to secure funding from private contributors. When implementing the marketing process, the agency should be well informed that such a process may take longer than desired (Capella & Mitchell, 1993). Marketing is utilized to illustrate the mission of the organization and the impact that the organization has in its community. A concept that brings forth a relationship between a nonprofit and a corporation is cause marketing. Cause marketing refers to a company's promotions increasing profits and thereby better the community. Cause marketing also corresponds to the corporate social responsibility and is a partnership that advances the mission of the nonprofit organization. Cause-related marketing can access a wider audience for the organization. Cause marketing is a collaboration between for profit and non-profit organizations to achieve mutual benefits (Daw, 2006). Utilizing social media platforms can also help with enhancing awareness of the cause and bring in additional source of income.

The Nonprofit Starvation Cycle depicts behaviors that are deeply ingrained in the nonprofit sector. Gregory (2009) notes in the article the following statement:

A vicious cycle is leaving nonprofits so hungry for decent infrastructure that they can barely function as organizations—let alone serve their beneficiaries. The cycle starts with funders' unrealistic expectations about how much running a nonprofit cost, and results in nonprofits' misrepresenting their costs while skimping on vital systems—acts that feed funders' skewed beliefs. To break the nonprofit starvation cycle, funders must take the lead. (p. 1)

Some would under report overhead expenses due to a cut in the budget. The data reported to the funders does not reflect the full amount that the organization utilizes in their overhead. In return, the funders will require the organization to spend a small amount on overhead. A research conducted at Indiana University states that the organizations would have inventory that no longer functioned due to the limited overhead funds, so they are unable to obtain new equipment. The



organization that Gregory (2009) studied illustrated that the contracts obtained only required fifteen percent can be allocated to indirect expenses. Misrepresentation of the overhead expenses feed into the nonprofit starvation cycle. The pressure to conform to the expectations comes from a variety of sources. A culture that is common in the nonprofit sector is “low pay, make do, and do without” (Gregory & Howard, 2009). Gregory (2009) states that the best way to end the vicious cycle is where the cycle begins.

The focus that the funders need to shift towards is outcome rather than cost. Operating support grants will help improve the results that the organization wants to achieve. Reporting quality also needs to be as accurate as possible and complete. An overall definition of overhead for nonprofit organization should be identified and used to find an appropriate overhead rate. The leadership of the organization should know the infrastructure and overhead cost. The grantees must take initiative to communicate to the donors the various types of expenses that is essential to the mission, that is normally not included in the contract. The grantees need to provide complete answers to the information that the grantors request and more importantly the itemized financial section (Arnsberger et al, n.d.). Communication is essential for the organization to have a positive relationship with the donors. In order to help the nonprofit organizations to strive, there is a need for more professional development training on specific skills relevant to their positions. The agencies should develop relationships with private organizations including other nonprofits.

When receiving contributions, properly illustrating the importance to thank the donors for their generosity will help demonstrate the impact that their contribution has made to the community. The diverse options that organizations can seek for funds include private organizations, private organizations can span from any type of businesses to universities. To build upon skills, conferences are a great way for individuals to attend seminars and classes. Another possibility could be to obtain information for various resources that the agency can seek for the specific program that they do. When an organization seeks funds, the funds should not just be for one year, but rather one that lasts for five years or a long-term funding. One option is to obtain interns to help with marketing the organization’s mission. A possibility could be in finding individuals that are passionate and qualified to engage as board of directors. Partnering with a local university to help with improving and developing the professional skills by being accessible and affordable (Jettner & Brown, 2014). A way to increase the revenue is to prioritize compensation, ask sponsors for what the organization needs the funds for, understand the worth of current employees, assign cost to the overall program (Rendon, 2019).

There should be an incentive for the individuals that strive to continue their education and professional development. An organization should recognize the hard work that the employee puts forth to advance their knowledge. Depending on the financial situation of the organization, there are affordable online programs. Mentoring is a great way for small organizations to continue their professional development. Obtaining an individual who is highly skilled in their profession can help the ones that are new to the nonprofit sector. Once an employee is recognized for their hard work, the recognition could help with the employee turnover and better employee performance (Mission box, 2019).

The people who receive formal training is not sufficient to maintain the mission (Leson et al, 2014). The curriculum utilized to enhance management must adapt to the everchanging organizational structure. Individuals who are independent learners can utilize e-learning to gain further training and knowledge about the nonprofit sector management. Mentoring is also another

way for leadership to gain insight in the nonprofit sector. Workshops are innovative because they sent the material before the individual arrives, so that when they do the present interaction, the time will be utilized effectively. E-learning is convenient because virtual learning can be done while traveling or when convenient. Paton notates five principles that needs to be taken into consideration when developing programs for nonprofit management education. The program needs to demonstrate the complexity in multilevel governance. Developing programs that are coherent with the progression of the structure of the organization is needed (Paton et al, 2007). Have a relationship with other leaders in the same sector to learn and understand the difference that other organizations do to manage their operations. The programs implemented to teach must be orientated towards the “psychology of adult development.” Learning new concepts should be integrated in the operations of the organization.

Johnston & Rudney in 1987 conducted a research similar to the study that this research is conducting. This research seeks to find the demographic characteristics of the workers in the nonprofit organization. According to the study that Johnston & Rudney conducted, one-third of the workers did not have a high school degree, and one-fourth of the works has some college or completed college. The context of the study complements the research result found in this study of the agencies in Alabama. Johnston & Rudney (1987) stated, “Nearly half of the nonprofit service workers were employed as executives, administrators, professionals, or technicians, and nearly one-third of these workers were classified as professionals” (p. 3).

## **Methodology**

### **Materials**

The survey, which is found in Appendix A, was utilized to find out the qualifications of the staff as well as other factors within the nonprofit organization. The purpose of the survey was to obtain the necessary data that contributes to this study. The survey was created on the SurveyMonkey site. The survey was distributed by social media platforms (Facebook, Instagram, etc.), e-mails, phone calls, and by virtual meetings. Individuals also forwarded the survey to prospective participants. Individuals invited to partake in the survey were notified that the responses provided were anonymous and there will not be any identifying markers of individuals or the organization in the research. Before partaking in the survey, individuals that participated were asked to fill out a consent form. The consent form, which is found in Appendix B, is signed by the individual who understands the procedure and agrees to be a part of the study. Data was also collected on the demographics of the counties that the agencies notated on the survey. Once the data was collected, the information was inputted in word as well as excel and analyzed. Participants in this research included nonprofit employees and volunteers in Alabama. The objective was to gain as much response from nonprofit organizations as we could; there was not a targeted amount. The study was intended to represent the organizations that are in Alabama.

### **Procedure**

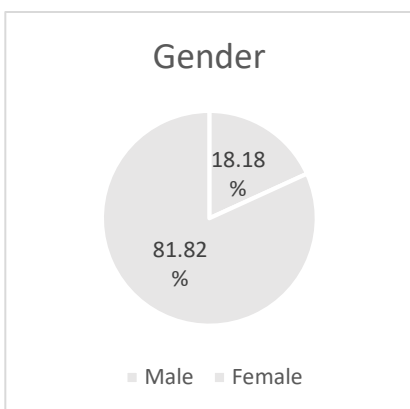
Nonprofit staff at a coalition in Alabama were contacted and were provided with an overview as well as the purpose of the research conducted. The coalition has other agencies that they cooperate with and then proceeded to contact the other agencies. The coalition helps people in the community who have been abused, train the workers in the field, educate the public, and advocate for the individuals. Each agency under the coalition serves more than one county. The

coalition supports 16 agencies that have similar mission to the organization. Other nonprofits were also contacted that did not have any relations to the coalition. I obtained the information of the other agencies through the coalition's website. The survey was distributed to organizations that were found. The development of the survey was utilized to determine the qualifications of the workers as well as comparing the data to the information found in the database of the demographics of the community. The counties that the participants notate, data was collected about the counties demographics through the United States Census database as well as Data USA database. Through the database, I was able to obtain information about population, languages spoken, and ethnicity about the counties that the participants stated they serve.

### Limitations

Conducting this research, the data collected were based upon concrete evidence, but there are also limitations to the research conducted. The first limitation is that this research was conducted during a worldwide pandemic, and the response rate was affected by pandemic. All nonprofit organizations closed during the pandemic for months and eventually some opened while others still remained closed. Another limitation was that some employees in one organization participated while others refused to participate in this research. The response rate was 44 percent. When utilizing the database on the demographics of the community, the data accumulated only accounts for the individuals that reported on the census. The number of people who did not report will be unknown

and their demographics will not be included. A few of the individuals that participated in the survey skipped some of the questions. The survey was conducted in a small sample size.



### Results

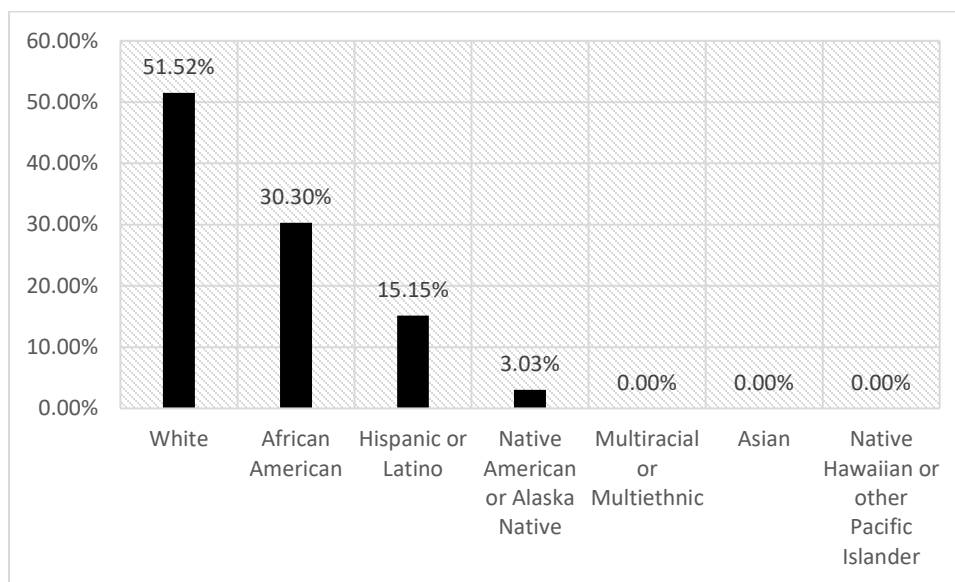
When conducting this research, nonprofit organizations in seven counties in Alabama participated in this study. The organizations were notified that the data collected would not include any information that may conflict with their organization.

Within the study in Figure 1, 81.82% of participants are females while there were 18.18% of males. The majority of the workers in the nonprofit sector are women.

In the nonprofit organization, the demographics of the workers correlates to the demographics of the community that they serve. The employee ethnicity is illustrated in Table 1.

Figure 3 – Participant Gender

Table 1 - Race / Ethnicity of employees that participated



The population in Montgomery County is 227,120. In Montgomery County, the majority of the people in the community identified themselves as white with a percentage of 35.2, and the second greatest percentage is African American with a percentage of 57.5.

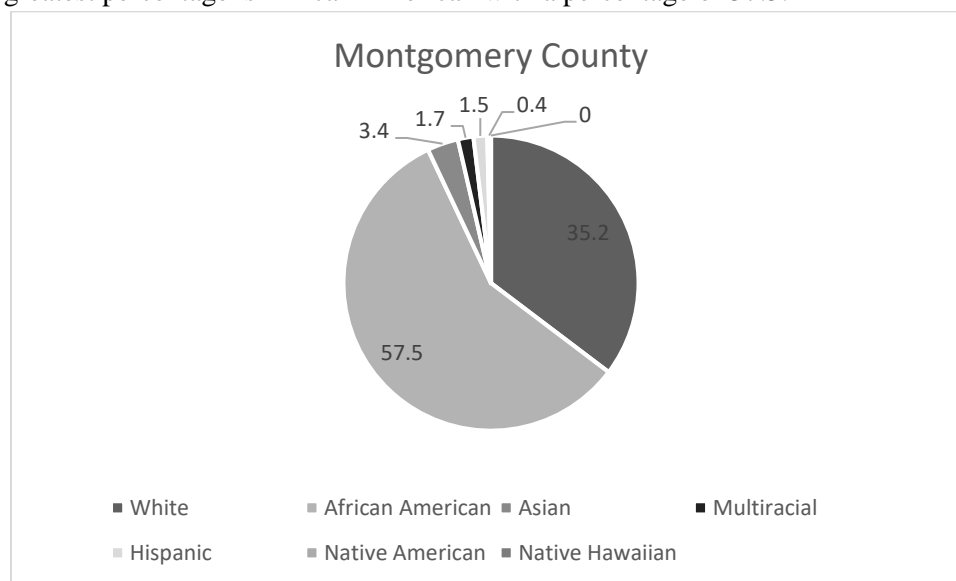


Figure 2- Montgomery County Ethnicity

According to the data collected in Figure 2, the nonprofit ethnicity to an extent correlates to the community. Asian is the third highest ethnicity in Montgomery County, and there are no individuals that identify themselves as Asian that participated in the research. 5.9 percent of the people speak another language that is not English.

The population in Lowndes County is 10,362. The majority of the people in the community identified themselves as African American with a percentage of 74.3, white with a percentage of 24.9 as shown in Figure 3 reported in the database.0.7 percent of the people speak another language that is not English.

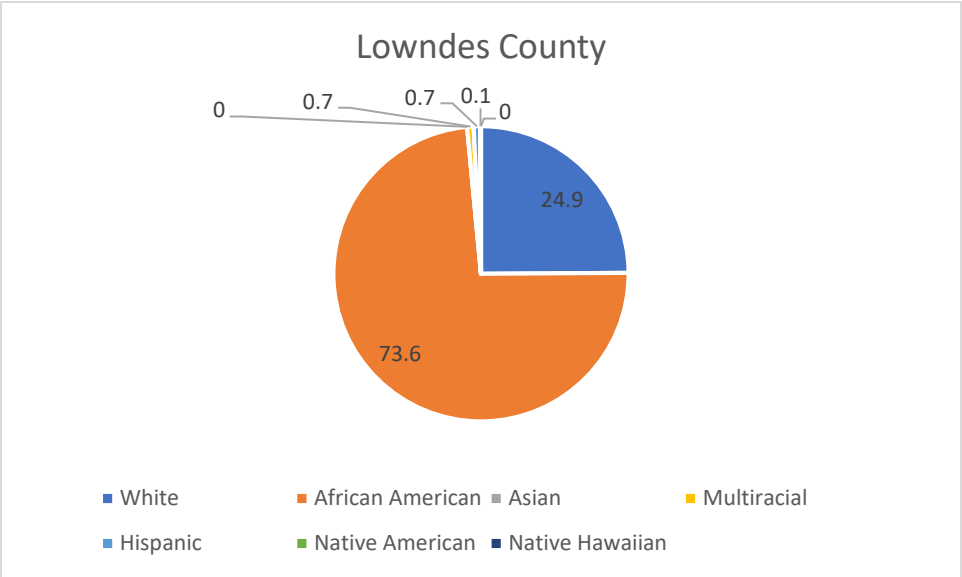
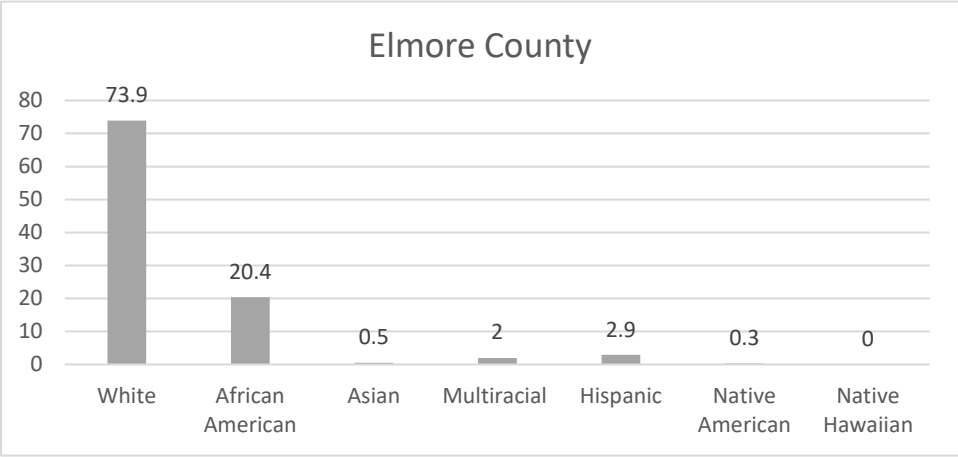


Figure 3-  
Lowndes  
County  
Ethnicity  
The  
population in  
Elmore  
County is  
81.887. The  
majority  
identified

themselves as white with a percentage of 73.9, proceeding with a percentage of 20.4 for African American. 2.2 percent of the people speak another language that is not English. Out of the people who reported for Lowndes, only 3% reported as African American.

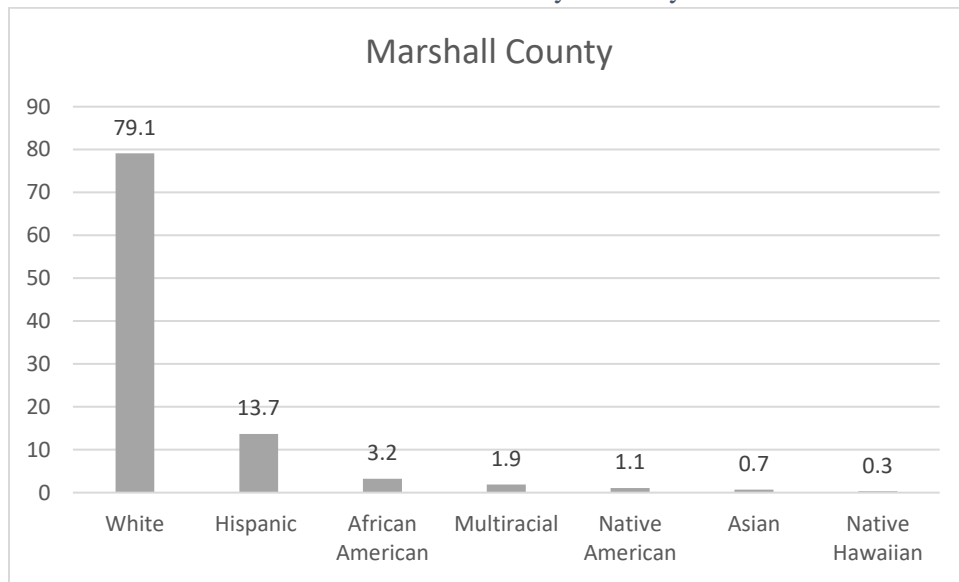
Table 2- Elmore County Ethnicity



In Marshall  
County, the  
population is  
96,774. 79.1  
percent  
identified as  
white in the  
Marshall

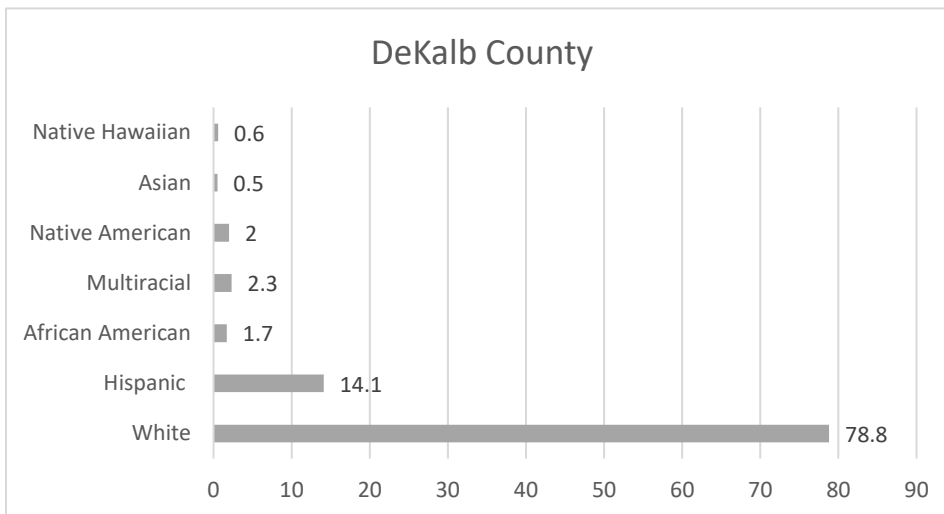
County database, Hispanic or Latino with a percentage of 13.7 subsequently. 11.7 percent of the people speak another language that is not English.

Table 3- Marshall County Ethnicity



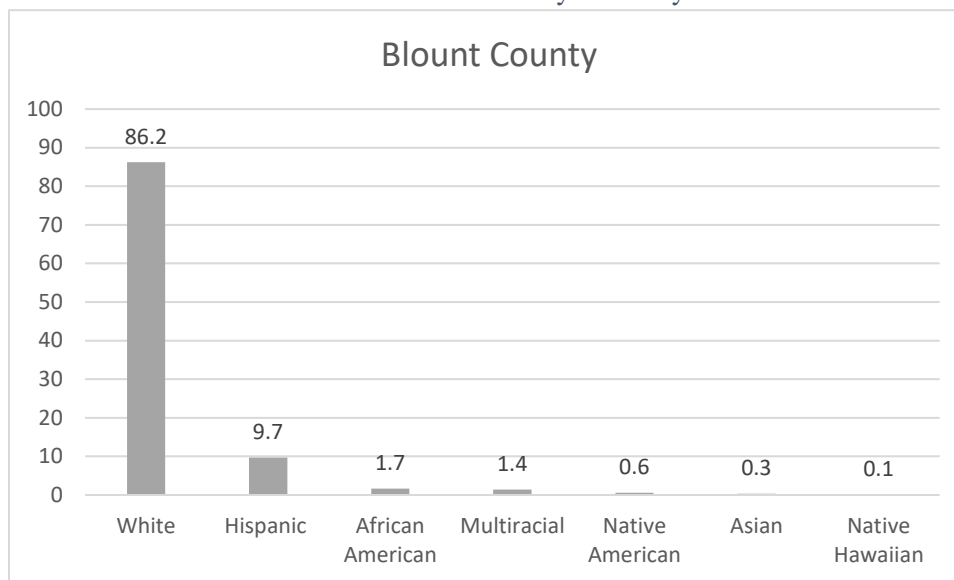
The DeKalb County population is 71,513. The majority with a percentage of 78.8 is white, Hispanic with a percentage of 14.1 as the second majority. 12.1 percent of the people speak another language that is not English.

Table 4- Marshall County Ethnicity



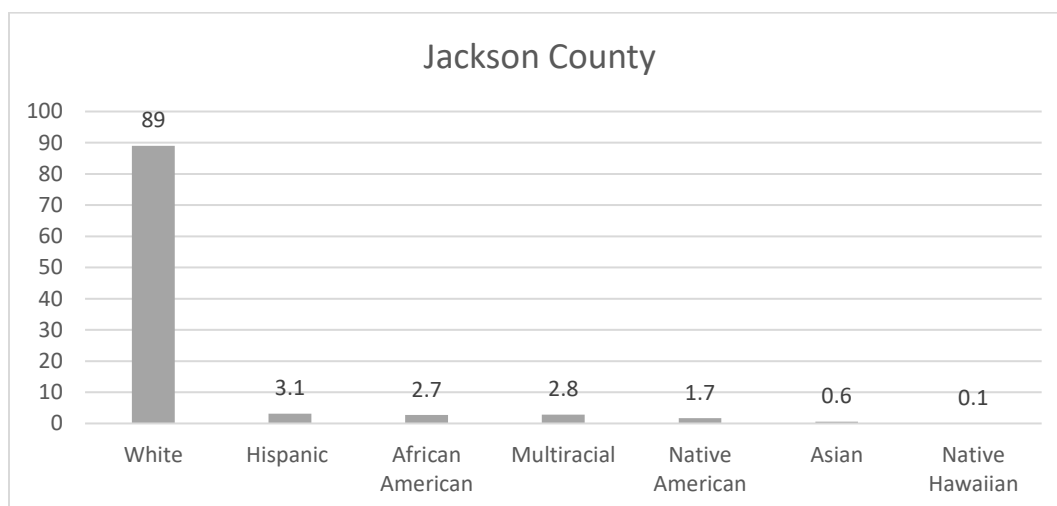
The population in Blount County is 57,826 people. The majority identified as 86.2 percent white and the next is Hispanic with 9.7 percent. 8.0 percent of the people speak another language that is not English.

Table 5- Blount County Ethnicity



Jackson County has a population of 51,626 people. The percentage of white is 89 and the next is Hispanic with 3.1 percent. 1.6 percent of the people speak another language that is not English. The information varies within the seven counties that participated in this survey.

Table 6- Jackson County Ethnicity



Since all the counties have individuals that speak a language that is not English, the importance that the organization find ways to communicate with people who do not speak English is vital. Some of the participants could speak another language. 21.21 percent of individuals reported that they could speak Spanish. There was a 100 percent outcome on English. The participants reported that they obtained translators, electronic translator, and collaboration with other entities. One individual stated that if funding were available that they would hire translators. Funding is a

continuous challenge for the nonprofit sector. Another individual reported that they utilize Google Translate.

The similarity- attraction theory states that people have a tendency to like others that are similar to themselves. Leonard, Levine, and Joshi (2004) states that “employers should hire minorities in order to attract and understand the needs of a demographically diverse customer base” (p. 9). Often times, individuals feel safe and trust people who resemble them. Realistically, the concept that every organization would have at least one representation of each ethnic group has been minimal. Rosenstein (2006) stated, “cultural heritage is a small but important component of the nonprofit cultural sector. There were 2,664 nonprofit cultural heritage organizations in the United States in 2001, representing approximately 9 percent of all nonprofit arts, culture and humanities organizations” (p. 5).

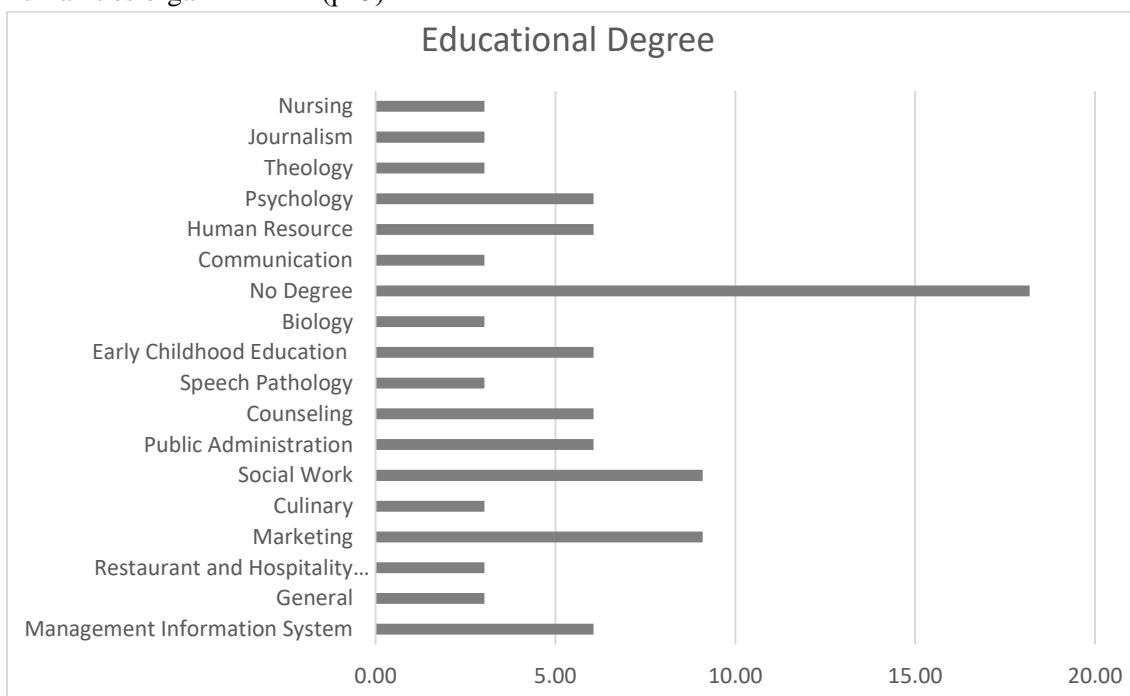


Figure 4 - Academic Degree Accomplished

The majority of the people who participated reported that they do not have a college degree. The degrees range from management information system to nursing. When asked about the highest degree obtained, 3 percent stated that they only have a high school degree while 21 percent reported that they have some college but no degree. In Figure 3, some of the individuals that responded on the highest educational level choose to skip the proceeding question. Few of the individuals actually have degrees that pertain to their position and field. When asked if they would obtain certifications that will help with their present position, 54.55 percent of individuals states that they would, while 45.45 percent of individuals stated they would not. Interestingly, as noted in the previous sentence, the percentage is close between obtaining additional training or certification. 61 percent of participants stated that they work more than 30 hours for the organization. 52 percent of participants are from the age range of 35 and 44 years old. 21 percent of participants are from the age range of 45 and 54 years old. 27 percent of participants are from the age range of 18 through 34 years old.



The vitality that the employees strive to obtain additional training is important for the organization that they work for.

### **Conclusion**

Nonprofit organizations contribute to the community critical services. The nonprofit sector is significantly growing and there is an increase in demand for attaining knowledge in leadership training. Data was accumulated on the counties that participated in the survey and an analysis of the nonprofit management qualification was conducted. Throughout this research, the importance of enhancing the leadership skills is portrayed. The nonprofit sector is actively facing various challenges. The importance of continued education was also discussed in this study. A well-developed training program will improve the overall structure and outcome of the organization.

## References

- Arnsberger, P., Ludlum, M., Riley, M., & Internal Revenue Service. (n.d.). Current Research in the Nonprofit Sector. Internal Revenue Service. <https://www.irs.gov/pub/irs-soi/05eonta.pdf>
- Blalack, Heather M., "The Financial Stability of Nonprofit Organizations" (2016). Finance Undergraduate Honors Theses. 29. <http://scholarworks.uark.edu/finnuht/29>
- Bowman, W. (2009). The economic value of volunteers to nonprofit organizations. *Nonprofit Management & Leadership*, 19(4), 491–506. <https://doi.org/10.1002/nml.233>
- Bowman, W. (2011). Financial capacity and sustainability of ordinary nonprofits. *Nonprofit Management & Leadership*, 22(1), 37–51. <https://doi.org/10.1002/nml.20039>
- Burlingame, D., & Indiana University. (2009). Nonprofit and Philanthropic Studies Education: The Need to Emphasize Leadership and Liberal Arts. *Journal of Public Affairs Education*. <http://216.119.97.87/JPAEmessenger/Article/JPAE-Vol.15-No1-Winter2009-Burlingame.pdf>
- Cantrell-Bruce, T., & Blankenberger, B. (2015). Seeing Clearly: Measuring Skill Sets That Address the “Blurred Boundaries” of Nonprofit Management Education. *Journal of Public Affairs Education*, 21(3), 367–380. <https://doi.org/10.1080/15236803.2015.12002204>
- Capella, L., Arnold, D., & Mitchell, M. (1993). The Marketing Concept: Potential Implementation Problems for Not-for-Profit Organizations. *Journal of Marketing Theory and Practice*, 1(4), 17-28. Retrieved July 16, 2020, from [www.jstor.org/stable/40469684](http://www.jstor.org/stable/40469684)
- Carroll, D. A., & Stater, K. J. (2008). Revenue Diversification in Nonprofit Organizations: Does it Lead to Financial Stability? *Journal of Public Administration Research and Theory*, 19(4), 947–966. <https://doi.org/10.1093/jopart/mun025>
- Collica-Cox, K. (2016, August). *Changes in the C-Suite: A New Study Defines Executive Women’s Growing Presence in Corrections*. Academia.Edu. [https://www.academia.edu/26750595/Changes\\_in\\_the\\_C-Suite\\_A\\_New\\_Study\\_Defines\\_Executive\\_Women\\_s\\_Growing\\_Presence\\_in\\_Corrections](https://www.academia.edu/26750595/Changes_in_the_C-Suite_A_New_Study_Defines_Executive_Women_s_Growing_Presence_in_Corrections)
- Connolly, P. C. (2002). Evaluating Capacity-Building Efforts for Nonprofit Organizations. *Funding Capacity*. <http://fundingcapacity.issuelab.org/resources/20680/20680.pdf>
- Current Research in the Nonprofit Sector. (2019, December). Paul Arnsberger, Melissa Ludlum, and Margaret Riley, Internal Revenue Service. <https://www.irs.gov/pub/irs-soi/05eonta.pdf>
- DATA USA. (n.d.). DATAUSA. <https://datausa.io/>
- Daw, J. (2006). *Cause Marketing for Nonprofits: Partner for Purpose, Passion, and Profits* (AFP Fund Development Series) (1st ed.). Wiley.

- Development and Training for Nonprofit Employees. (2019, June 6). Mission Box. <https://www.missionbox.com/article/706/development-and-training-for-nonprofit-employees>
- Dolnicar, Sara; Irvine, H. J.; and Lazarevski, K.: Mission or money? Competitive challenges facing public sector nonprofit organizations in an institutionalized environment. 2008. <https://ro.uow.edu.au/commpapers/468>
- Exempt Organizations Business Master File Extract (EO BMF). (n.d.). Retrieved July 5, 2020, from <https://www.irs.gov/charities-non-profits/exempt-organizations-business-master-file-extract-eo-bmf>
- Giving credit where credit is due... (n.d.) > *The Free Library*. (2014). Retrieved Jul 5, 2020 from <https://www.thefreelibrary.com/Giving+credit+where+credit+is+due.-a0377998906>
- Gregory, A. G., & Howard, D. (2009). The Nonprofit Starvation Cycle. *Stanford Social Innovation Review*. <http://www.macc-mn.org/Portals/1/Document-library/Research/SSIR%20Nonprofit%20starvation%20Cycle%202009.pdf>
- Helmig, B., Jegers, M., & Lapsley, I. (2004). Challenges in Managing Nonprofit Organizations: A Research Overview. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 15(2), 101–116. <https://doi.org/10.1023/b:volu.0000033176.34018.75>
- Hodge, M. M., & Piccolo, R. F. (2005). Funding source, board involvement techniques, and financial vulnerability in nonprofit organizations: A test of resource dependence. *Nonprofit Management and Leadership*, 16(2), 171–190. <https://doi.org/10.1002/nml.99>
- Hopkins, K. M., & Hyde, C. (2002). The Human Service Managerial Dilemma. *Administration in Social Work*, 26(3), 1–15. [https://doi.org/10.1300/j147v26n03\\_01](https://doi.org/10.1300/j147v26n03_01)
- Jettner, J.F., & Brown, H. (2014). Nonprofit Sector Needs Assessment Survey: A Report of Findings for the Richmond Metro Area. Virginia Commonwealth University, Richmond, VA. [www.community.vcu.edu](http://www.community.vcu.edu)
- Kegan, R. (1994). *In over our heads: The mental demands of modern life*. Cambridge, MA: Cambridge University Press.
- Keyes, L. C., Schwartz, A., Vidal, A. C., & Bratt, R. G. (1996). Networks and nonprofits: Opportunities and challenges in an era of federal devolution. *Housing Policy Debate*, 7(2), 201–229. <https://doi.org/10.1080/10511482.1996.9521219>
- Kim, M. (2016). The Relationship of Nonprofits' Financial Health to Program Outcomes: Empirical Evidence From Nonprofit Arts Organizations. *Nonprofit and Voluntary Sector Quarterly*, 46(3), 525–548. <https://doi.org/10.1177/0899764016662914>
- Kingma, B. R. (1993). Portfolio Theory and Nonprofit Financial Stability. *Nonprofit and Voluntary Sector Quarterly*, 22(2), 105–119. <https://doi.org/10.1177/089976409302200202>

- Lecy, J. D., & Searing, E. A. M. (2014). Anatomy of the Nonprofit Starvation Cycle. *Nonprofit and Voluntary Sector Quarterly*, 44(3), 539–563. <https://doi.org/10.1177/0899764014527175>
- Leonard, J. S., Levine, D. I., & Joshi, A. (2004). Do birds of a feather shop together? The effects on performance of employees' similarity with one another and with customers. *Journal of Organizational Behavior*, 25(6), 731–754. <https://doi.org/10.1002/job.267>
- Leson, S. M., Van Dussen, D. J., Ewen, H. H., & Emerick, E. S. (2014). Differences Among Preferred Methods for Furthering Aging Education in Ohio. *Educational Gerontology*, 40(11), 847–857. <https://doi.org/10.1080/03601277.2014.907068>
- Low pay Is Driving Workers Away: Meager salaries limit who can take nonprofit jobs - and who can afford to stay. That can hurt your mission and your bottom line, both now and down the road! By: RENDON, JIM, *Chronicle of Philanthropy*, 1040676X, Sep2019, Vol. 31, Issue 11. (2019, September). JIM RENDON. [https://www.philanthropy.com/interactives/20190904\\_salaries](https://www.philanthropy.com/interactives/20190904_salaries)
- Michael, J. Austin , Kate Regan , Mark W. Samples , Sara L. Schwartz & Sarah Carnochan (2011) Building Managerial and Organizational Capacity in Nonprofit Human Service Organizations Through a Leadership Development Program, *Administration in Social Work*, 35:3, 258-281, DOI: 10.1080/03643107.2011.575339
- Mottner, S., & Ford, J. B. (2005). Measuring nonprofit marketing strategy performance: the case of museum stores. *Journal of Business Research*, 58(6), 829–840. <https://doi.org/10.1016/j.jbusres.2003.06.004>
- O'Neill, M. (2007). The Future of Nonprofit Management Education. *Nonprofit and Voluntary Sector Quarterly*, 36(4\_suppl), 169S-176S. <https://doi.org/10.1177/0899764007305043>
- Paton, R., Mordaunt, J., & Cornforth, C. (2007). Beyond Nonprofit Management Education: Leadership Development in a Time of Blurred Boundaries and Distributed Learning. *Nonprofit and Voluntary Sector Quarterly*, 36(4\_suppl), 148S-162S. <https://doi.org/10.1177/0899764007305053>
- Rojas, R. R. (2000). A Review of Models for Measuring Organizational Effectiveness Among For-Profit and Nonprofit Managers. *Nonprofit Management & Leadership*, 11(1), 97. <https://doi.org/10.1002/nml.11109>
- Siemens, G. (2006). *Knowing Knowledge*. Google Books. [https://books.google.nl/books?hl=en&lr=&id=Pj41TomgKXYC&oi=fnd&pg=PR5&dq=Siemens,+G.+\(2006\).+Knowing+Knowledge+\(null+ed.\).+Lulu.com.&ots=WusGORvQnJ&sig=vsBpNR57Hn\\_\\_Awlgq7apvqyEjdQ&redir\\_esc=y#v=onepage&q&f=false](https://books.google.nl/books?hl=en&lr=&id=Pj41TomgKXYC&oi=fnd&pg=PR5&dq=Siemens,+G.+(2006).+Knowing+Knowledge+(null+ed.).+Lulu.com.&ots=WusGORvQnJ&sig=vsBpNR57Hn__Awlgq7apvqyEjdQ&redir_esc=y#v=onepage&q&f=false)
- Stone, D. (2002). Introduction: global knowledge and advocacy networks. *Global Networks*, 2(1), 1–12. <https://doi.org/10.1111/1471-0374.00023>

- Tuckman, H., & Chang, C. (1991). A methodology for measuring the financial vulnerability charitable nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, 20(4), 445–460.
- US Census Bureau. (n.d.). Data. Census.Gov. <https://www.census.gov/data.html>
- Van Slyke, D. M. (2006). Agents or Stewards: Using Theory to Understand the Government-Nonprofit Social Service Contracting Relationship. *Journal of Public Administration Research and Theory*, 17(2), 157–187. <https://doi.org/10.1093/jopart/mul012>
- Wildcat Corp. provides job training and learning. (2005, September 8). *THE NEW YORK AMSTERDAM NEWS*, 44–48.
- Worth, Michael J. (2009). *Nonprofit management: principles and practice*. Los Angeles: SAGE Publication

## Appendix A

1. What is your present position? (Check all that apply)

- ☐ Executive Director
- ☐ Assistant Director
- ☐ Financial Officer
- ☐ Administrative Assistant
- ☐ Community Coordinator
- ☐ Other (please specify)

2. Are you a volunteer or paid employee?

3. Average number of hours volunteered or worked per week?

4. Age:

5. Gender:

- ☐ Male
- ☐ Female
- ☐ Prefer not to say

6. Race/Ethnicity: (Choose all that apply)

- ☐ Asian
- ☐ African American
- ☐ Hispanic or Latino
- ☐ Multiracial or Multiethnic
- ☐ Native American or Alaska Native
- ☐ Native Hawaiian or another Pacific Islander
- ☐ White

7. Highest level of education or degree obtained:

- ☐ Less than high school degree
- ☐ High school degree or equivalent (e.g., GED)
- ☐ Some college but no degree
- ☐ Associate degree
- ☐ Bachelor's degree
- ☐ Graduate degree

8. If degree obtained, what was your major? (If not write N/A)

9. Do you have any specialized certifications that are applicable in your present position?

10. Do you intend on obtaining certifications that will help in your present position?

- ☐ Yes
- ☐ No

11. If so, please specify the type of certificate or goal desired

12. In what county (or counties) does your agency provide service to?

County 1

County 2

County 3

County 4

County 5

County 6

County 7

13. What language(s) are you able to communicate in? (Check all that apply)

☐ English

☐ Spanish

☐ French-Creole

☐ Other (please specify)

14. How do you help people who do not comprehend English? (For Example, hiring translators, electronic translators, etc.)

## Appendix B

### **INFORMED CONSENT FORM**

Lee University

**Project Title: The Correlation between Nonprofit Management and the Demographic of the Community**

You have been asked to take part in a research project described below. The following instructions will explain the project to you in detail. If you have questions after completing the following surveys, please contact Maria Tomas at 256-744-0256 or mpedro00@leeu.edu.

#### **Description of the project:**

This research pertains to the correlation between the leadership serving the community and the community itself.

#### **Procedures:**

If you decide to take part in this study, here is what will happen:

The community coordinator of the coalition will remind the group of the researchers up-coming presence, and she will ask the staff to fill out the survey. She will not have access to the data at any given point. Each participant will fill out the anonymous demographic/academic questionnaire via SurveyMonkey online. The survey will require less than 5 minutes of the participants' time. The items all refer to the participants' position, their demographic, and their academic background.

#### **Risks or discomfort:**

The risks that you will be exposed to in this study are minimal. There is a risk of discomfort if the participants do not like filling out surveys.

#### **Benefits of this study:**

It is hoped that results of this study will be presented or published in a scientific setting that will allow for better understanding of the nonprofit management demographics that pertain to the community that they serve. If the results do not show this conclusion, it will still provide additional insights towards management and how they help the community.

#### **Compensation:**

There is no compensation for participating in this study.



**Confidentiality:**

Your part in this study is confidential within legal limits. The researchers and Lee University will protect your privacy, unless they are required by law to report information to city, state or federal authorities, or to give information to a court of law. Your data will be matched by code to your identity so your results can be tracked over time. However, all reported, presented, and published data will have all identifying information removed. All data will be collected on paper or on password-protected computers, to which only members of the research team have access. After completion of the research, all paper data will be securely stored in the locked lab rooms, and all computer data will be stored on password-protected computers.

**Voluntary participation and withdrawal:**

All participation is voluntary. Refusal to participate in any or all aspects of this project will be immediately honored. If you decide to be in the study and change your mind, you have the right to drop out at any time. If you drop out during this study, please contact the researcher to obtain credit for participating.

**Questions, Rights and Complaints:**

If you have questions after completing the following surveys, please contact Maria Tomas at mpedro00@leeu.edu. If you have any questions or concerns about your rights as a research participant in this study, please contact the Human Subjects Review Committee at Lee University (bpoole@leeuniversity.edu).

**Consent statement**

By reading and moving to the next screen you consent to participating (or having your child participate) in this project being given by the Behavioral and Social Sciences Department at Lee University. This statement certifies the following: that you are 18 years of age or older and you have read the consent and all your questions have been answered. You understand that you may withdraw from the study at any time. All of the answers you provide will be kept private. You have the right to see the results of this study if you wish. A copy of the informed consent will be given to you if requested.

Summer 2020

## Christ as Intercessor and Mediator: A Non-Sacrificial Exploration of Atonement

Tyler Price

*Lee University*

*Under the guidance of Dr. Skip Jenkins*

## Abstract

*In their landmark publication “For God so Loved the World”, Joanne Carlson Brown and Rebecca Parker offered a critique of Christian atonement theology based on the notion of “divine child abuse.” While their critique is inadequate due to its being predicated on a non-trinitarian doctrine of God, it does bring to light the issue of atoning violence and the implications therein for the moral character of God. In this paper, I address the critique leveled by Brown and Parker, establish a theological anthropology indebted to John Chrysostom and Irenaeus of Lyons, and, after proving the death of Christ only to be necessary for Christ to fully participate in the human condition and thereby inaugurate the New Covenant, develop a paradigm for atonement based on incarnational intercession that will provide a way forward in the discussion among feminist and Reformed theologians.*

## Table of Contents

<b><u>Introduction</u></b> .....	283
<u>The Problem of Atoning Violence and the Feminist Critique</u> .....	284
<b><u>Anthropology and Original Sin</u></b> .....	286
<u>The Goodness of Prelapsarian Humanity</u> .....	286
<u>The Fall and the Doctrine of Original Sin</u> .....	287
<u>Augustine Intensified: Calvin’s Perspective Regarding Concupiscence</u> .....	289
<b><u>Chrysostom and the Nature of Humankind</u></b> .....	290
<u>The Gnomē, the Proairesis, and Freedom in Moral Choice</u> .....	291
<b><u>Irenaeus and The Salvific Efficacy of the Incarnation</u></b> .....	293
<u>Anthropology and the Economy of Salvation</u> .....	293
<u>The Economy of Salvation</u> .....	294
<u>Recapitulation</u> .....	295
<b><u>Synthetic Conclusion</u></b> .....	297
<u>The Levitical Law and Christian Atonement</u> .....	300
<u>The Mechanics of Intercession as Atonement</u> .....	301

## Introduction

In years prior to the landmark publication of Joann Carlson Brown and Rebecca Parker's article, "For God So Loved the World", a multitude of questions had been raised pertaining to the inherent violence within the Christian doctrine of atonement, especially with regard to what has been perceived as the salvific nature of the crucifixion event. The critique offered by Brown and Parker, along with other feminist theologians, is one aimed at the traditional models of atonement, namely, penal substitution, moral exemplary, and the *Christus Victor* paradigms. The largest part of their exposition is given to the penal substitutionary atonement paradigm in which they say that in the sacrifice of the Son in the crucifixion event, there can be found an instantiation of "divine child abuse."<sup>1</sup> Theirs is not merely a theological claim, but also a pastoral-theological claim dealing with the issue of women's suffering in the church and the abuse of women in their familial relationships. These women within the church, who have suffered abuse from their spouses and by their fellow Christians, are taught that "the disciple's role is to suffer in the place of others, as Jesus suffered for us all."<sup>2</sup> This characterization of the disciple and the role of the disciple, they posit, encourages women to choose suffering because they have become convinced that through their suffering another whom they love may escape pain. Through this glorification of the suffering of both the Son and that mirrored by mistreated women, the latter in abusive situations are encouraged to be more concerned about the person abusing them rather than about their own health and safety because suffering is sanctioned as a liberating experience that frees others from the bondage of their own suffering.<sup>3</sup>

The concern shared by Brown and Parker derives from a particular understanding of the moral character of God. From their perspective, Penal Substitutionary atonement portrays God the Father as a divine being that requires the sacrifice of his innocent Son in order that he may be appeased and that his wrath may be satisfied. From this perspective, the Son is portrayed as the innocent victim that suffers the abuse due to another so that the guilty party does not have to suffer the penalty due them. If Christians are to imitate Christ, then Christians should also endure suffering so that they may receive the reward promised them, namely, resurrection and glorification. This theology of atonement, according to Brown and Parker, results in the unnecessary glorification of suffering and the subsequent encouragement for women to passively endure suffering so that Christ may be glorified through their suffering. John Calvin, a major proponent of penal substitutionary atonement theology, connects any type of suffering endured by humanity to the cross. All afflictions endured by humanity, according to Calvin, including, but not limited to, poverty, disease, and natural disasters, serve the purpose of instructing Christians in the discipline of self-denial and the patient endurance of their suffering.<sup>4</sup>

These recent critiques of atoning violence and the salvific nature of the Cross have caused many theologians to take interest, sparking discussions within the Reformed, Wesleyan, and Liberation patterns of theological thought pertaining to original sin, the nature of the atonement, and whether violence is even necessary for atonement. Focusing on the feminist critique of atoning

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<sup>1</sup> Joann Carlson Brown and Rebecca Parker, "For God So Loved the World" *Christianity, Patriarchy, and Abuse: A Feminist Critique* (New York, NY: Pilgrim Press, 1989), 2.

<sup>2</sup> Brown and Parker, 8.

<sup>3</sup> *Ibid.*, 8.

<sup>4</sup> Nancy J. Duff, "Atonement and the Christian Life: Reformed Doctrine from a Feminist Perspective" *Interpretation* 53:1 (Jan 1999), 24. See also John Calvin, *Institutes of the Christian Religion* 1.3.8.

violence, I will show that an incarnational-intercession notion of atonement, established on a theological anthropology indebted to John Chrysostom, paired with Irenaeus' thought regarding incarnational soteriology, meets the feminist critiques leveled against Christian notions of atonement and establishes a sufficient way forward in light of those critiques. I will accomplish this in four steps. First, I will offer a sympathetic response to their claim of 'divine child abuse.' Second, I will develop a theological anthropology based on the theology of John Chrysostom. This will be paired with Irenaeus of Lyons' theology regarding an incarnational soteriology wherein the incarnation itself was enough for human reconciliation to God. Third, I will show through a re-reading of the epistle to the Hebrews that the "mechanism" by which atonement is made is not a sacrificial death, but rather Christ's mediation and intercession for us. Finally, I will demonstrate how the atonement for human sin is made through the intercessory mediation of Christ and how violence is not a necessary characteristic for human reconciliation to God.

### The Problem of Atoning Violence and the Feminist Critique

The problem of atoning violence begins with its base premise, namely, that God requires the sacrifice of his innocent Son in order that the wrath of God may be satisfied, (satisfactionary), the cosmic battle with the power of sin may be won (Christus Victor), or the punishment due to the guilty may be acquitted because the innocent Christ takes upon himself all of humanity's sin (penal substitutionary), so that human reconciliation to God can be accomplished. The ~~inherent~~ issue with the three previously mentioned models of atonement is that they all contain violence, which is commonly seen as something that is morally objectionable. The criticism is, bringing about human reconciliation through a violent medium is morally unsustainable and it paints a picture of God that is morally questionable.<sup>5</sup> If violence is seen as morally objectionable, and if God cannot do anything that would be considered morally objectionable, then God could not use atoning violence for the purpose of human reconciliation with Godself. Therefore, if God uses violence as a means of bringing about human reconciliation, then God would be subject to moral reprehension. The problem of atoning violence is that it *implicates* God in works of violence, which is seen by most to be morally objectionable.<sup>6</sup>

The narrative of atonement that uses atoning violence thinks it is necessary because of the doctrine of Original Sin. According to the notion of original sin found in the Reformed tradition, God created a wholly good creation and intended the human condition to be holistically painless. In this world, there was no moral or physical evil in this creation and humans would have neither sinned nor would have they died. Human disobedience ruined this original plan and corrupted human nature and creation itself. As a result, humans sunk into a condition both prone to physical evil, culminating in bodily death, and locked into a tendency toward moral evil from which they are unable to rescue themselves.<sup>7</sup>

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<sup>5</sup> Oliver D. Crisp, *Approaching the Atonement: The Reconciling Work of Christ* (Downers Grove, IL: IVP Academic, 2020), 131.

<sup>6</sup> *Ibid.*, 132. Here, Crisp notes that to think otherwise would be to conflate two incommensurate things, atonement and violence, creating a theological oxymoron, like "an 'open secret' or 'the living dead.'" If this is the case, then violent mediums cannot in any case bring about human reconciliation or atonement.

<sup>7</sup> Rosemary R. Reuther, *Redemption in Christian Feminism* (Cleveland, OH: Pilgrim Press, 2000), 97.

The means by which original sin is removed from the individual and actual sin is forgiven is a crucicentric atonement paradigm in which the divine Son of God, Jesus, must come in the fullness of humanity and serve as a sacrificial offering to God in the crucifixion event so that God the Father can be reconciled to a fallen humanity. No matter how sinless the life of any particular human throughout history, the human is still held accountable due to the infinite guilt incurred by prototypical humanity in the Garden of Eden, and the human is absolutely incapable of paying the debt owed to God. God is infinitely offended and humanity is thereby irreparably alienated from God, with no means to make amends at their disposal. The human cannot do anything to please God and is often portrayed as inherently evil and is described as “totally depraved” within the Reformed tradition.<sup>8</sup> It is because of the human inability to make amends and reconcile themselves to God that there must be atonement. Because of the human condition, there is no mere human that can atone for the sin of Adam that corrupts the descendants of Adam nor can they atone for their own personal sin, known as *actual sin*. This is the purpose of the incarnation: to come in the fullness of humanity and divinity, to die as the sacrificial lamb, who propitiates God the Father or expiates sin, and to be raised from the dead so that his glory may be put on display before all of humanity.

This leads to the feminist critique of the crucicentric atonement paradigms known as “penal substitutionary” and “satisfactionary.” The feminist theologians Carole R. Bohn and Rebecca Parker critique these models of atonement by equating the Father’s sacrifice of the Son to “divine child abuse.” This is based on the claim that the Father sends the Son so that the Father may punish the Son and place all guilt incurred by humanity on the innocent Son and in the punishment of the Son, the Father is appeased and the debt owed to the Father by humanity has been paid in full. This analogously presents God the Father as an abusive parent that seeks the sacrificial death of God’s own innocent child so that God’s wrath may subside.

Oliver Crisp, however, concludes that the feminist critique of “divine child abuse” is inadequate due to it being predicated on a non-Trinitarian understanding of the Divine Nature and the purposes of God. In traditional theological thought, the divine persons come together and bring about human salvation by means of their own reconciling work. The three persons, sharing and being of the same essence, share together in one perfect will and together, the three execute that perfect will in perfect agreement and in unity of action. Therefore, it is not the Father sending the Son against his will and subjecting the Son to suffering, death, and punishment in place of those that deserve it, rather the Son instead voluntarily takes upon himself the punishment or the penal consequences of human sin; it is not the action of one divine person against another, and so it cannot be a case of divine child abuse — even in an analogous sense. It would be metaphysically impossible for the three persons of the Trinity to be in disagreement with one another and to act against one another because of the inherent monotheistic nature of the Christian religion as well as the common operations of the Triune God.<sup>9</sup>

To say that the Father abused the Son in the crucifixion event would be to say that the Father abuses the very substance from which the Father derives. Although the three share one common substance, each member of the Trinity is an individual hypostatic existent, unable to stray from the will of the singular divine substance. When the Trinitarian will is seen as a common,

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<sup>8</sup> Donald Macleod, “Original Sin in Reformed Theology” *Adam, the Fall, and Original Sin: Theological, Biblical, and Scientific Perspectives*, ed. by Hans Madueme and Michael Reeves (Grand Rapids, MI: Baker Academic, 2014), 139.

<sup>9</sup> Crisp, 137.

shared will, it may be perceived that Christ was not sent against his will to die a grueling death, rather he, sharing the common will of the Father and the Spirit, willingly becomes human and subjects himself to death in order to bring about human reconciliation. Although traditional, technical Trinitarian theology may defeat the notion of “divine child abuse” leveled against penal substitutionary and satisfactionary atonement theology by feminist theologians like Parker and Brown, that critique does have much to say about the nature of humankind, the moral character of God, and the efficacy of the incarnation regarding human and divine reconciliation. From here, we shall turn to a more in-depth look at the anthropological problem of the necessity of violence and bringing about human reconciliation and the development a theological anthropology based on John Chrysostom’s understanding of the existence of inherited guilt and the human inclination of the will toward virtue.

### Anthropology and Original Sin

While Augustine of Hippo’s doctrine of original sin did not win universal agreement amongst his peers, the medieval theologians took it for granted. John Calvin, a magisterial reformer of the 16<sup>th</sup> century, made a significant contribution to the doctrine of original sin by utilizing and intensifying the work of Augustine of Hippo. Calvin’s explanation of his doctrine of original sin begins in the second volume of his *Institutes of the Christian Religion*, particularly chapter one; however, before one seeks to understand Calvin’s perspective regarding original sin, one must first understand Calvin’s perspective regarding pre-lapsarian humanity and the initial moral and physical perfection of humanity.

#### The Goodness of Prelapsarian Humanity

Calvin repeatedly refers to creation as the “theatre of God’s glory” and to the human as as being created in order to enjoy God’s glory in this theatre by living in total, ontological communion with God. Creation and humanity “mirror” the works and the power of God and they serve the purpose of compelling the highest being in the created order, namely, humanity, to contemplate and glorify the triune God. Through the contemplation of God’s works, the human should develop a sense of God’s infinite grace that is put on display through God’s action of creation.<sup>10</sup> Within the created order, prelapsarian humanity found itself at the pinnacle of a perfect creation. Prior to the creation of humankind, acts of creation were referred to as simply “good”, but in reference to a created humankind, scripture states that humanity was “very good.” Calvin takes this to mean that the entirety of creation was inherently good prior to the fall with humanity being the only component of the created order being fashioned in the image of the Triune God, which bestowed upon humankind the highest honor in the created order and placed them at the pinnacle. The image, however, does not lie in the physical aspects of human existence, but rather in the non-corporeal aspects of human existence.<sup>11</sup>

Calvin notes that prior to the formation of humankind on the sixth day of creation, God spoke everything into existence by his *command*, but when it came to forming humankind, God enters into a state of inner trinitarian *deliberation*. Calvin writes that “this is the highest honor with

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<sup>10</sup> Nico Vorster, “Calvin on the Created Structure of Human Nature: The Influence of his Anthropology on his Theology,” *Journal of Theology for Southern Africa* 151:1 (March 2015), 163.

<sup>11</sup> Richard R. Topping, “John Calvin and the Image of God: Creation, Regeneration. Remnants, and Rights” *Touchstone* 34:1 (February 2016): 9.

which he has dignified us.”<sup>12</sup> In Calvin’s perspective, God did not take counsel in the creation of humankind because it was a difficult task for God to undertake, nor did God consider what endowments it would be fitting to adorn humankind with, but he was, in taking counsel in the creation of man, testifying that the triune God was about to undertake something great.<sup>13</sup> The great work that God was planning to undertake was to bestow upon humankind the image and the likeness of the triune God. This would entail that the nature of humanity would include moral and physical perfection and well-regulated, sound senses, meaning that humankind would execute right judgement in their individual, ethical conduct and that they would be perfectly benevolent in all scenarios that should arise. In the prelapsarian human mind, perfect intelligence was present and uprightness followed as its companion; all the senses of the body were created with an inclination toward the good, and the body was made to be in perfect harmony with the senses, intelligence, and perfect righteousness.<sup>14</sup>

### The Fall and the Doctrine of Original Sin

The event that led to the condemnation of Adam, commonly referred to as “the Fall,” caused the nature of humankind to shift from perfect harmony with the good to being perpetually condemned from birth. Prior to this event, Adam and Eve were directed to exercise dominion over the entirety of creation and commanded not to partake of the fruit of the knowledge of good and evil, otherwise, they would “surely die” (Genesis 2:17 ESV).<sup>15</sup> This condemnation of Adam and Eve becomes a defect in their human nature – the physical death of the body, a guilt that is inherited by the descendants of Adam, and a disposition toward evil rather than good – and only a remnant of the Image of God remains in a post-lapsarian humankind.<sup>16</sup> Calvin writes that “original sin” is the inherited corruption and defines it as the deprivation of a nature previously good and pure. Through the sin of one singular man, namely, Adam, all were made guilty. This guilt did not derive from the mistake of an individual themselves, but this guilt was delivered to them through birth.<sup>17</sup> All are infected with the “contagion” of sin from birth and therefore are seen as “soiled and spotted in God’s sight.” Calvin, however, did not come to this conclusion alone, but rather he borrowed and intensified the notion of concupiscence found in the writings of Augustine of Hippo while retaining the notion of inherited guilt.

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<sup>12</sup> John Calvin, *Genesis*, ed. Alister McGrath and J. I. Packer (Wheaton, IL: Crossway, 2001), 54.

<sup>13</sup> Calvin, *Genesis*, 40.

<sup>14</sup> Calvin, *Genesis*, 41.

<sup>15</sup> This does not simply note a consequence for an action, rather “you shall surely die” denotes a change in the natural state of the body. Calvin [*Genesis*, 56] notes that “in [Adam’s] body there was no defect, and so he was wholly free from death”, which denotes a change in the very nature of the being. In this change of nature, the aspect of physical perfection and immortality was removed from the nature of humankind, and humankind was no longer to be in perfect communion with God; humanity had become alienated from God.

<sup>16</sup> Calvin, *Institutes*, 2.1.5. Here, Calvin writes that the curse, which derives from Adam’s guilt, is spread to all of his offspring in a biological manner since the transgression of Adam resulted in a change of nature. Each of Adam’s descendants, because they, too, have a nature that is corrupted, are subject to the power of “the most filthy plagues” – blindness, impotence, impurity, vanity, and injustice – and are forced to suffer the same miseries that Adam suffered, which culminates in the physical death of the body.

<sup>17</sup> Calvin, *Institutes*, 2.1.5. See also Peter Sanlon, “Original Sin in Patristic Theology” *Adam, the Fall, and Original Sin*, ed. Hans Madueme and Michael Reeves (Grand Rapids, MI: Baker Academic, 2014), 85.



Augustine, adhering to the teaching of Ambrose of Milan, affirmed a doctrine of the “original righteousness” and “perfection” of Adam in prelapsarian paradise. Adam was the perfect physical human being with no physical deformities, ailments, illnesses, effects of aging, and was given the gift of immortal youth. Adam’s intellectual abilities were far superior to other creatures within the created order and his moral character was without a single blemish; he was capable of not sinning. Adam’s “fall” was not due to concupiscence, rather it was due to a direct, willful transgression of God’s command not to partake of the fruit of the tree of the knowledge of good and evil. Adam’s “fall”, which led to the perpetual condemnation of his descendants, did not stem from appetite or some other human weakness – something absent from prelapsarian humanity. Augustine taught that Adam’s fall from grace, keeping in accord with Ambrose’ ideology, came out of pride and Adam’s desire to be like God, which Augustine believed to be the greatest of all blasphemies.<sup>18</sup>

Augustine’s doctrines of the fall and original sin affirm that (1) in Adam and Eve’s act of disobedience, which went against God’s primordial command to refrain from eating from the tree of the knowledge of good and evil caused a fundamental shift in the nature of humanity’s relationship to God, each other, and the rest of creation; (2) that this “fall” from the perfected nature of humankind includes that all humans born into the lineage of Adam and Eve come into the world in a state of estrangement from God. This state of estrangement derives from the guilt passed down from Adam to his descendants and has an effect of everyone in existence prior to committing their own “actual sins”<sup>19</sup>; and (3) that there is a fundamental shift in the moral disposition in humankind, located in the notion of concupiscence.

In Augustine’s perspective, all of those born after Adam and Eve come into the world guilty of the disobedience of their ancestors and are therefore subject to the eternal punishment of hell; however, this is not the only implication of an Augustinian doctrine of original sin. A term important to understanding the Augustinian notion of original sin is “concupiscence.” This term refers to the estrangement from God humanity suffers in which the ethical and moral desires of the human are no longer focused on the desires of God, rather the desires of the human are focused entirely inward. The actions of a person, however, do not stem from the guilt that they have inherited from the first humans, rather this guilt stems from the will, which, from the beginning of their life, is tainted and oriented toward that which is against God.<sup>20</sup> Therefore, the desires of a fallen humanity are in a state of ongoing disorder and are seen as perverse in the sight of God.<sup>21</sup>

Augustine uses two primary metaphors when referring to the nature of transmitted sin, one being a medical metaphor, *vitium*, and the other is a legal metaphor, *reatus*. The medical metaphor postulates that human suffering and the existence of evil stems from a hereditary moral disability. This was acquired by Adam at the time of his transgression and has been transmitted from generation to generation through the medium of human sexual reproduction. Concupiscence is “the tendency which drives human beings to turn from the supreme and unchangeable God to find satisfaction in the changeable”<sup>22</sup> and, according to Augustine, finds itself most manifest in the

<sup>18</sup> John Toews, *The Story of Original Sin* (Eugene, OR: Pickwick Publications, 2013), 160.

<sup>19</sup> Ian A. McFarland, *In Adam’s Fall: A Meditation on the Christian Doctrine of Original Sin* (Malden, MA: Wiley-Blackwell, 2010), 29-30.

<sup>20</sup> Jeffrey K. Mann, “Original Sin in Augustine: An Analysis of Ricoeur’s Essential Three Traits” *Budhi* 2:2 (1998), 139-40.

<sup>21</sup> Sanlorn, 103.

<sup>22</sup> Toews, 164. Toews notes that many interpreters of Augustine have suggested that original sin as

human sexual desire – a part of the postlapsarian human nature that is entirely involuntary. In the medical metaphor, the corruption of human nature meant the entire loss of free will, and the power of the human will was irreparably weakened such that humans cannot make decisions that are not tainted by concupiscence.

The legal metaphor, *reatus*, makes the assertion that humanity is subjected to an inherited legal liability, and subsequent judicial punishment, for the sin of Adam. The transfer of original guilt from Adam to his descendants is explained by the theory of seminal identity, which posits that Adam's sin included all of those that would come after him in a strictly physiological sense. Because Adam was the original, universal human nature, all who have been born since were subsumed into Adam, and therefore, all have sinned "in Adam" due to the small portion of the Adam who sinned remaining in them.<sup>23</sup>

### *Augustine Intensified: Calvin's Perspective Regarding Concupiscence*

Calvin, like Augustine, views the transmission of original sin as both medical and judicial. In the medical sense, he sees sin as a contagion that spread from Adam to his posterity; however, unlike Augustine, Calvin does not see original sin as being transmitted through a biological medium like sex – Calvin leaves this to the mystery of God. This "contagion" of sin did not simply have an effect on human nature, as Augustine posits, rather sin corrupts the entire nature of the human being – the human is nothing but concupiscence.<sup>24</sup> Concupiscence from Calvin's perspective is not merely the damaging of the will where no human decision is made without the taint of original sin, rather concupiscence is the entirety of the human will. It does not merely affect the physical appetites and inner desires of the human creature; it has corrupted all parts of the human soul and faculties, namely, the mind and the will, as well as the heart.<sup>25</sup>

A fundamental difference between Augustine and Calvin concerns Calvin's noetic approach to original sin. Augustine located the first sin in pride, or Adam's desire to be like God, whereas Calvin ascribes it to the human longing for illicit knowledge, namely, that of good and evil – it was not pride that was the sin of the first couple, rather it was a shared unbelief. This fundamental difference between Calvin and Augustine underscores the noetic nature of the first sin and denotes a shift in focus away from the will and toward the mind – Calvin emphasized the role of the mind over the role of the will in the Fall.<sup>26</sup> Regarding the noetic element of original sin, Barbara Pitkin writes:

"When viewed from the perspective of his Augustinian context, Calvin places greater emphasis in his depiction of original sin on the relationship between the intellect and sin than the vast majority of his forebears. This is not to say that

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*vitium* equals concupiscence and concupiscence is equal to the sexual passion of human nature, while others are not so sure about a solid connection between concupiscence and human sexual desire. Regardless of this, reproduction stains every child with original sin so that every person born from sexual relations is literally "born in sin." Therefore, Augustine, like Ambrose of Milan, believed that it was entirely necessary for Christ to be born from a virgin – someone who'd never had sex – thus making Christ free of original sin.

<sup>23</sup> Toews, 165. Because all have sinned "in Adam", all humans are subject to the judgement executed upon their sin committed pre-natally in Adam's genitals.

<sup>24</sup> Calvin, *Institutes*, 2.1.8.

<sup>25</sup> Barbara Pitkin, "Nothing but Concupiscence: Calvin's Understanding of Sin and the Via Augustini" *Calvin Theological Journal* 34:1 (1999),

<sup>26</sup> Nico Vorster, *Created in the Image of God: Understanding God's Relationship with Humanity* (Eugene, OR: Pickwick Publications, 2011), 91.

Calvin neglects the role of the will altogether. Although he does play down the role of the vitiated will's expressing itself as sexual desire in the transmission of original sin, his repeated stress on the vitality and extent of original sin's affecting all parts of the soul can leave no doubt that both heart and mind are deeply corrupted. He "corrects" the Anselmian definition of sin to underscore original sin's vitality; he likewise "corrects" Lombard's use of concupiscence by extending this to the mind as well as the will. Thus, to say, as I shall shortly, that Calvin's doctrine of original sin encompasses a noetic element, is not to deny the significance he ascribes to the volitional aspect of original sin."<sup>27</sup>

The intensification of Augustinian notions of original sin does not stem from the judicial implications, nor from the means by which it is transmitted from a generation to their posterity, rather it derives from the entire change in the nature of the human creature. This change takes place in the heart, mind, and will, and this change, following Adam's disobedience, results in the corruption of the entire human being and the faculties therein. Because of Adam's unbelief and subsequent disobedience, the mind no longer knows nor does the mind understand the good to be done and is therefore turned over to a state of total depravity.<sup>28</sup> John Chrysostom, however, provides us with a theological-anthropological point of view that runs counter to the Augustinian-Calvinistic notion of original sin; this view does not see sin as the problem inherited by the posterity of Adam, but rather it is mortality and death.

### **Chrysostom and the Nature of Humankind**

John Chrysostom, a mid-fourth century eastern theologian, had a different understanding when it came to the nature of humankind. Unlike Augustine and Calvin, John Chrysostom argued that there is no guilt inherited from the transgression of Adam and that there is no inward change in the moral disposition of his posterity. Rather *the condition* resulting from the consequences of Adam's transgression was upon all. Following Pauline terminology very closely Chrysostom concludes that the first consequence that follows from the transgression of Adam is human mortality, culminating in death; this is transmitted to Adam's posterity.<sup>29</sup> Mortality and death, however, are followed by shame, the loss of honor and authority, fear, the ability of the human body to feel suffering, and the experience of a multitude of passions that require a greater amount of effort to control.<sup>30</sup>

Yet what Paul says seems to involve no small question. But if anyone pays careful attention, the question is easily answered/ What, then, is the question? It is that he says that through one man's disobedience, the many were made sinners. For the fact that, when Adam sinned and became mortal, those who were his descendants also became mortal is not improbable. But how would it be logical that from Adam's disobedience, another man would become a sinner? For such another man

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<sup>27</sup> Pitkin, 359.

<sup>28</sup> Vorster, *Created in the Image of God*, 93.

<sup>29</sup> John Chrysostom, "Homily X, On Romans" *Nicene and Post-Nicene Fathers*, ed. Philip Schaff (Peabody, MA: Hendrickson, 2004), 401.

<sup>30</sup> Panayiotis Papageorgiou, "Chrysostom and Augustine on the Sin of Adam and its Consequences: A Study of Chrysostom's 'Homily 10, on Romans' and Augustine's interpretation of it in *Contra Julianum*." *St. Vladimir's Theological Quarterly* 39:4 (1995): 6.

will not be found as owing a penalty from this account, unless he became a sinner of his own accord.<sup>31</sup>

Chrysostom does not see sin as the flaw in the nature of humankind, as it would neither be just nor would it be logical for one man to owe a penalty due to the wrongdoing of another. Sin would only become an issue for the person when they, by their own will and volition, became disobedient to the command of God. The moral nature of postlapsarian humankind, since sin is not inherited from generation to generation and death, accompanied by fear, suffering, decay, and the passions, is the only flaw in human nature following Adam's disobedience, is largely unaffected by the transgression of Adam.

#### The Gnomē, the Proairesis, and Freedom in Moral Choice

Chrysostom does not locate his theological anthropology in postlapsarian human nature, but rather in the creation account, from which he understands humans to have been created with the inherent ability to distinguish that which is good from that which is evil. Because of this ability, even after the fall, the soul has a "greater wisdom" than the body – it was designed to be virtuous.<sup>32</sup> Adam and Eve, until the point of their disobedience, were willingly, perpetually choosing virtue over vice, and due to their continued dedication to virtues over vice, they were able to live in the fashion of angels, wearing a body, but not subject to the mortal needs of the body.<sup>33</sup> The body that Chrysostom describes as being given to Adam was a body "not corruptible and mortal... Labor did not trouble it, nor sweat ruin it. Concerns did not plot against it; nor shadows besiege it"<sup>34</sup> nor did death and mortality stem from their persistence in virtue, but rather death derives from Adam's fall into vice. Adam, hearing from the serpent "you will be like God", disobeyed God's command not to eat the fruit from the tree of the knowledge of good and evil, and as a result of this, "God, to humble him by decisive acts, made him mortal, as well as corruptible; and fettered him with such varied necessities..."<sup>35</sup> God does not change anything about the natural, moral disposition of the human creature, but rather God changes their nature as immortal changes to mortal and their awareness of the body.<sup>36</sup> The freedom and self-determination of the human creature remain in the state it was before the change in human nature.

Along with a newfound awareness of the body, Chrysostom discusses how the passions entered into the human struggle after the sin of Adam. Chrysostom writes:

Before the coming of Christ, our body was easily overcome by sin. For after Adam's sin brought death, a great swarm of passions entered into man. And for this reason, he was not very nimble in the race for virtue. Neither was the Spirit

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<sup>31</sup> Chrysostom, "Homily X, On Romans" *NPNF*, 403.

<sup>32</sup> Samantha L. Miller, *Chrysostom's Devil: Demons, the Will, and Virtue in Patristic Soteriology* (Grand Rapids, MI: IVP Academic, 2020), 133. This notion is further reinforced in Chrysostom's *On Romans*, 13.2 when Chrysostom remarks, "Do you see how Paul explains that the knowledge of good things and of things that are not has been put down in us as a foundation from the beginning?"

<sup>33</sup> Chrysostom, *On Genesis, Homily 13.3*.

<sup>34</sup> Chrysostom, *On the Statues*, 11.3.

<sup>35</sup> Chrysostom, *On the Statues*, 11.3.

<sup>36</sup> "Awareness of the body" refers to newly discovered feelings of hunger, shame, fear, and the realization that they were naked – they become aware of the body and the needs thereof.

yet present to help, nor was baptism, which could deaden these passions. Man was like a resistant and ill-bridled horse that ran but often went astray.<sup>37</sup>

The passions, in the hamartiology of Chrysostom, are that which lead one to commit acts of disobedience with regard to the law and/or command of God. “Passions” in Eastern Christian philosophy are the uncontrolled desires that stem from the needs of the human body and are typically referred to as any “disordered appetite or longing that violently takes possession of the soul: anger, jealousy, gluttony, avarice, lust for power, pride, and the rest.”<sup>38</sup> While some Eastern theologians have designated passions as inherently egoistic and intrinsically evil, others have considered the passions to be dynamic impulses originally placed in man by God, and so fundamentally good, and are now distorted in the present by the existence of sin.<sup>39</sup> The aim of the latter view is to redirect the energy of the passions rather than eliminate them entirely.

Chrysostom held to the former belief pertaining to the passions, but through an examination of his concepts of the *proairesis* and the *gnomē*<sup>40</sup>, he may lean in ways favorable to the latter view. The mindset, according to Raymond Laird, is the critical faculty of the soul in which sin works and the controlling and motivating faculty behind the disposition.<sup>41</sup> Laird argues that this passage from Chrysostom’s *On Romans, Homily 13*, on Romans 7:19-20, indicates a relationship between the mindset and the disposition:

Do you see how Paul acquits both the substance of the soul and the substance of the flesh and transfers the blame entirely to the evil action? For if he did not wish to do it, the soul is freed from blame. If he himself did not accomplish it, the body is also acquitted. And the entire blames [sic] to the *ponēra proairesis* [evil disposition/attitude.] For the substance of the soul and the substance of the body are not the same as the substance of the disposition. The first two substances are works of God; the third substance is a movement that comes from ourselves and is directed toward whatever object to which we may wish to lead it. The will is a natural thing and comes from God. But such a use of the will belongs to us and comes from our own mindset.<sup>42</sup>

According to Laird, this particular passage identifies the disposition as a choice or desire that derives from the mindset and considers the disposition of the mindset to be the origin of all virtue and vice – the disposition is a function of the mindset and the mindset is the locus of all moral responsibility in Chrysostom’s theological anthropology.<sup>43</sup>

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<sup>37</sup> Chrysostom, *On Romans* 11.3

<sup>38</sup> Kallistos Ware, *The Orthodox Way* (Crestwood, NY: SVS Press, 1995), 116.

<sup>39</sup> St. Antony, Chrysostom, and Origen were two theologians in the Eastern patristic tradition that perceived the passions to be inherently evil; Irenaeus of Lyons saw the passions as inherently good, but skewed by the existence of sin.

<sup>40</sup> Laird [*Mindset, Moral Choice, and Sin in the Anthropology of John Chrysostom* (Stratfield, NSW: St. Paul’s), 2] translates *proairesis* as “moral choice” and *gnomē* as “mindset.” However, for the sake of clarity, I will henceforth refer to *proairesis* as “disposition” rather than moral choice.

<sup>41</sup> Laird, 2.

<sup>42</sup> Chrysostom, *On Romans, Homily 13.2*.

<sup>43</sup> Laird, 107.

One's mindset determines their moral disposition. The mindset of the virtuous person is oriented toward things that are eternal; this mindset produces a disposition that scorns things that are temporary.<sup>44</sup> The mindset and the disposition thereof determine the efficacy of one's efforts in redirecting the energies of the passions. The passions, when redirected by the proper disposition, are beneficial to the human. For instance, a temporal mindset produces a disposition that can breed the passion of lust, whereas an eternal mindset produces a disposition that produces a physical intimacy shared between a loving husband and wife. Both instances are driven by a singular passion, namely, sexual passion, but only one of the two is beneficial to the human being. Thus, passions are not intrinsically evil, rather they are innately good and can be corrupted by a disposition produced by a mindset directed toward evil. By the existence of the mindset and the disposition and the role they play in the redirection of the passions, one can determine that humans are born into the world without moral defect and therefore have total freedom in the determination of their own morality – each human is only responsible for their own sin and there is no guilt inherited by Adam's posterity. What we gain from Chrysostom is the understanding that humans were not created morally perfect<sup>45</sup> and that Adam's posterity is neither held responsible for the sin of Adam nor do they inherit a negative moral disposition, but rather it is the individual's mindset that determines their moral disposition. We also gain from Chrysostom the notion that the change in human nature that results from the transgression of Adam is the change from immortal to mortal instead of sinless to sinful; when created, humans were in a state of ontological perfection, without suffering, fear, nor death – this is what was lost in the Fall, namely, immortality.

### **Irenaeus and The Salvific Efficacy of the Incarnation**

In the previous section, I demonstrated, through the lens of John Chrysostom, that sin is not the problem inherent to the nature of humankind, but rather it is mortality and death. If death is the problem that befalls all of humankind, what is the solution to the problem we face? Irenaeus of Lyons, through his incarnational soteriology, provides an answer that not only addresses the problem, but also offers an adequate solution that refrains from downplaying the role of the life, death, or the resurrection of the Incarnate Son. His answer lies within his "recapitulation" theory of atonement, which is premised on the notion that Christ, of whom Adam was a type, perfected that which Adam failed by living a life perfectly obedient to the commandment of God, suffering in the body and dying a physical death, and being resurrected, the latter signifying the defeat of the power of sin and death. The means by which human salvation, which comes to fruition through deification, becomes possible is not crucicentric, but rather it takes into account both the life, death, and the resurrection of Christ.<sup>46</sup> To come to a holistic understanding of what this entails, one must first understand his theological anthropology and the economy of salvation from his perspective.

#### **Anthropology and the Economy of Salvation**

Humankind in the theological anthropology of Irenaeus, who views humankind through an innately Christological lens, was originally intended to become glorified and to participate in the benefits of the triune God, namely, immortality, incorruptibility, and eternal glory.<sup>47</sup> This, however,

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<sup>44</sup> Miller, 126.

<sup>45</sup> Humans were only in a state of ontological perfection wherein there was neither suffering, fear, shame, nor death.

<sup>46</sup> Irenaeus, *Against Heresies*, IV.38.4.

<sup>47</sup> John Behr, *Asceticism and Anthropology in Irenaeus and Clement* (Oxford: Oxford University Press,

could not come to fruition through Adam. Adam was made in the image and in the likeness of the triune God; however, the image and likeness was not fully matured and/or perfected in Adam. The perfected image of God “is an eschatological reality, not a protological reality”, meaning that the perfected image of God must come to fruition through the incarnation of God the Son rather than through the human creation of Adam.<sup>48</sup>

It was established in the previous section that Adam’s disobedience to God’s command not to eat of the fruit of the tree of the knowledge of good and evil brought forth human mortality and suffering, as well as the introduction of the passions, which will receive more attention later. Like Chrysostom, Irenaeus perceives death to be the problem in postlapsarian human nature and Adam’s sin to have been the catalyst for death.<sup>49</sup> Unlike Chrysostom, however, Irenaeus perceives that God did not make human beings immortal, morally incorruptible, or unable to suffer from the advent of their existence – humankind has always been susceptible to physical weakness and death.<sup>50</sup> He posited that the experience of weakness and death were necessary for the human creature to be glorified and in order to move from their created state into the transfigured immortality and incorruptibility that lies within the eschatological communion with God, human beings must be free creatures who are capable of love, growth, and perfect obedience.<sup>51</sup> Adam, in his disobedience, failed to exhibit the latter capability, and as a result, he and his posterity were not able to move from their created state to the eschatological, perfected state. The purpose of the incarnation is to recapitulate the behavior of Adam and as a result, bring about human salvation, but to understand recapitulation in the Irenaeus’ theology, one must first understand his perspective regarding the economy of salvation.

### *The Economy of Salvation*

Irenaeus, unlike many theologians after him, does not see a separation between creation and atonement, rather Irenaeus sees the two as aspects of the single overarching economy of salvation.<sup>52</sup> It is funded significantly by the notion of recapitulation which, according to John Behr, provides “a restatement of the argument in an epitome or resume, bringing together the whole into one conspectus, so that, while the particular details will have made little impact because of their number or apparent insignificance, the picture summarily stated as a whole will be more forceful, giving new significance to each particular detail and bringing them all together into one.”<sup>53</sup> In other words, Irenaeus does not see there being any distinction between the prelapsarian creation, the postlapsarian period, and the subsequent life, death, and resurrection of Christ, but rather he

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2000), 36.

<sup>48</sup> M.C Steenberg, *Of God and Man: Theology as Anthropology from Irenaeus to Athanasius* (London: T&T Clark, 2009), 33.

<sup>49</sup> Irenaeus, *Demonstration on the Apostolic Preaching*, 15. The “immortality” spoken of here should be understood as a conditional immortality based on the condition that if the prototypical couple does not sin, they shall transition from their created state into their glorified state – Immortality was not inherent to human nature, meaning that they were not created incapable of death.

<sup>50</sup> Irenaeus, *Against Heresies*, IV.38.3.

<sup>51</sup> John Behr, “Irenaeus of Lyons” *T&T Clark Companion to Atonement*, ed. Adam J. Johnson (London: Bloomsbury T&T Clark, 2017), 571.

<sup>52</sup> Behr, “Irenaeus of Lyons”, 569.

<sup>53</sup> John Behr, *Irenaeus of Lyons: Identifying Christianity* (Oxford: Oxford University Press, 2013), 137.

perceives it to be one singular overarching economy beginning at creation and culminating in Christ.<sup>54</sup>

From the advent of creation, there has been a “definable, discernable *telos* toward which the creation is moving” that “establishes, on the one hand, the purposefulness of creation as focused and coherently aimed toward a definable goal.”<sup>55</sup> This in particular is why the notion of prelapsarian human immaturity exists in the theology of Irenaeus; creation was not intended to reach the *telos* of its existence until a point later in time. Creation does not stagnate, but rather it is in consistent advancement toward the *telos*, which Christ reveals in his promise of an eternal kingdom that, since Genesis, has been the intended point of fulfillment.<sup>56</sup> The purpose of the incarnation is to reveal the *telos* of creation and to usher in its fulfillment in the eschaton.

### Recapitulation

With this brief understanding of the economy of salvation in the soteriology of Irenaeus, the recapitulatory nature of the incarnation may be understood in a fuller sense. Recapitulation, in the simplest of terms, is the way in which Christ reversed the transgression of Adam by succeeding in that which Adam failed, namely, living in direct, uncompromising obedience to the command of God.<sup>57</sup> Recapitulation, in a short summation, does four things: *corrects* and *perfects* mankind as well as it *inaugurates* and *consummates*. Because the latter two are eschatological categories, I will focus on the former two.

The first meaning which Irenaeus links with the concept of recapitulation is *correction*, or the rectification of that which has gone wrong from the advent of human history. Within *correction* lies the implication that although something went wrong in the beginning, there may also be the hope that what went wrong can be made right. Linked to the concept of *correction* are ideas of the redemption of sinners held captive, the justification of the ungodly, repetition, restoration, and reconciliation. The disobedience of Adam was corrected by the obedience of Christ, and humanity, which was once held captive by the devil, was freed in Christ because God became incarnate in order that humanity might be redeemed by Christ. The incorruptible God was joined to human flesh in order that sin might be killed, death might be deprived of power and replaced by life, the corruptible might be joined to the incorruptible, and so that mortality may become immortality.<sup>58</sup>

In correcting that which was incorrect, Christ perfected the imperfect nature of humankind. However, this perfection is not simply moral and/or ethical perfection, but rather it is a perfection that focuses primarily on the ontological existence of Christ. This ontological perfection is “both exclusive, in that it is God’s unsurpassable perfection or the Word’s unsurpassable priority, and inclusive, in that it brings together all things within the word of God...”<sup>59</sup> With regard to the exclusive nature of this perfection, the perfection of God overflows in the form of goodness to all that has been made, and the incarnate God does not simply correct that which has gone wrong, but rather his perfection removes all limits on his being and on his grace which is shown in salvation.

<sup>54</sup> Behr, “Irenaeus of Lyons”, 570. See also Irenaeus, *Against Heresies*, IV.38.3.

<sup>55</sup> M.C. Steenberg, *Irenaeus on Creation: The Cosmic Christ and the Saga of Redemption* (Leiden: Brill, 2008), 52.

<sup>56</sup> Irenaeus, *Against Heresies*, IV.37.7.

<sup>57</sup> Irenaeus, *Demonstration on the Apostolic Preaching*, 31.

<sup>58</sup> Eric Osborn, *Irenaeus of Lyons* (Cambridge: Cambridge University Press, 2001), 100-101. See also Irenaeus, *Demonstration on the Apostolic Preaching*, 31, 33 and Irenaeus, *Against Heresies*, IV.38.4.

<sup>59</sup> Osborn, 104.



As such, the purpose of the Incarnation is not to simply die in order that a fallen humanity might be reconciled to God, and the incarnation is not the result of an *ad hoc* plan to rescue a humanity held captive by the enemy, but rather the purpose of the incarnation is to achieve the goal set for humanity, which is to make perfect that which was imperfect (or immature) from creation. Because the Word was temporally prior to creation and consequently the creator of all, he can perfect all things, for if there were anything prior to the Word, he would be powerless to it.<sup>60</sup>

From the exclusive priority inherent to the Incarnation, universal inclusiveness is ushered in and his work of the fulfillment of the purpose of creation is accomplished. The universal inclusivity of Christ is based on the notion within recapitulation that Christ sums up and gathers all things in himself. One might ask how the perfection of Christ accomplishes the salvation of humankind, and this is answered in the notion that in the Incarnation, there was a perfect, undivided union of God and humankind; the impassible God was ontologically united to the passible humankind. At the baptism of Christ, the Word, united to the substance of corrupt humanity, accomplished the perfection of humanity and made the human nature able to receive the perfection of the Father. The crucifixion and death of Christ is the event in which God participated in the fullness of flesh, and therefore proves the salvation of the handiwork of God, namely, humankind. However, not only was there a union of the created and the Creator, but there was also a union of the mortal to the immortal. The only path to human nature receiving incorruptibility was through the incorruption of the Son being united with the corrupt human nature.<sup>61</sup> Therefore, the Word became flesh and dwelt among humanity so that he might accustom humankind to receive God and for God to receive humankind, and as such, human flesh participates in the wisdom and power of the risen Christ.<sup>62</sup>

The *Logos*, in the Incarnation, became human in order that he might bring humankind to be what he is, namely, incorruptible and immortal. This notion denotes a reciprocity of attributes in the Incarnation wherein the post-eschatological nature of humanity finally receives the divine attributes of the immortal, incorruptible God and wherein the Incarnate God takes on the corruptible nature of humanity in order that the divine attributes of the Father might be communicated to human nature.<sup>63</sup> This reciprocity, however, does not occur in the first nor the third person of the Trinity, rather it only occurs in the second person, who took on human flesh and dwelt among humankind. The communication of attributes from God to humankind does not occur until the new creation is established, where God will dwell ontologically with that which has been perfected.

With this understanding of the notion of recapitulation in the theology of Irenaeus of Lyon that it may be understood that the soteriology of Irenaeus is not crucicentric, but rather—# is Christocentric. In the Christocentric soteriology of Irenaeus, it is not the sacrificial death of Christ that accomplishes human reconciliation, but rather it is the incarnation itself that accomplishes the eschatological perfection of humankind and the present reconciliation of humankind to man. While the death and the resurrection of Christ do play a pivotal role in the soteriology of Irenaeus, the

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<sup>60</sup> Ibid., 105. See also Irenaeus, *Against Heresies*, IV.38.1. Irenaeus writes that “created things must be inferior to Him who created them, from the very fact of their later origin; for it was not possible for things recently created to have been uncreated. But inasmuch as they are not uncreated, for this very reason do they come short of the perfect. Because, as these things are of later date, so are they infantile; so are they unaccustomed to, and unexercised in, perfect discipline.”

<sup>61</sup> Irenaeus, *Against Heresies*, IV.38.3.

<sup>62</sup> Osborn, 107.

<sup>63</sup> Irenaeus, *Against Heresies*, IV.33.4.

most crucial aspect of his soteriology is found in the incarnation, which unites the incorruptible to the corruptible and the immortal to that which is immortal and consequently perfects that which was never designated as perfect from the advent of creation. What we gain from our explication of recapitulation in the theology of Irenaeus is the notion that it is not the death of Christ that accomplishes human reconciliation to God, but rather it is the Christ's full participation in the human experience and the moral/ethical perfection therein as well as the notion that it is the incarnation itself that perfects the ontological nature of humankind. It is this that will inform our development of an atonement paradigm based on incarnational intercession rather than propitiatory/expiatorial sacrifice. It is with this understanding of the incarnational soteriology of Irenaeus of Lyons that we shall move into a synthesis of the views of John Chrysostom and Irenaeus and why these views are crucial in the development of an atonement paradigm based on the intercession of Christ.

### Synthetic Conclusion

Until this point, there has been the explication of many points of view surrounding the inherent nature of postlapsarian humankind and the nature of atonement, and it has been shown through the two views of Irenaeus and Chrysostom that there is neither inherited guilt nor a shifted moral disposition is the problem that requires a solution, but rather it is the problem of death inherent to human nature. The solution to the problem of atoning violence, death, and the feminist critique of Christian atonement theology lies within a Christocentric atonement paradigm based on the mediation and incarnational intercession of the Incarnate God rather than sacrifice.

The purpose of atonement is, in many traditions, to reconcile humankind to God, and there have been many discussions surrounding how this has been achieved. Irenaeus proposed an Incarnational atonement paradigm in which Christ recapitulated within himself God's creation, and in doing so, accomplishes the salvific plan of God, which was laid out in the beginning,<sup>64</sup> another proposed a view wherein the Son, who came in the fullness of flesh and divinity, was crucified as a sacrifice in order that a wrathful God might be appeased and humanity might be reconciled to God, and John Calvin intensified the prior notion of satisfactionary atonement in his proposal of penal substitutionary atonement wherein Christ bore the guilt of all on the cross, and as he was sacrificed, he stood in the stead of all of humanity and bore the punishment which was theirs to bear.<sup>65</sup> However, the problem raised pertaining to Christian atonement, according to Oliver Crisp's assessment of feminist theologians Joanne Carlson Brown and Rebecca Parker, is that any sacrificial notion of atonement implicates God in that which is morally questionable, namely, violence, and as such, "violence cannot bring about atonement."<sup>66</sup> The three forerunners of atonement theology each involve some act of violence in the process of human reconciliation to God: satisfactionary atonement implicates God in the act of crucifying the son in order that his wrath might be appeased, penal substitutionary atonement implicates God in the act of punishing the innocent son who stands in the stead of all humans who were present before the crucifixion and

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<sup>64</sup> Gustaf Wingren, *Man and the Incarnation: A Study in the Biblical Theology of Irenaeus*, trans. by Ross Mackenzie (Eugene, OR: Wipf and Stock, 2004), 81.

<sup>65</sup> Jeannine Michele Graham, "Substitution and Representation" *T&T Clark Companion to Atonement*, ed. Adam J. Johnson (London: T&T Clark, 2017), 763.

<sup>66</sup> Crisp, 131-32.

those that come after the crucifixion, and the Christus Victor atonement model implicates God in the act of deception and of violence in the crucifixion.

The charge leveled against Christian atonement theology by feminist theologians Brown and Parker is that the violence inherent to the three previously mentioned models of atonement makes for an act of “divine child abuse” wherein the Father, out of wrath, punishes the innocent son in order to bring about human reconciliation.<sup>67</sup> Although it has previously been established by Crisp that this understanding of the nature of atonement is predicated on a non-Trinitarian understanding of God and inherently denies the tenet of common operations, he notes that this critique has serious implications regarding the moral character of God.<sup>68</sup> If an act of violence is morally objectionable, then this would implicate God in that which is morally objectionable and lead one to question the goodness of God. If we are to provide a sufficient way forward in the dialogue amongst feminist theologians regarding atonement, there must be a model of atonement that does not implicate God within any act of *atonement violence*, as the use of violence within the act of bringing about human reconciliation would be counter to the moral character of God. In this section, I am proposing a model of atonement based on the mediation and intercession of Christ.

Although each person is born into the world without sin, they are still subject to the power of death and as such, there must be a solution to the inherent problem of death, which is located in postlapsarian human nature; each person must be forgiven of their own individual sin in order that they might be reconciled to God, whose wrath is not directed at the individual but at sin itself. The way in which this is accomplished is through the common link between the divine and humanity, namely, Christ, who acts as the one mediator between God and Man (Hebrews 8:6; 1 Timothy 2:5 ESV). The mediator, Christ, came in the fullness of flesh and divinity, lived a perfect life directed by a mindset focused and centered on that which is eternal, and shared with humanity the physical death in order that he might be raised, and in doing so, foreshadowed that which is to come at the consummation of the eternal, ontological communion of God and humankind, namely, the deification of the human body through which human nature may share in the immortality and incorruptibility of the Triune God.

Because Christ, who exists simultaneously as both fully God and fully man and lived a life perfect in ethic and morality, is the perfect mediator between God and humankind, Christ is also the perfect intercessor for those who acknowledge the error of their ways and their temporal mindset and consequently seek to focus their mindset on that which is eternal and redirect the energies of the passions toward that which they were originally intended.<sup>69</sup> As the perfect intercessor for humanity and the mediator between God and man, humans may be forgiven for their individual sin and receive the promise of that which is to come, namely, deification and eternal communion with God. In the eternal existence, following the ascension of Christ, the Incarnate son “always lives to make intercession” (Hebrews 7:26 ESV) for those who come to God through him.

In this particular understanding of atonement, there is no need for an atoning sacrifice because Christ flawlessly executed that which was commanded in the Old Testament scriptures, namely, “to do justice, love mercy, and walk humbly with [his] God” (Micah 6:8 ESV). In his life on earth, Christ acted in a manner that was just through his healing of the sick, the lame, the deaf, and the blind and through the way in which he dealt with those in the seat of the oppressor, namely,

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<sup>67</sup> Brown and Parker, 2.

<sup>68</sup> Crisp, 101-02. See also Crisp, 137-38.

<sup>69</sup> This is evidenced through repentance (*metanoia* – “change of mind”) and submission to baptism.

the Pharisees and the Sadducees; in the Incarnation of the second person of the Trinity, the *Logos*, Christ united the human nature, which was subject to death and all that lies therein, and the divine substance of God, which is incorruptible and immortal, and in doing so demonstrated the perfect love and mercy God reserved for humankind; in the flesh, the human will of Jesus and the divine will of God, two things often juxtaposed, acted in perfect harmony and executed that which was necessary to accomplish the plan of redemption for humankind. In these three categories, Christ fulfilled that which was commanded by God and consequently reconciled humankind to God.

John Calvin writes in his *Commentary on Hebrews* that the wrathful God who is entirely displeased with humanity cannot be appeased without a sacrifice of expiation.<sup>70</sup> Calvin notes that the Old Covenant and the New Covenant share a common trait, that is, that they are both dedicated with blood. In this, he likens the blood of Christ spilled on the cross to the blood which was sprinkled on the tabernacle, the vessels, and the book of the law – God could not be sought after for salvation, nor could God be worshipped properly except through faith which always required some sort of blood intervention.<sup>71</sup> Without dedication by blood, the Covenant cannot be efficacious and thus, it is necessary that both Covenant and blood should be united to the other, for it is blood that ratifies the Covenant and it is the Covenant that guarantees the expiation of sin.<sup>72</sup> The promises of God are only confirmed by the blood of Christ with the blood acting as a pledge for that which is spoken by God.<sup>73</sup> Therefore, Christ is never to be separated from the sacrifice of his death as it is only through spilled blood that sins might be expiated through the ratification of the New Covenant.<sup>74</sup> It can be understood through his *Commentary on Hebrews* that Calvin sees Christ's death as a sacrifice of inauguration and the means by which sins might be expiated.

Simon J. Kistemaker, in his article "Atonement in Hebrews", argues that the death of Christ should be understood as a propitiatory sacrifice rather than as a death of inauguration and expiation. He notes that by his death, Christ expiated the sin of his people and, through this, restored the relationship between the human and the divine that sin had severed; however, ignoring the propitiatory element of atonement is unwarranted and that the effect of propitiation stems from the expiation of sin – the sin that stoked God's wrath is expiated and no longer does so through the death of Christ.<sup>75</sup> It is not because God is a "spiteful and whimsical deity who expresses his wrath to people that fail to bring him the required offerings" as some scholars that object to the use of the word propitiation might suggest, but rather, in Kistemaker's perspective, it is out of love that God "initiates propitiation by having Jesus Christ turn aside divine wrath and take away sin out of love for lost humanity."<sup>76</sup> In other words, it is God who, in his infinite love for humanity, initiated the process of reconciliation and, through Christ's death, reconciled humankind to himself through Christ who was the sacrifice of propitiation. The death of Christ, in Kistemaker's perspective, does

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<sup>70</sup> John Calvin, *Commentary on Hebrews*, 9.22.

<sup>71</sup> Calvin, *Commentary on Hebrews*, 9.18.

<sup>72</sup> The Covenant is meaningless without the blood necessary for inauguration and the blood would be meaningless without the Covenant.

<sup>73</sup> Calvin, *Commentary on Hebrews*, 9.20.

<sup>74</sup> Calvin, *Commentary on Hebrews*, 9.22.

<sup>75</sup> Simon J. Kistemaker, "Atonement in Hebrews," *The Glory of the Atonement*, ed. Charles E. Hill and Frank A. James III (Downers Grove, IL: IVP Academic, 2004), 165-66.

<sup>76</sup> Kistemaker, 167.

not serve to inaugurate the New Covenant, but rather “he bore the burden of sin and accepted his people’s penalty”<sup>77</sup> on the cross and served the purpose of placating the anger of the triune God.

I, however, would contend that the death of Christ was not a sacrificial death wherein the Incarnate Christ stands in the stead of a totally depraved humanity and bears the punishment for all sin both previous and proceeding after, but rather the death of Christ is the means by which the New Covenant and the eschatological promise of immortality and incorruptibility is sealed. It is written in the Epistle to the Hebrews that “under the law almost everything is purified with blood, and without the shedding of blood there is no forgiveness of sins” (Hebrews 9:22 ESV) and this would lead some, such as Calvin and Kistemaker, to believe that the death of Christ was required in order that sin may be forgiven. The natural death of Christ inaugurates the New Covenant. It was necessary for Christ to die a physical death in order that the New Covenant might be inaugurated; the means by which this death occurred is unimportant. The Incarnate Christ had to die to fully participate in the human condition. In this section, I will show through the context of Hebrews 9:22 that the death of Christ was only necessary for the inauguration of the New Covenant insofar as this death is only understood as a participatory death wherein it was necessary that Incarnate Christ die in order that he might fully participate in the human condition and act as the perfect mediator between God and humankind.

#### The Levitical Law and Christian Atonement

Within Hebrews 9, the author is contrasting the sacrificial system of the Levitical law with the achievement of Christ on the cross. One way in which this can be understood is the way in which the author of Hebrews writes about how Christ “redeems them from the transgressions committed under the first covenant” (Hebrews 9:15 ESV). The word translated to “transgressions” in this context is the word *parabaino*, which typically refers to one “‘passing beyond’ the limits set by a definite, positive law or command.”<sup>78</sup> In other words, this type of sin was committed intentionally with knowledge of the Law’s prohibition.

Something important to note is that the author of Hebrews writes that “almost all things are purified with blood...” (Hebrews 9:22). In the Levitical Law there were provisions that would grant one purification and forgiveness without requiring sacrifice such as washing with water (Leviticus 15:16-17; 17:15), anointing with oil (Lev 14:29), burning flour (Lev 5:11), giving money (Exodus 30:11-16), or releasing an animal into the wild (Lev 16:10). However, when it came to sins that were committed intentionally, there was no offering of any kind prescribed by the Law. All sacrifices and offerings under Levitical Law were to be used in the case of unintentional sins, and thus when an Israelite sinned intentionally, the only means by which forgiveness could be granted was to receive forgiveness from God directly.

The context indicates that the author of Hebrews specifically has in mind the tabernacle and the religious items therein (Hebrews 9:21) and it can be deduced that the author is writing regarding the initial dedication ceremony of the first tabernacle built by Moses.<sup>79</sup> This purification rite and dedication ceremony ushered in and sealed the Mosaic Covenant (Heb. 9:18-19). It is with this understanding of the immediate context that it can be understood that the author is not speaking

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<sup>77</sup> Kistemaker, 170.

<sup>78</sup> Douglas Moo, *The Letter to the Romans*, 2<sup>nd</sup> Ed. (NICNT; Grand Rapids, MI: Eerdmans, 2018), 302.

<sup>79</sup> F.F. Bruce, *The Epistle to the Hebrews*, Ed. Gordon D. Fee (NICNT; Grand Rapids, MI: Eerdmans, 1997), 213-14.

about the means by which sins are forgiven, but rather, according to Archbishop Dmitri Royster, the author is referring to the means by which the covenant of Moses was initiated and sealed.<sup>80</sup> In light of the contrast between Moses' inauguration of the Mosaic Covenant and Jesus' inauguration of the New Covenant, the author of Hebrews demonstrates that the sacrifices within Mosaic Covenant were never able to accomplish that which they were intended, namely, to propitiate, and offer the forgiveness of, sins—no person was forgiven of sin through the blood sacrifices prescribed in the Levitical Law (Hebrews 10:4).<sup>81</sup>

In Hebrews 10:1-4, the author of Hebrews emphasizes the failure of the Mosaic law to accomplish that which it sought to accomplish, namely, forgiveness of sins. Hebrews 10:2 informs those who would have read or heard it that if the Law could have accomplished the forgiveness of sins, then there would have not been a need for perpetual sacrifices because those who sacrificed would have had no more consciousness of their previously committed sins that would have been atoned for through the sacrifice offered.<sup>82</sup> Sacrifices, rather than accomplishing a goal, simply served as a reminder of sins committed.<sup>83</sup> In Hebrews 10:5-10, the author indicates that the sacrificial system was never intended to take away sins and that God never took pleasure in any of the sacrifices. God did not desire sacrifice; God desired a life lived in obedience to God, which is what Jesus brought in the Incarnation.<sup>84</sup> With this in mind, it should be understood that Hebrews 9:22 does not prescribe a means for the removal of sin, but rather Christ's death serves the purpose of inaugurating the New Covenant, which, through Christ's perpetual intercession on behalf of those that are in Christ, accomplishes the forgiveness of sin and ushers in the promise of resurrection in the eschaton and the deification of those who are in Christ. The necessity of the death of Christ regarding the forgiveness of sins should only be understood as Christ's death being used for the inauguration and seal of the New Covenant – it should not be understood as a sacrifice that propitiates sin.<sup>85</sup>

#### The Mechanics of Intercession as Atonement

Now that it has been established that Christ's death was not a sacrificial, but an inaugural death, the mechanics of a notion of atonement may be established on the premise of intercession. Christ, who came in the fullness of flesh and divinity, served as an exemplar of what it means to do justice, love mercy, and live a life in total obedience to God, and as a result, perfected that which Adam made imperfect. Those that are in Christ receive the promise of the physical resurrection of

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<sup>80</sup> Dmitri Royster, *The Epistle to the Hebrews: A Commentary* (Crestwood, NY: SVS Press, 2003), 145.

<sup>81</sup> Royster, 154.

<sup>82</sup> Bruce, 221.

<sup>83</sup> Ibid., 152. See also Bruce, 222.

<sup>84</sup> Bruce, 224-25.

<sup>85</sup> Royster [*The Epistle to the Hebrews*, 154-55] writes that Christ came to “do God's will, which ultimately is to give his body in sacrifice for sinful man” (p. 154) and that Christ came to replace all of the Old Covenant sacrifices “by his own self-sacrifice” (p. 155). If this, however, is to be seen as sacrificial, it should be understood that this self-sacrifice is not a sacrifice with the outcome of the propitiation of sin, but rather it would be considered a sacrifice of inauguration wherein Christ allows himself to die in order that the New Covenant might be established and sealed. The death of Christ was not a sacrificial death, but rather it was participatory, meaning that the death of Christ was the fulfillment of what it means to participate in the fullness of humanity. In order for Christ to perfect human nature, it was necessary for him to participate in the fullness of humanity even to the point of death so that the New Covenant could be inaugurated and sealed. So thus, the New Covenant was inaugurated with the blood, or the life, of Christ.

the body, of which Christ foreshadowed in his bodily resurrection, and of deification and eternal communion with the Triune God. One might ask how this is achieved for those who are in Christ, and I would contend that this is achieved through the perfect intercession of Christ, who is the perfect mediator between God and man on the basis of being both fully God and fully human.

While there are many ways in which one may intercede on behalf of another such as acting as a legal advocate, as an activist within social justice issues, and/or as a social worker working with abused women and children, there is a common form of intercession found in both the Old and New Testaments. This form of intercession is through the medium of intercessory prayer. The apostle James writes that “the prayer of a righteous person has great power as it is working” (James 5:16 ESV) and Christ, who lived a perfectly righteous life, serves as the person whose prayer has the greatest efficacy. Christ is the perfect intercessory advocate for humankind and until the consummation of creation, he perpetually intercedes for those who are in Christ in order that those who sin in Christ may continually be forgiven.

As Christ lived, he consistently served as an advocate for the poor, the disenfranchised, the oppressed, and the sick as well as the sinner. He restored a blind man’s sight (John 9:6; Mark 8:22-25; Matthew 9:27-30a; Luke 18:35-43 ESV), made the deaf hear (Mark 7:31-37 ESV), commanded those who followed him to rid themselves of their earthly possessions and give them to the poor (Matthew 19:21; Luke 18:22 ESV), and, in the case of the adulterous woman, he turned away those that wished to stone her for her transgression (John 8:1-11). All of these acts mentioned can be classified as acts of intercession in the life of Christ. These, however, are only the physical acts of intercession wherein Christ does something physically for someone. Christ also engaged in many acts of intercessory prayer; he prayed for little children (Matthew 19:13 ESV), he prayed for the faith of Peter to remain strong (Luke 22:32 ESV), he prayed for and on behalf of his followers and “for those that will believe in [him] through their (the apostles’) message” (John 17:1-26 ESV), and finally, the cry of dereliction upon the cross “my God, my God, why have you forsaken me” (Matthew 27:46; Mark 15:34 ESV) serves as a prayer of intercession wherein Christ assumes the identity of a lost Israel devoid of the presence of God, and it is in this prayer that the perfect mediator between God and humankind intercedes for the lost nation of Israel and foreshadows that which is to come, namely, the renewal of creation and the restoration of Israel.

It is the life of Christ that makes the reality of salvation possible, it is the death of Christ that inaugurates and seals the promise of the New Covenant, it is the resurrection of Christ that proves the divinity of Christ and that foreshadows that which is to come, namely, the physical resurrection and deification of those who are in Christ, and it is the intercession of Christ that brings one into the New Covenant and marks them as part of the body of Christ. While the Church awaits the return of Christ, he is seated at the right hand of the Father continually interceding on behalf of those who are in Christ. It is this intercession that provides the forgiveness of sins committed rather than a propitiatory sacrifice offered in order to placate the wrath of God. While there is much more to discuss in relation to the propitiatory nature of incarnational-intercessory atonement and the sacrificial imagery utilized by the author of Hebrews, the problem of atoning violence has been eliminated and the concerns leveled against Christian atonement theology have been adequately addressed throughout this paper, an atonement paradigm based on incarnational-intercession sufficiently provides a way forward in the ongoing discussion between feminist and Reformed theologians.

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# Literature Review of Deaf Bilingual-Bicultural Educational Approach Literacy Outcomes and Instructional Practices

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## **Abstract**

*This paper will share the process of collecting research on Deaf and Hard of Hearing literacy levels and practices. Readers will understand reading literacy of deaf student. Readers will gain knowledge of Deaf and Hard of Hearing students literacy levels and historically what has been recorded. Also, readers will learn about different literacy approaches to increase Deaf and Hard of Hearing students reading and writing levels. While anyone would benefit, educational practitioners, and those working in the Deaf field will gain the most insight.*

## **INTRO**

Literacy and mathematics make up the foundation of a student's education; however, in recent years the focus has been shifted to primarily mathematics causing student's literacy outcomes to decline. This is particularly relevant to Deaf Education because deaf students historically have low reading outcomes. This paper will consist of a brief explanation of key terms related to the field of education and d/Deaf education, a short history of literacy outcomes, and education of deaf students, and an explanation of different Deaf education models/philosophies along with their impact on literacy, Deaf/Hard of Hearing students' literacy outcomes and factors that impact those outcomes, and a Discussion and explanation section of research articles that have been conducted on literacy outcomes and Bilingual-Bicultural Deaf Education instructional practices. As you will soon see d/Deaf students' literacy outcomes and education are multifaceted with many factors to consider when researching the topic.

## **TERMS AND DEFINITIONS**

Each field of study has numerous terms and definitions that go along with that particular field. In the field of Deaf Studies and Deaf Education, some terms need to be defined to help others understand what is being presented and discussed. HoH, d/Deaf, GE, TC, Sim-Com, Bi-Bi, and ASL are terms and abbreviations that are frequently used throughout this paper as well as in the field of Deaf Education.

HoH is the abbreviation for the term Hard of Hearing; the definition for hard of hearing is a mild-to-severe hearing loss in which some hearing capability is present (Deafness and Hearing loss, 2020). d/Deaf is used to include individuals who view themselves as culturally d/Deaf and those who see their deafness as a disability. When the term deaf is used, it indicates that the participants or individuals were viewed or viewed themselves as having a disability. On the other hand, when the term Deaf with a capital D is used, it indicates that they view themselves as culturally Deaf (Paul, pgs. 11, 13). The term GE stands for Grade Equivalency which is a type of norm measurement used in evaluating students' progress. Another term that is used is ASL; this is a more well-known term which stands for American Sign Language. Additionally, there is the term Sim-Com this stands for Simultaneous Communications; this is defined as using Sign Language and Spoken Language at the same time (Paul, pg. 173). Lastly, are the terms TC and Bi-Bi. TC stands for Total Communication, an educational approach used in the field of Deaf Education. Bi-Bi is an abbreviation for the term Bilingual-Bicultural which is another approach used in the Deaf Education field which will be explained in greater detail later.

## **THE TREND IN EDUCATION TO FOCUS ON LITERACY**

Since the implementation of STEM program in 2001 and Common Core in 2009, Mathematics has been an academic subject on the forefront of education; however, due to the educational focus being on mathematics, students' literacy performance has decreased. The National Assessment of Educational Progress (NAEP) assesses students' reading progress in 4<sup>th</sup>, 8<sup>th</sup>, and 12<sup>th</sup> grades. According to NAEP's 2019 assessment results, students' reading performance has decreased since 2017 in grades 4, 8, and 12 (The Condition of Education, 2020); this decrease in reading performance was also seen in their 2017 assessment of students reading performance. As a result of this continued decline in student literacy and reading performance, educators are now beginning to place an emphasis on literacy instruction, assessment, and outcomes.

This “trend” to now focus on literacy instruction, assessment, and outcomes is not only happening in public schools general education classrooms but is also occurring in all educational settings. This new focus on literacy instruction can also be seen in Deaf Education. Additionally, in the Deaf Education field, literacy has been an academic area that many deaf and HOH students struggle with meeting their grade equivalent reading outcomes. In the Deaf education field, there have been three main educational models which all argue in some way to improve d/Deaf and HOH students' reading and writing literacy performance. Each model is explained below.

### **DEAF EDUCATION EDUCATIONAL PHILOSOPHY'S**

The three main educational philosophies in Deaf Education are Oralism, Total Communication (TC), and Bilingual-Bicultural (Bi-Bi). The oldest of these is Oralism; Oralism was first introduced by its founder Alexander Graham Bell. The first school for the deaf in the USA was an oralist school which was founded in the late 1800s. This approach to education involves the use of lip-reading and speech training to teach students. Additionally, students who attended an oralist school were prohibited from using manual communication (sign). In regards to literacy instruction, it has been argued that the oralist approach facilitates student's development of reading and writing skills because proficiency in the English language is key to developing good reading ability (Moog, 2000). However, not all scholars are in agreement.

Another prominent approach to Deaf education is Total Communication. This philosophy came onto the deaf education field in 1967 and was created by a deaf man named David Denton. This philosophy involves both the use of oral spoken communication along with a sign system. Several hybrid systems have been created to support deaf children's early access to language through sign, while simultaneously giving them access to a spoken language (Marschark, 2007). Many schools for the deaf have adopted a TC education philosophy and use Sim-Com during instruction. The TC educational approach supports d/Deaf students' literacy skills by helping them become familiar with English Language Structures.

The last and most recent educational philosophy to come about in the Deaf education field is Deaf Bilingual-Bicultural education. In the Bilingual-Bicultural approach to education, ASL is considered the first or native language of d/Deaf children with English considered as their second language (Evans, 2004). Additionally, with this approach, Deaf culture is discussed by both students and faculty. Deaf culture is integrated within the classroom environment and curriculum. This educational model treats ASL and English as two completely separate but equal languages. In schools that have adopted the Bi-Bi philosophy, instruction is primarily taught through ASL (DeVera, 2000); this approach has been slowly implemented into schools for the Deaf since the

1980s. The effects of the Bi-Bi approach on literacy have been debated by many researchers and d/Deaf educators for years. The remaining of this paper and research focuses on the Bilingual-Bicultural approach to d/Deaf education as well as literacy outcomes and instruction.

## **HISTORY OF DEAF/HOH STUDENTS LITERACY - OUTCOMES & FACTORS THAT IMPACT READING/WRITING OUTCOMES**

Statistically, only 1 out of 10 d/Deaf children are born to d/Deaf parents. This means that 90% of deaf children are born into hearing families who have little knowledge about the impact deafness can have linguistic, even cognitive, development. For some parents, it can take years to decide or find a mode of communication that works well for their deaf child and their family. Due to this long process d/Deaf students have a lack of access to language during early childhood (birth- 2 years). d/Deaf and HoH children are deprived of access to foundational processes that stimulate language development (Humphries, 2012). The lack of access to foundational skills impedes students' ability to achieve higher-order linguistic and literacy skills. Research has been conducted on many theories and practices on literacy instruction. Various theories and practices have emerged in the history of d/Deaf education of how best to develop their acquisition of literacy. The student's deafness has a huge impact on their acquisition of literacy skills (Power, 2000).

Historically, the reading level of d/Deaf students has been around the fourth grade or age equivalent of a typically hearing 9-year-old student (Power, 2000). Several factors contribute to what is known as a deaf ceiling or a fourth-grade reading level. One of the factors being a lack of a good foundation in their first Language typically either ASL or English. Another consideration for why d/Deaf students are not meeting literacy levels equivalent to their hearing peers is inconsistent educational practices and/or poor teaching.

## **EXPLAIN/DISCUSS ARTICLES ON LITERACY OUTCOMES**

During the research process, 21 articles were read, all relating to d/Deaf and Hard of Hearing students' reading and writing (literacy) development and performance. Fourteen out of twenty-one of these articles related specifically to students who either were currently attending or had attended a school for the Deaf that adopted a Bilingual-Bicultural philosophy. These articles were then organized by those that focused on literacy outcomes and those that focused on instructional practices; there ended up being seven articles in each category.

The first seven articles all focused on different aspects of student's literacy outcomes; although they focused on different aspects of literacy, they all had some commonalities. One of the commonalities being that almost all of them used the NWEA's MAP assessment or sections of the MAP assessment. The NWEA is a not-for-profit organization that develops assessments to accurately measure students' academic progress (Map Growth, 2020). The MAP is one of the NWEA assessments; this assessment measures student's language use, reading, and mathematics achievement (Hrastinski, 2016). However, in the case of these articles, it was used only to measure student language use and reading. Also, many of the articles assessed students' ASL proficiency most commonly using the ASLAI assessment. Many of the researchers thought that it was necessary to measure student ASL proficiency as higher ASL proficiency may have correlated to an increase in reading comprehension and academic English use (Scott, 2017).

Another commonality seen throughout these articles were the factors that contributed to d/Deaf and Hard of Hearing students reading and writing outcomes. One factor that positively impacted

students' outcomes was the particular philosophy that schools adopted. Those enrolled in Bi-Bi program showed higher overall reading and writing achievement (Dammeyer, 2016). Another factor was students ASL proficiency students who had greater ASL proficiency performed better on reading and writing assessments (Hrastinski, 2016 and Mayer, 2020). Other factors that were found to negatively impact students' outcomes were lack of Aural-oral skills, a second or additional disabilities, lack of parental involvement, lack of access to early language development (sign or spoken), and degree of hearing loss (Dammeyer, 2013 and Dammeyer, 2016).

It was seen throughout the articles on literacy outcomes that students' ASL skills have an impact on their reading performance and outcomes (Scott, 2017). Additionally, a students' exposure to ASL outside of the classroom and parental involvement was also seen to impact their reading achievement (Mayer, 2020). Almost all of the articles scored different aspects of students' literacy outcomes and scored them all on different scales. However, even though they were all scored on different scales and different areas of literacy, it looks as though that majority of the students assessed for these research articles scored on average at their grade level or within 2-grade levels of their placements (Lange, 2013).

### **EXPLAIN/DISCUSS ARTICLES ON INSTRUCTIONAL PRACTICES (STRATEGIES, PRACTICES, AND INTERVENTIONS)**

The other seven articles that were studied related to strategies, practices, and interventions that have been used in the classroom to improve d/Deaf and Hard of Hearing students' literacy development. There were three elements that were seen to positively correlate with students improved reading and writing outcomes. The first was a focus on vocabulary development. Vocabulary development was seen as a longitudinal predictor for increased reading outcomes (Harris, 2017). Students who had teachers focused on building up their vocabulary in the classroom had greater reading comprehension (Hermans, 2008). An example of this would be teachers using conceptual translation to explain how one sign can have multiple English word meanings (Evans, 2004). Secondly, student's sign proficiency was seen as a strong predictor of increased literacy outcomes (Hermans, 2008). Third, a common area of literacy instruction in these articles was student phonological awareness. It was seen that as students' sign and English phonological skills developed, they showed higher reading outcomes (Mcquarrie, 2013). In one article the teachers encouraged students to sound out words (Harris, 2017). In another article they had students discriminate contrast between sign that share sign parameters (Mcquarrie, 2013). In multiple articles, they noted that phonological awareness, phonemic skill, sign proficiency, and vocabulary development all significantly correlated to students increased reading skills and comprehension (Mayberry, 2010).

Additionally, one of the articles conducted research on a strategic writing instruction model known as SIWI which stand for Strategic and Interactive Writing Instruction. This instructional model is used to explicitly teach d/Deaf and HOH students strategies to use during the writing process (Wolbers, 2015). These strategies are to be used across different genres of writing and are used to improve d/Deaf and HOH students writing outcomes. The SIWI model uses acronyms such as POSTER (plan, scribing, organize, translate, edit, and revise), interactive and collaborative writing to improve and encourage student writing (Wolbers, 2015). This model encourages teachers to aid in students' development of metalinguistic awareness. Teachers who use this model in their

classroom also work with students on comparing ASL and English grammar, expanding their vocabulary and teaching them multiple linguistic aspects of English and ASL (Wolbers, 2015).

## **CONCLUSION**

Overall, from this literacy review on the current research articles that have been conducted on d/Deaf students literacy it does show that students are producing increased reading and writing outcomes. Also, this literature review revealed that educators of the d/Deaf are making progress in instructional strategies, practices, interventions to best teach students the literacy skills that they will need to succeed. The issue of d/Deaf students literacy outcomes and instructional practices is still one that bears continued research. There are still the various aspects of the topic at hand that warrant more research to gain a full picture of how to best meet the literacy need of students who are d/Deaf and Hard of hearing.

## Reference

- Dammeyer, J., & Marschark, M. (2016). Level of Educational Attainment Among Deaf Adults Who Attended Bilingual–Bicultural Programs. *Journal of Deaf Studies and Deaf Education*, 21(4), 394–402. doi: 10.1093/deafed/enw036
- Dammeyer, J. (2013). Literacy Skills among Deaf and Hard of Hearing Students and Students with Cochlear Implants in Bilingual/Bicultural Education. *Deafness & Education International*, 16(2), 108–119. doi: 10.1179/1557069x13y.0000000030
- Delana, M., Gentry, M. A., & Andrews, J. (2007). The Efficacy of ASL/English Bilingual Education: Considering Public Schools. *American Annals of the Deaf*, 152(1), 73–87. doi: 10.1353/aad.2007.0010
- Deafness and hearing loss. (2020, March 1). Retrieved July 23, 2020, from <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss>
- De Vera , N., & Dharer, Y. (n.d.). Bilingual-Bicultural Education of Deaf/Hard-of-Hearing Children. Retrieved from <http://www.deafed.net/PublishedDocs/sub/ivd1c.htm>
- Evans, C. J. (2004). Literacy Development in Deaf Students: Case Studies in Bilingual Teaching and Learning. *American Annals of the Deaf*, 149(1), 17–27. doi: 10.1353/aad.2004.0011
- Harris, M., Terlektsi, E., & Kyle, F. E. (2017). Concurrent and Longitudinal Predictors of Reading for Deaf and Hearing Children in Primary School. *The Journal of Deaf Studies and Deaf Education*, 22(2), 233–242. doi: 10.1093/deafed/enw101
- Hermans, D., Knoors, H., Ormel, E., & Verhoeven, L. (2008). The Relationship Between the Reading and Signing Skills of Deaf Children in Bilingual Education Programs. *Journal of Deaf Studies and Deaf Education*, 13(4), 518–530. doi: 10.1093/deafed/enn009
- Hrastinski, I., & Wilbur, R. B. (2016). Academic Achievement of Deaf and Hard-of-Hearing Students in an ASL/English Bilingual Program. *Journal of Deaf Studies and Deaf Education*, 21(2), 156–170. doi: 10.1093/deafed/env072
- Humphries, T., Kushalnagar, P., Mathur, G., Napoli, D., Padden, C., Rathmann, C., & Smith, S. (2012). Language acquisition for deaf children: reducing the harms of zero tolerance to the use of alternative approaches. *Harm Reduction Journal*, 9(16).
- Lange, C. M., Lane-Outlaw, S., Lange, W. E., & Sherwood, D. L. (2013). American Sign Language/English Bilingual Model: A Longitudinal Study of Academic Growth. *Journal of Deaf Studies and Deaf Education*, 18(4), 532–544. doi: 10.1093/deafed/ent027

Marschark, M. (2007). *Raising and Educating a deaf child: A comprehensive guide to the choices, controversies, and decisions faced by parents and educators* (2nd ed.). New York: Oxford University Press

MAP Growth: Precisely measure student growth and performance. (2020). Retrieved July 23, 2020, from <https://www.nwea.org/map-growth/>

Mayberry, R. I., Giudice, A. A. D., & Lieberman, A. M. (2010). Reading Achievement in Relation to Phonological Coding and Awareness in Deaf Readers: A Meta-analysis. *Journal of Deaf Studies and Deaf Education*, 16(2), 164–188. doi: 10.1093/deafed/enq049

Mayer, C., & Trezek, B. J. (2020). English Literacy Outcomes in Sign Bilingual Programs: Current State of the Knowledge. *American Annals of the Deaf*, 164(5), 560–576. doi: 10.1353/aad.2020.0003

Mcquarrie, L., & Abbott, M. (2013). Bilingual Deaf Students' Phonological Awareness in ASL and Reading Skills in English. *Sign Language Studies*, 14(1), 80-100. doi:10.1353/sls.2013.0028

Moog, Jean S.. "Auditory-Oral Education: Teaching Deaf Children to Talk". Audiology Online. 17 May 2000. Accessed 20 April 2020. <https://www.audiologyonline.com/articles/auditory-or-al-education-teaching-deaf-1248>

Mounty, J. L., Pucci, C. T., & Harmon, K. C. (2013). How Deaf American Sign Language/English Bilingual Children Become Proficient Readers: An Emic Perspective. *Journal of Deaf Studies and Deaf Education*, 19(3), 333–346. doi: 10.1093/deafed/ent050

Paul, P. V. *Language and deafness*. Jones and Bartlett Publishers. Sudbury. 2009. p. 11, 13, 173  
1/Preprimary, Elementary, and Secondary Education. (n.d.). In *The Condition of Education 2020*. Power, D. (2000). Principles and Practices of Literacy Development for Deaf Learners: A Historical Overview. *Journal of Deaf Studies and Deaf Education*, 5(1), 3-8. doi:10.1093/deafed/5.1.3

Position Statement On Early Cognitive and Language Development and Education of Deaf and Hard of Hearing Children. (2014). Retrieved July 23, 2020, from <https://www.nad.org/about-us/position-statements/position-statement-on-early-cognitive-and-language-development-and-education-of-deaf-and-hard-of-hearing-children/>

Scott, J. A., & Hoffmeister, R. J. (2017). Superordinate Precision: An Examination of Academic Writing Among Bilingual Deaf and Hard of Hearing Students. *The Journal of Deaf Studies and Deaf Education*, 23(2), 173–182. doi: 10.1093/deafed/enx052

Wolbers, K. A., Dostal, H. M., Graham, S., Cihak, D., Kilpatrick, J. R., & Saulsbury, R. (2015). The Writing Performance of Elementary Students Receiving Strategic and Interactive Writing

Instruction. *Journal of Deaf Studies and Deaf Education*, 20(4), 385–398. doi:  
10.1093/deafed/env022



Summer 2020

## The Effect of COVID-19 on Deaf and Hard of Hearing College Students

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## Abstract

*This study aimed to research Deaf and hard of hearing (DHH) college students' access to appropriate information about the COVID-19 pandemic and how barriers to information have impacted them emotionally. In order to thoroughly study the effect of this unique time on DHH college students, this project consisted of three components: review of literature, comparison of English and American Sign Language (ASL) news programming, and a survey of DHH and hearing college students. The study revealed that DHH college students have a more negative emotional response to the pandemic and have less access to information in their first or preferred language.*

The COVID-19 pandemic has established a “new normal” across the globe. Due to the nature of the pandemic, government guidelines have redesigned social interactions and created widespread feelings of isolation. Specifically, the American Deaf community has been presented with challenges unique to their cultural and linguistic norms. The lifestyle standards of the general hearing population have, at times, ostracized and overlooked the unique needs of both the Deaf community and hard of hearing individuals. More so, the unexpected shift to online learning and social distancing has presented distinct challenges to Deaf and hard of hearing college students.

This study aimed to research Deaf and hard of hearing (DHH) college students' access to appropriate information about the COVID-19 pandemic and how barriers to information have impacted them emotionally. Throughout the research, a larger emphasis was placed on the impact among culturally Deaf college students as opposed to hard of hearing college students. In order to thoroughly study the effect of this unique time on DHH college students, this project consists of three components: review of literature, comparison of English and American Sign Language (ASL) news programming, and a survey of DHH and hearing college students.

The study revealed that all three groups of college students feel that they are experiencing certain communicative and emotional difficulties during this pandemic. Naturally, some of these difficulties are more prevalent among the DHH college students. DHH college students have a more negative emotional response to the pandemic and have less access to information in their first or preferred language. Interestingly, differences also arose among the Deaf and hard of hearing students, which indicates that the cultural and linguistic experiences of the culturally Deaf and the medically deaf (hard of hearing) impact the way in which these students access information and cope emotionally.

## Literature Review

The literature reviewed for this research investigated a wide variety of topics in order to better understand the events currently unfolding. Due to the nature of the ongoing pandemic, very little literature has been published at this time. The topics of the literature reviewed include those about the impact of the HIV/AIDS epidemic on the Deaf community, the impact of COVID-19 on the Deaf community, Deaf culture, Deaf communication, and DHH mental health.

### *The Deaf Community and HIV/AIDS*

The impact of the HIV/AIDS epidemic on the Deaf community reveals the need for proper information access during future epidemics and pandemics. Before the COVID-19 pandemic, the HIV/AIDS epidemic presented access difficulties among the Deaf that led to higher rates of infection in the community. Investigating the impact of this past epidemic reveals that recent strides have been made in the effort of presenting accessible information to the DHH and caring for their

overall well-being. Unfortunately, it also reveals that the challenges presented to the DHH during past pandemics and epidemics still exist.

Poor information access and miseducation among the Deaf led to higher infection rates during the HIV/AIDS epidemic of the 1980s. Anecdotal accounts reveal that this time period was characterized by misinformation and fear among the general population. The impact of the HIV/AIDS epidemic on DHH populations is often overlooked. Due to the lack of accessible information in terms of prevention and treatment, scholars suggest that the infection and mortality rate among the Deaf was higher than that of the general population (Stevens 1998; Winningham et al. 2008). As Stevens (1998) aptly stated in her article on Deaf access to HIV/AIDS information, “for deaf people, the main risk factor for HIV infection is not, in the first instance, their sexual behavior, nor the availability of condoms, but the lack of access to information” (p. 101). As it relates to the COVID-19 pandemic, one could hypothesize that misinformation could lead to higher infection and mortality rates among the DHH due to misunderstandings about the nature of the virus. The unique linguistic and cultural standards among the Deaf require information to be shared in a pointed and accessible manner which will be examined later in this literature review.

The Deaf community’s vulnerability to HIV/AIDS infection began as miseducation or undereducation at the adolescent level. It was observed that Deaf children were not properly exposed to appropriate sexual education curriculum or HIV/AIDS preventative information throughout the epidemic (Peinkofer 1994). Additionally, a large number of Deaf children reported that their parents did not provide at-home sexual education prior to college (Peinkofer 1994). For this reason, the Deaf lacked appropriate education at the stage of prevention which led to infection. Additionally, poor information access at the treatment stage led to difficulty accessing treatment and recovery (Stevens 1998). Stevens attributed the Deaf community’s ignorance towards the risk of HIV/AIDS to “limited access to mainstream mass-information systems... [and discrimination] within the health care system, due to poor communication and cultural insensitivity” (p. 102). When this is applied to the current COVID-19 pandemic, one can hypothesize that DHH individuals who do not have enough access to information at the prevention stage may become infected. Additionally, DHH individuals who do not have enough access to information at the treatment stage are more at risk of mortality.

#### *The Deaf Community and COVID-19*

The poor access to health information among the Deaf community experienced during the HIV/AIDS epidemic applies similarly to the COVID-19 pandemic. As the pandemic is ongoing, it is hard to judge the complete impact of language barriers in the Deaf community concerning COVID-19 related issues. At this point in the pandemic, it can be observed that the linguistic and cultural needs of the DHH are being widely overlooked or diminished in the realms of healthcare and politics.

The flimsy establishment of sign language vocabulary related to COVID-19 at the beginning of the pandemic caused confusion and misinformation. As the media began to report heavily on the development of COVID-19, the World Health Organization (WHO) neglected to establish a standardized sign for COVID-19 (Amorim et al. 2020). By not establishing a standard sign for the virus, WHO practically left this responsibility up to the Deaf who developed a variety of signs across the globe. A study of the Brazilian Deaf community revealed that the Brazilian Deaf had more than three widely used signs for COVID-19 in the early stages of the pandemic. This linguistic variance led to communicative and general confusion about the virus itself. In Brazil, one

accepted sign for COVID-19 involved a hand movement that represented a bat bite, since it was first believed that COVID-19 was transmitted from bats to humans. The researchers from the study noted that this sign causes unnecessary fear of animal bites and misconceptions about the true risk of COVID-19 spread (Amorim et al. 2020). As noted during the HIV/AIDs epidemic, in order to properly intervene between an individual and their risk of contracting an illness, one must first “perceive themselves to be at risk” (Winningham et. al 2020). In other words, linguistic discrepancies among the global Deaf communities can lead the Deaf to misinterpret their risk of infection, increasing their risk of transmission.

In addition to vocabulary discrepancies among the Deaf, COVID-19 has also impacted the DHH way of life through the widespread use of face masks. Many DHH individuals rely on lipreading in order to effectively communicate with hearing individuals. Wearing face masks visually interferes with an individual’s ability to lipread. In an article advocating for the unique needs of DHH frontline workers and patients, Grote and Izagaren (2020) noted that the social media campaign “#MasksforAll” has had a negative impact on accessibility for the DHH community in the UK. Even alternatives to masks, such as clear face masks and face shields, are difficult to attain and do not meet hospital standards. Grote and Izagaren concluded that the implementation of widespread masking “risks those with hearing loss becoming increasingly isolated, with all the detrimental mental health consequences that can ensue” (p. 1). This risk goes beyond the DHH in the UK, having a serious impact on a large number of DHH individuals globally. Unfortunately, in the pursuit of equality, as opposed to equity, some have suggested that the DHH persevere “for the greater good of society” (p. 1). This places unfair pressure on DHH individuals to forfeit appropriate access for the good of the hearing majority, which is a large ethical conundrum.

The mishandling of sign language vocabulary related to COVID-19, as well as the widespread implementation of mask mandates has globally ostracized the DHH. The general public has overlooked the specific communication needs and preferences of both the medically deaf and the culturally Deaf. A closer examination of the communication mores of the Deaf community will highlight the specific differences between communication in the hearing world and the Deaf world.

#### *Deaf Culture and Communication*

It is a common misconception that all DHH individuals consider themselves disabled or in need of medical intervention. In actuality, there are many ways that individuals experience deafness. The term *deaf* refers to individuals who view their deafness as a disability. These individuals often identify as hard of hearing. This group is less likely to rely on sign language and more likely to seek assistive technology, such as hearing aids or cochlear implants. *Deaf* individuals, on the other hand, are those who identify with Deaf culture. They do not view themselves as disabled, rather they live through the lens of Deaf gain. According to Holcomb (2013) “the concept of Deaf gain, counters the emphasis on the ‘loss’ of hearing and instead accentuates the benefits of being deaf” (p. 308). Additionally, Deaf individuals see their deafness as more of an ethnicity than a disability (Holcomb 2013). Members of the Deaf community are more likely to communicate in sign language and shun the use of assistive technologies.

While it is important to understand that there are many ways to experience deafness and one must never rely on overreaching generalizations, in the United States it is widely accepted that deaf or hard of hearing individuals most often rely on English or a signed version of the English language to communicate. Deaf individuals, on the other hand, are proud proponents of ASL as a fully realized language directly connected to a fully realized culture. With this understanding of the

difference between cultural Deafness and medical deafness, it is easier to understand why DHH individuals communicate differently than the hearing culture. In order to better comprehend how the Deaf access information and communicate, the concepts of incidental learning and information sharing must be explored.

### *Incidental Learning*

Incidental learning, by definition, is the learning that individuals partake in unintentionally. In the hearing world, incidental learning most frequently occurs through audition. Examples of incidental learning among hearing individuals include gaining information through overhearing a radio, the television, or a conversation (Holcomb 2013). It is difficult for DHH individuals to participate in incidental learning. Instead of overhearing, “for deaf people, incidental learning needs to involve overseeing a conversation” (Meek 2020, p. 1677). Due to the nature of sign language and spoken English, Deaf individuals overseeing a conversation in sign language is not nearly as common as hearing individuals overhearing a conversation in English. Overseeing requires focused, visual attention. Overhearing, on the other hand, can happen without focused, auditory attention. Scholarship suggests that this reduced access to incidental learning creates gaps in world knowledge among the DHH.

World knowledge is general information that one has about life and the world. A considerable portion of an individual’s world knowledge is acquired through incidental learning (Convertino et al. 2014). This means that DHH individuals must acquire world knowledge through overseeing conversations or information around them. Due to the nature of incidental learning among the DHH, studies reveal that DHH individuals have less vocabulary and world knowledge than their hearing peers (Convertino et al. 2014). Additionally, Convertino et al. (2014) performed a study that revealed that the use of cochlear implants had no significant impact on a DHH individuals ability to access vocabulary and world knowledge through incidental learning. In other words, it is common for DHH individuals to miss out on world knowledge due to the inaccessible nature of incidental learning.

Poor access to incidental learning among DHH children is widely attributed to their inability to overhear conversations that occur in family settings. 90-95% of d/Deaf children are born to hearing parents (Holcomb 2013). This means that an overwhelming number of d/Deaf children are born into families that cannot easily communicate with them. Poor communication with hearing family members causes deficits in incidental learning and world knowledge. This common experience of missing out on family conversations is known in the Deaf community as Dinner Table Syndrome. Dinner Table Syndrome refers to “scenario[s] in which deaf members are excluded from family conversations and often feel isolated as a result” (Meek 2020, p. 1676). These conversations most often happen at the dinner table, hence the terminology. By missing out on family conversations, DHH individuals are more likely to miss out on news of current events (Meek 2020). When applied to situations such as the COVID-19 pandemic, it is understandable why many DHH individuals experience informational gaps.

### *Information Sharing*

Information sharing is when Deaf individuals exchange knowledge amongst themselves that can benefit the whole community. According to Holcomb, “Deaf people continue to feel responsible for supporting each other with detailed accounts of various types of information from tips on finding a good deal to critical health related issues to rumors about upcoming layoffs” (p. 201). Due to the common experience of poor access to information in the hearing world,

information sharing is an important value of Deaf culture. It is so highly valued, that Deaf individuals consider vagueness and privacy to be rude because it could be detrimental to the community (Mindess 2006). For this reason, Deaf people are quick to share new information with one another. It is a way of preserving the interests of community members and the culture as a whole.

As technology evolves, the Deaf community finds new means of information sharing. Before the widespread use of social media, information sharing occurred mostly through “a complex and highly efficient communication network often described as the ‘Deaf Grapevine’” (Winningham et al. 2008, p. 52). With the advent of social media, the Deaf have started to rely on social networking sites to share information with each other in a more efficient manner. This new platform has allowed a larger group of Deaf community members to communicate with one another, even facilitating international Deaf communication (Tannenbaum-Baruchi & Feder-Bubis 2018). For this reason, some scholars have referred to social media as “a modern-day Deaf club or virtual Deaf club,” reminiscent of the cultural gatherings of the twentieth century (Holcomb & Smith 2018). Social media is the new meeting place for culturally Deaf individuals. It is a place where information can be shared easily and outside of the restrictions of the hearing world.

Social media is more than a means of communication in the Deaf community, it is also an important and accessible source of news. In Meek’s (2020) study of six Deaf adults’ experiences with Dinner Table Syndrome, the participants noted that they often rely on their phones to access information. Meek noted, “on Facebook and other social media outlets, they could control the flow of information and gain incidental and world knowledge” (p. 1685). In addition to their praises of social media, these participants also described their frustrations with poor quality captioning on television news. Through social media platforms, written information as well as signed information is far more accessible. For this reason, modern technology is cited as having “minimized the communicative barriers that have traditionally made it difficult for deaf people to be fully included in the larger society” (Holcomb 2013, p. 101).

In a sense, information sharing is the solution to the problem of incidental learning among the Deaf. Poor access to world knowledge through incidental learning calls for the Deaf to share information as widely and purposefully as possible. In terms of the COVID-19 pandemic, one can hypothesize that the Deaf have relied on information sharing throughout the pandemic as a way to inform each other of the risks of COVID-19. Since information sharing has been modernized through social media as well as video conferencing apps, the Deaf are still able to share pertinent information with one another. Additionally, it is likely that DHH individuals have had limited access to incidental information about the pandemic. DHH individuals are unable to overhear news reports on television or the radio. Social distancing standards make it difficult for DHH individuals to oversee visual conversations.

### *Deaf Mental Health*

Despite the unique ways in which DHH individuals acquire knowledge, poor access to important information and fluid communication has a negative impact on DHH mental health. Psychological research indicates “that the Deaf community faces a higher rate of mental health problems than does the general population” (Recio-Barbero et al. 2020, p. 212). This risk of mental health problems can be partially attributed to the inaccessibility of communication and information. Studies on DHH children reveal that failed communicative interactions with adults have negative emotional implications, which “[leave] a mark in the DHH child’s psyche” (Hintermair 2016, p.

64). For this reason, a bicultural-bilingual identity among the Deaf is considered optimal, as it gives the individual access to both the hearing world and the Deaf world (Holcomb 2013). Access to both worlds promotes emotional and mental well-being.

The COVID-19 pandemic presents risks to the mental health of the DHH due to the large influx of inaccessible and confounding information. Scholars are hypothesizing higher risks of anxiety, depression, PTSD, and other related mental disorders among the DHH in relation to the pandemic (Recio-Barbero et al. 2020). The general population is at risk due to increased isolation, but these risks are exacerbated among the DHH due to new communication barriers (i.e.: face masks). In order to prevent a serious influx in mental disorders among the DHH, advocates for these individuals are suggesting “small actions that promote adequate public access to health resources for social minorities” (Recio-Barbero et al. 2020, p. 213). These small actions can be the preventative measures necessary to protect the mental well-being of DHH individuals.

A wide review of literature suggests that the DHH are especially at risk during this pandemic. These potential risks include: higher infection rates, development of mental disorders, and poor access to information. Due to the unique communication and information gathering standards of the Deaf, this pandemic poses old risks in a new way. While these hardships and hurdles are not new to the DHH experience, they are especially prevalent during this period of global distress. In order to better understand how the DHH are accessing information in these unprecedented times, it is necessary to analyze media coverage of the pandemic.

### **News Analysis**

The second portion of this project was an organized observation of four news channels. Three of the news channels observed are prominent, mainstream networks: CNN, Fox News, and MSNBC. The fourth news channel is the Daily Moth, an online news platform produced in ASL and very well respected in the Deaf community. These four channels were observed in order to compare and contrast the content being reported during the COVID-19 pandemic. Observations were made from May 18, 2020 to June 30, 2020. During this time period, the researcher watched the news Monday through Friday, focusing on each network for twenty minutes a day. News reports were accessed through each network’s Youtube channel. Most observations were made in the morning, which may affect the content which was observed.

These observations are helpful in understanding how and why DHH individuals access news differently than hearing individuals. Through watching these four news sources, one can conclude that important information about the COVID-19 pandemic was covered across all four networks, but through different manners and in different amounts. Additionally, the mainstream networks incorporated a large amount of political bias which made it difficult to follow the facts of the pandemic. Lastly, while the Daily Moth produces much less content than the other three networks, it proves reliable in its focus on informing as opposed to entertaining. Most importantly, it was observed that the Daily Moth follows an information sharing model which is consistent with Deaf culture.

#### *News Sources at a Glance*

The Daily Moth is an online news source produced by Alex Abenchuchan, a culturally Deaf man who graduated from Gallaudet University. Abenchuchan produces the news in ASL by reiterating English news and citing his sources. In addition to being shared in ASL, the Daily Moth also provides English captions which are translated by ASLCaptions.com. The main target

audience of the Daily Moth is the Deaf community, as well as hard of hearing individuals. Due to its cultural affiliations, the Daily Moth balances mainstream news stories with stories specifically for and about the Deaf community. For example, while reporting on the COVID-19 pandemic, Abenchuchan often interviewed Deaf doctors, medical students, and frontline workers about their experiences. Like any other news source, the Daily Moth has its political biases. One can infer that the Daily Moth has a Democratic leaning, based on the way in which it covered the Democratic race for the presidential nominee and its subtle criticisms of President Trump. Despite its political leanings, the Daily Moth is not driven by politics. Instead, its drive for sharing news in an accessible manner is what makes it such an admirable source. As far as the amount of content produced, Abenchuchan tends to post a news report every weekday and one or two stories about the Deaf community on the weekends.

CNN is a mainstream news source that is popular in the United States. It is produced in spoken and written English for a primarily hearing audience and provides closed captioning. CNN is known for having a Democratic leaning (some may argue that “leaning” is not a strong enough descriptor). Still, politically, it is considered to be a fair middleground between MSNBC and Fox News. Since it is such a popular source of news, it has a near constant stream of content coming out of a variety of platforms.

Fox News is another well respected news source in America. It is produced in spoken and written English, provides captioning, and is intended for a predominantly hearing audience. Fox News is considered by most to produce content from a conservative, Republican perspective. Similarly to CNN, Fox News has a constant stream of reporting coming out of its platforms.

MSNBC is the final mainstream, American news source observed in this study. It is produced in spoken and written English with captioning provided. Its main audience is the general, hearing public. MSNBC is known for its liberal, Democratic reporting. Again, like the other two mainstream news sources, it has a constant stream of information being produced.

### *Political Interference*

The most notable difference between the mainstream news sources and the Daily Moth, other than the amount of information produced, is the amount of political discourse. The mainstream networks incorporated a large amount of political commentary into their reporting. MSNBC and Fox News were the most saturated in political discourse. CNN had less political dialogue, but still more than the Daily Moth. This became obvious in the way that the networks were reporting throughout the pandemic.

Political biases affiliated with each mainstream news source made it difficult to discern the true nature of the pandemic. As the pandemic continued, networks began advocating for reopening or continued closings based on political affiliations. Fox News, known for its Republican viewpoint, was a large proponent for reopening the country on the grounds of economic stability and Constitutional rights. MSNBC and CNN were more likely to advocate for keeping the country closed for the sake of public safety. Additionally, network opinions of the Trump Administration frequently showed up in COVID-19 related reports. For example, during the observations on May 20, 2020, CNN and MSNBC both reported negatively on how the White House was interacting with the CDC. CNN reported that “politics, not science, is the driving force behind the White House response to COVID-19 and those decisions have made the effects of the pandemic in the United States worse” (CNN 2020). Similarly, MSNBC reported in regards to silence from the White House COVID-19 task force, “is this vacuum in medicine, science, and facts, for all of us taxpayers, a



kind of perverse victory for the Trump White House?” (MSNBC 2020). On the same day, Fox News was advocating for reopening the country due to the negative effect social distancing has on the mental health of children. During this report, the CDC was criticized for its reaction to COVID-19 as opposed to the flu among children (MSNBC 2020).

Political blame shifting in mainstream news made it difficult to know the true state of the country throughout the pandemic. In more layman's terms, involving the President's name in COVID-19 reporting that had nothing to do with him seemed to be a failure across the board, with CNN being the most innocent among the three mainstream sources. This incorporation of political discourse into medical discussions makes it difficult for *all* individuals to access true information, not just DHH individuals.

The Daily Moth, on the other hand, stuck to straightforward reporting in an attempt to provide the Deaf community with important information about the pandemic. This focus on informative news, rather than entertainment or political debate, showcases how the Daily Moth follows the information sharing model valued in the Deaf community.

#### *Information Sharing in the Daily Moth*

The Daily Moth's emphasis on straightforward reporting that values the interests of the viewers, models the Deaf cultural value of information sharing. In Holcomb's (2013) textbook *Introduction to American Deaf Culture*, he posits that a similar news source for the Deaf, iDeaf News, follows an information sharing model which praises achievements in the Deaf community and advises Deaf viewers to be cautious of current events. As the Daily Moth presents information in a similar manner, one can conclude that Abenchuchan's news reports also follow an information sharing model.

Throughout the observation period, there were instances in which Abenchuchan's reporting went beyond standard journalism. During a variety of news reports, Abenchuchan shared helpful, sometimes intimate information with the viewers. Examples include: reporting on which nationwide Deaf events were cancelled, detailed reports on how to access stimulus checks, and state-by-state updates on the number of COVID-19 cases. One specific instance that stands out to the researcher comes from the report on March 12, 2020. This was very early in the pandemic when the nation began experiencing overwhelming shutdowns. At the end of the news briefing, Abenchuchan signed, “On a personal level, I want you to start considering a plan on if you and your family will have to be at home for an extended period of time. Consider stocking up on food, medicine, and other necessities. Have a plan if someone in your family is sick. Where would they stay? Reach out to elderly members of your family and see if they need help with things” (Daily Moth 2020). As previously mentioned, in Deaf culture it is considered rude to withhold information that may benefit the group. The Daily Moth, which was designed to bring accessible news to the Deaf community, focuses more on providing the Deaf with the information they need than entertaining or pushing political agendas. For this reason, the Daily Moth is a valuable source to the Deaf community.

The mainstream news sources observed in this project have their respective purposes. While many hearing individuals enjoy watching these news programs, their political agendas and overwhelming production of news makes it difficult for DHH individuals to access information. In a sense, DHH individuals have limited access to a large amount of news in the United States. On the other hand, the news many of them receive from the Daily Moth is straightforward and trustworthy.

## Survey Analysis

### *Methodology*

The final portion of this project involved the distribution of a survey to Deaf, hard of hearing, and hearing college students. After much difficulty, a sample was collected from each demographic. Unfortunately, the sample sizes were insufficient to draw any firm conclusions about Deaf, hard of hearing, and hearing college students during the COVID-19 pandemic, but patterns were observed within the sample populations that may shed light on future research.

Approval for the distribution of the survey was granted by the Institutional Review Board at Lee University. The survey asked twelve questions. Four of the questions asked the students to identify with certain demographics. The other eight questions asked students to self-assess their access to information and their overall emotional state during the pandemic.

The original plan for the survey was to survey a predominantly hearing university and a predominantly Deaf university. The predominantly hearing university was Lee University in Tennessee, from which 569 hearing students and 17 hard of hearing students responded. The original target university from which Deaf student responses were meant to be collected had difficulty dispersing the survey. After a few failed attempts to disperse the survey to students from this university via social media platforms, three more predominantly Deaf colleges were contacted. Again, these three universities were unable to disperse the survey appropriately. One last attempt was made by emailing American universities with Deaf education programs and colleges that are recognized for their service of Deaf and HOH college students. Lists of these universities were found through the websites for College Express and Deaf Education. To contact the Deaf education programs, emails were sent to the directors or professors from the programs. To contact the colleges with high accessibility standards, disability services or academic support was contacted unless another individual at the university was determined to be a better point of contact.

These programs were sent a link to an online survey through Survey Monkey and asked to forward the link to their DHH students. At the end of the sample period, 17 hard of hearing and 19 Deaf students responded. As previously mentioned, this is an inappropriate sample size from which to draw conclusive data from, but insightful patterns were discovered among the populations.

### *Survey Results*

To better compare the results of the survey, the hard of hearing students from all universities were combined into one group, the Deaf were separated from the hard of hearing, and the hearing group stood alone. Of the 34 hard of hearing students, 23 were female, 9 were male, and 2 did not specify their gender. Among the Deaf students, 14 were female and 5 were male. Lastly, among the hearing students, 429 were female, 134 were male, and 6 did not specify their gender. Additionally, both undergraduate and graduate students were surveyed. Of the 34 hard of hearing students, 27 were undergraduate students and 7 were graduate students. Among the Deaf students, 14 were undergraduate students and 5 were graduate students. Lastly, among the hearing students, 530 were undergraduate students and 39 were graduate students.

The first content question asked students to determine their primary source of news and information during the pandemic. As hypothesized, DHH individuals did not rely on television news as heavily as the hearing students. 5.88% of the HH students and 5.26% of the Deaf students relied on television news, whereas 14.59% of hearing students relied on this source. It was also hypothesized that DHH students would rely more heavily on social media than hearing students, this proved to be an accurate assumption. 41.17% of the HH students and 47.37% of the Deaf

students relied on social media for news. Only 30.23% of hearing students relied on social media as their primary source of information. Across the three groups, reliance on online news as a primary source of information was fairly consistent.

The next content question asked students to determine their overall feelings towards the pandemic: negative, neutral, or positive. Overwhelmingly, DHH students had a more negative, less positive outlook on the pandemic. 50% of HH students and 57.89% of Deaf students said they had overall negative feelings about the pandemic. Only 35.5% of hearing students felt that they had an overall negative perspective. Additionally, 8.82% of HH students and 15.79% of Deaf students had a positive outlook on the pandemic. 23.55% of hearing students, almost a full quarter, had an overall positive attitude concerning the pandemic.

The students were then asked to determine if they had access to enough information in order to feel safe during the pandemic. Surprisingly, the group that felt the least safe based on information access was the HH group. While the numbers were close, 89.47% of Deaf students said they felt safe, whereas 86.16% of hearing students said they felt safe.

The next question asked if students had feelings of isolation during the pandemic. Unfortunately, the number of students who agreed across all three groups was fairly high. 64.71% of HH students, 63.16% of Deaf students, and 57.64% of hearing students said that they either agreed or strongly agreed that they experienced feelings of isolation during the pandemic.

Students were asked a series of questions concerning their ability to communicate with others during the pandemic. One question asked if students had people to communicate with when they experienced negative feelings. Two other questions asked if students were still able to communicate with their friends and the outside world during the pandemic. For all three questions, the combined number of students who agreed or strongly agreed was highest among the hearing students and lowest among the Deaf students.

Lastly, students were asked if they felt that they had enough access to information in their first or preferred language. As expected, Deaf students, who tend to rely on ASL, overwhelmingly felt as if they did not have enough access to information in their first or preferred language. Less than 1% of hearing students either disagreed or strongly disagreed that they did not have enough access in their first language. 97.89% of hearing students either agreed or strongly agreed that they did have enough access in their first language. 8.82% of HH students either disagreed or strongly disagreed that they did not have enough access in their first language. 64.71% of HH students either agreed or strongly agreed that they did have enough access in their first language. 31.58% of Deaf students either disagreed or strongly disagreed that they did not have enough access in their first language. Only 52.63% of Deaf students either agreed or strongly agreed that they did have enough access in their first language.

### *Discussion*

The results of this survey suggest that all three groups of college students have felt a negative emotional impact as a result of the COVID-19 pandemic. This could be due to a variety of reasons such as school closings, social distancing, fear of illness, and family factors. Additionally, DHH college students had a more negative emotional response to the pandemic at the time of the survey. This could be due to the communication deficits experienced by both groups.

As one might assume, DHH students responded that they had less access to information about the pandemic, especially in terms of first language access. This could be due to low levels of English literacy among both the Deaf and HH as well as low levels of access to information in

ASL. DHH students also have less access to incidental learning about the pandemic due to language barriers. Additionally, DHH students felt less able to communicate with friends and the outside world than hearing students. This is of great concern due to this group's propensity towards developing mental illness in relation to isolation and language barriers.

The most unexpected results came when students were asked if they felt they had enough information to feel safe. HH students felt the least safe and Deaf students felt the most safe. One could hypothesize that HH students felt the least safe in terms of information access because they are less likely to access English or ASL news in a completely fluent manner. This means that neither English nor ASL news is fully accessible to this group. Additionally, one could infer that hearing students felt slightly less safe than Deaf students due to the overwhelming influx of news about the pandemic. Many hearing students commented that they did not trust the media's handling of the pandemic. In a sense, hearing students felt that they did not have enough information to stay safe because they had too much information and were unable to discern truth from "fake news." Deaf individuals, on the other hand, genuinely do not have access to enough news. They are not afforded the opportunity to dissect large amounts of news and determine what is true and what is false.

#### *Limitations*

This survey experienced a few limitations. One limitation is the fact that the COVID-19 pandemic was ongoing throughout the project. It was difficult to contact schools and ask them to disperse surveys to students. Some schools responded that they were afraid to fatigue their students with emails and research opportunities. Additionally, the online format of the survey made it difficult to recruit students.

There was also a large time gap between collecting responses from Lee University and the other colleges. Responses were collected from Lee University in mid-May. Responses were collected from the other colleges from late-July to early-August. As much changed during the pandemic, this could have caused students to answer differently.

#### **Conclusion**

Based on the three components of this study, one can infer that DHH college students have less access to important information pertaining to the COVID-19 pandemic than their hearing counterparts. Additionally, DHH college students are experiencing more negative emotions in regards to the COVID-19 pandemic.

It would be flagrant to assume that Deaf and hard of hearing college students are experiencing these difficulties in the same manner, though. A Deaf or hard of hearing individual's response to the COVID-19 pandemic largely relates to their linguistic and cultural identity. Individuals who identify as culturally Deaf will likely have less access to news in written or spoken English. These individuals may rely on the Daily Moth for news programming, which would give them access to less news with less political bias. They may also partake in information sharing which would give them access to a base of collective knowledge within the Deaf community. This collective knowledge could potentially be based on Deaf individuals' first hand experiences with the virus. Of course, this has its own dangers in the fact that hearsay could easily integrate these channels of communication.

Hard of hearing individuals may be in the unfortunate situation of not having appropriate access to English news, due to literacy levels, or ASL news, due to language barriers. Additionally, these individuals are put into the uncomfortable situation of wearing masks and limiting their access to lipreading.

DHH college students especially may be experiencing the overwhelming scenario of being isolated from friends and classmates due to school closings and social distancing. Dinner Table Syndrome in the home setting could limit their access to incidental knowledge about the pandemic. Limited access to information and isolation from friends can give way to serious mental health issues.

Further research should be done on this topic once the pandemic has passed. Additional research should also be conducted on implementing policies to protect DHH individuals from being overlooked in future pandemics or other global disasters.

## References

- Amorim, G., Ramos, A. S. I., Junior, G., de Souza Afonso, L., Castro, H. C. (2020). Coronavirus, deafness and the use of different signs of the area in health during a period of pandemic time: is that the best option to do? *Creative Education*, 11, 573-580.
- Convertino, C., Borgna, G., Marschark, M., Durkin, A. (2014). Word and world knowledge among deaf learners with and without cochlear implants. *Journal of Deaf Studies and Deaf Education*, 471-483.
- Grote, H., Izagaren, F. (2020). Covid-19: the communication needs of D/deaf healthcare workers and patients are being forgotten. *BMJ*, 1-2.
- Holcomb, L. (2018). Harnessing Social Media as a Tool of Empowerment and Change. In D. H. Smith, T. K. Holcomb (Eds.), *Deaf eyes on interpreting*. 105-116. Washington: Gallaudet University Press.
- Holcomb, T. K. (2013). *Introduction to American Deaf Culture*. New York, NY: Oxford University Press.
- Meek, D. (2020). Dinner table syndrome: a phenomenological study of deaf individuals' experiences with inaccessible communication. *The Qualitative Report*, 25(6), 1676-1694.
- Mindess, A., Holcomb, T. K. (2006). American Deaf Culture. In *Reading between the signs*, 2nd ed., 76-118. Boston, MA: Intercultural Press.
- Peinkofer, J. (1994). HIV education for the deaf, a vulnerable minority. *Public Health Reports*. 109(3), 390-396.
- Recio-Barbero, M., Saenz-Herrero, M., Segarra, R. (2020). Deafness and mental health: clinical challenges during the COVID-19 pandemic. *American Psychology Association*, 12(1), 212-213.
- Stevens, H. (1998). AIDS, not hearing aids: exploring the link between the deaf community and HIV/AIDS. *Health and Human Rights*, 2(4), 98-113.
- Tannenbaum-Baruchi, C., Feder-Bubis, P. (2018). New sign language new(s): the globalization of sign language in the smartphone era. *Disability and Society*, 33(2), 309-312.
- Winningham, A., Gore-Felton, C., Galletly, C., Seal, D., Thornton, M. (2008). Lessons learned from than two decades of HIV/AIDS prevention efforts: implications for people who are deaf or hard of hearing. *American Annals of the Deaf*. 153(1), 48-54.

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## Coral Communities: A Comparative Case Analysis of Non-Profit Conservation Projects

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## Abstract

*The proposed project will be a comparative case study of two conservation projects conducted by non-governmental organizations. Non-governmental organizations that target environmental conservation have been pivotal in the fight to create a better and more sustainable Earth. This project will explore the activities of two organizations as they relate to the social, economic, and demographic context of the conservation interventions. The projects are the Mesoamerican Reef project conducted by the World Wildlife Fund and the Resilient Island initiative conducted by the Nature Conservancy. The Mesoamerican Reef stretches from the Yucatan Peninsula on the coast of Mexico to the Honduran Bay Islands. The reef also spans the coasts of Belize and Guatemala. The Resilient Island initiative focuses on Jamaica, Grenada and the Dominican Republic. The assessment of each project would be based on the United Nations Development Programmes' Sustainable Development Goals (SDGs). These goals serve as a call to action for all people of the planet to improve life in many facets. This research will explore the interventions used by these projects according to their direct fulfillment of three SDGs, those being, Sustainable Cities and Communities, Climate Action and Life Below Water. These goals will be compared with data from the website pages and provided resources. The success of intervention projects often relies on interactions with local communities and economies. In order to contextualize the conservation initiatives into the specific social and economic positions in the communities where they are located, additional secondary data regarding population and development will be included in the analysis. This includes economic data from the World Bank and development information from the United Nations Human Development Report. With this research, the hope is to objectively describe the intervention process of dissimilar projects which have similar goals. The research aims to situate the initiatives in specific places and suggest the importance of cultural context and location in the successful attainment of SDGs.*

## Introduction

The Earth has undoubtedly experienced vast amounts of change within the last century and humans are the main contributors. Humans existing inevitably cause environmental change in order to meet the essential needs of living. As humans continually evolve the impact on their environment does as well. The most recent bout of climate change specifically human-induced climate change has been unrivaled (Thornes, 2016.) Air and water temperatures are at an all time high and biodiversity is being threatened in many places around the globe. Rainwater and natural disasters have increased (Rao, 2018). These subtle changes in the environment can influence many aspects of daily life and create economic concern. Climate change is a growing problem that affects the planet, in its entirety, and will continue to do so if more intensive preventative measures are not taken. This has pushed authorities across the planet to press for more sustainable living. Sustainable development is roughly defined by the UN, as a result of a 2012 meeting, as “working for poverty eradication, changing unsustainable patterns of consumption and production, and promoting inclusive and equitable economic growth” (25). The desire for sustainable development by many nations bred the creation of Sustainable Development Goals (SDG). These goals serve as guidelines and benchmarks for countries to strive for a more sustainable and holistic society. The goals are each tailored to remedy specific pressing issues that face the planet. SDG eleven is titled Sustainable Cities and Communities. The focal points of this goal are to improve daily life for individuals by way of providing career options, more affordable living, and communities that are



better suited for natural disasters. Many island countries and coastal regions have become increasingly susceptible to natural disasters as climate change intensifies (Bosque, 2012). SDG Thirteen is titled Climate Action and is directly aimed at combating climate change. Climate change has disrupted the fishing industries, the economy, and led to an increase of natural disasters over the years. This goal aims to help build more disaster resilient systems and increase education and awareness. Knowing the influence and expanse of climate change is crucial for it to become a top priority among governments and citizens. SDG Fourteen is titled Life Below Water which draws attention to sustainable and appropriate use of ocean resources as well as managing and conserving coastal ecosystems amid pollution and acidification.

### **Literature Review**

Though the SDGs themselves are fairly new the literature regarding the topics is extensive. Additionally, much of the research done on Sustainable Development is from recent studies. Each of the SDGs used in this research overlap and interlay with one another. According to the literature, a pillar of building sustainable cities and communities in island settings is the partnership and involvement of Non-Governmental Organizations (NGOs) (index 11.2). NGOs include organizations like the WWF and The Nature Conservancy that work to create numerous partnerships with governments while working outside of them. The main concern with these partnerships is not the partnership itself but the function of these partnerships not inhibiting their purpose. Simply phrased, it is vital but difficult to ensure that NGOs and governments are working in a way that is sustainable and not actually enlarging the issues that they are aiming to solve (index 11.2). This principle is difficult to ensure because many governments have long operated in unsustainable ways when it comes to military conflict, resource management, political engagement and consumption patterns. Most governments unintentionally operate in a way that makes sustainable development that much more difficult. Though the United Nations and involved countries have made an effort to improve their sustainability efforts by signing treaties and creating laws, Lempert and Nguyen argue that it is a frail attempt at best to actually solve any issues (2017). One of the goals of this paper and research is to provide a more microscopic look at how the goals of the SDGs are being implemented by NGOs and if it is proving to be effective in any capacity. Organizations and governments do hold a substantial role in sustainability efforts, the natural environment itself is of consequential importance. Natural disasters have wreaked havoc among many coastal countries throughout the years. This can be detrimental for less developed or smaller countries that may not have the same resources or funds of a larger country. Tyler states the claim that it is imperative for all at risk countries to establish sustainable hazard mitigation which is described as “a concept that links the wise management of natural resources with local economic and social resiliency” (index 11.5). Essentially there is a lack of resilience in the way that most economies operate so when disaster strikes it is harder to recover and even more so in a way that is truly healing to the environment. It is proposed that establishing greener infrastructures can serve as a mitigation measure and step in the right direction to solve other issues within the environment and economy. The problem lies in the way that three components interact. The physical environment, built environment and human environment interact and react to crisis in a way that has been determined to be highly problematic (Tyler, 2016). This segways deeper into the issue of climate change which is addressed in SDG 13, Climate Action. The physical environment is constantly changing and creating a ripple effect that spills over into many components necessary

to sustain human life and wildlife. The health of the natural environment impacts much more than just the animals inhabiting that area. The scope of areas impacted by climate change increases every day. Thornes explains that this round of “human-induced climate change” has created a dependency on other resources thus enabling humans to turn a blind eye to the detriments of human evolution to the natural population (2016). Sea levels have risen due to melting ice caps and seas have gotten gradually warmer as time progresses. This is a direct threat to coastal habitats for animals and humans. In addition, the more damaged animal habitats become the more difficult it will be for local economies that depend on fishing to stay afloat. Climate change even impacts livestock and their susceptibility to certain illnesses and foodborne pathogens (index 13.3). Rainfall has increased which can create significant flooding concerns especially in areas that rely on watersheds or have poor drainage (index 13.5). Flooding, water temperatures increasing and ocean acidification are all contributing factors to driving fish from their habitats as well. It is predicted that if climate change continues at such rates then the areas fish have to inhabit will decrease significantly (index 13.2). The magnitude of this climate change really does extend to almost every factor of life. There is also an extensive amount of literature regarding climate change and its impact on marine life and habitats which relates to SDG 14 which is Life Below Water. As already briefly mentioned, life below water is at serious risk in many ways. In the Great Barrier Reef the overall reef health and water quality of the region is poor and it’s not due to a lack of action. The massive 2000 km reef system has seen severe deterioration over the last few decades despite protection and conservation efforts from the Federal, National, and Global organizations and government groups (index 14.2). Laws and various other forms of protection are in place but land pollution and climate change have created damage within the reef system that many fear is irreparable. In South Africa, the ecosystem also experiences effects of the many environmental pressures created by climate change and industrialization. Ocean acidification has greatly impacted microorganisms that help keep the water clean and protect species important to local aquaculture and fisheries. (index 14.5). Globally, life below water has been affected by climate change and can hopefully be rejuvenated by efforts to create sustainable cities and communities.

### **Why are the SDGs important?**

The United Nations made the Sustainable Development Goals to be a call to action and accountability of partnering countries. Humans are mostly responsible for the current state of the planet, which in many ways is negative. In an effort of ownership, the SDGs are a guideline for improving life in many major areas of concern. In relation to the two projects in question, there are three specific goals that were referenced. SDGs 11, 13 and 14 were used as a comparative lens in this project. Within each goal there is a more detailed list of target goals that are meant to better describe and guide the intentions of each goal.

### **SDG 11**

The first goal that was utilized as a comparative lens is titled Sustainable Cities and Communities. Creating careers, business opportunities, safe and affordable housing and building more resilient societies is in the description of what this goal aspires to achieve. This SDG is relevant to many of the countries in each of these projects that display a lack of general economic stability coupled with environmental concerns regarding reefs, and other issues present with island living. It is vital to the longevity of the planet to prioritize cultivating sustainable communities. One of the more

elaborate target goals for SDG 11 was “By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels” Goal 11, 2015).

### **SDG - 13**

Sustainable Development Goal 13 is titled Climate Action. Over the years climate change has been political, educational, harmful and relevant. It has been and continues to be a frequent topic of discussion among governments, companies and everyday people. Projects from the World Wildlife Fund and the Nature Conservancy exist as a result and effort to repair the damages of climate change. Thus the goal of Climate Action is to allocate funds that will allow practical, preventative steps to be taken to aid developing countries in their pursuit of a safe, clean and affordable environment for their citizens. Many of the countries being aided by the aforementioned projects are island countries which introduces an entirely new set of climate related challenges. Disaster resiliency is a goal for these islands that continually get bombarded by natural disasters (Bosque, 2012). Not only is there environmental fallout but there is economic fallout as well. Disaster relief costs money and has economic impacts thus in an environment with constant disasters it becomes more difficult to recover financially. With island countries, many people draw their livelihood from fishing and tourism (The World Factbook Guatemala, 2018). A target goal for this SDG was to “Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning” (Goal 13, 2015).

### **SDG 14**

Sustainable Goal 14 is titled Life Below Water and focuses on ocean health. Ocean health is more vital than some realize since it is essentially what makes the planet habitable. Oceans provide a home for abundant marine life and are useful resources for human life. Yet as a result of years of carelessness and exploitation of those resources, the oceans are becoming increasingly unhealthy. Over the last century ocean acidification has increased by twenty-six percent while ocean pollution has increased to a startling amount (Goal 14, 2015). Pollution makes the ocean dangerous for many of the species living in it and may be a contributing factor to the extinction or endangerment of many animals. A target goal for this SDG is “By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics” (Goal 14, 2015).

### **Marine Protected Areas**

A vital step in the right direction is in the creation and continuation of Marine Protected Areas (MPAs). MPAs have been defined internationally as “a clearly defined geographical space, recognised, dedicated and managed, ... to achieve the long term conservation of nature with associated ecosystem services and cultural values.” MPAs may sound, from a conservation standpoint, like a positive measure however those that are directly affected may disagree. The enactment of these protected areas has become somewhat controversial due to the nature of their

reach. Many fisheries, oil companies, and locals that live off the land see these areas as taking away resources that ensure their livelihood. This concern cannot be ignored and should be taken into consideration as with the many other factors that determine the establishment of an MPA. MPAs may be established in a variety of ways that allow, restrict or limit accessibility to specific areas of an environment.

## NGOs, WWF and The Nature Conservancy

### Country Information

	Policy Information	Environmental Standings/Reef Health	Economic Information	Demographic Information
<b>Mexico</b>	1. Mexico has made efforts to create legislation but the backing and execution of such have fallen short. Lacks framework despite MPA implementation	7. Reef health is steady, “fair”. Commercial fish biomass is on a steady decline. Herbivorous fish biomass has increased and coral cover was increasing until stony coral tissue loss disease outbreak	21. 11th largest economy in the world. The US’ second largest export market. Services sector, development and oil are the main focuses of the economy.	21. 1, 964, 375 sq km of land and 20, 430 sq km. The population of Mexico is 128,649,565.
<b>Belize</b>	3. 14. Managed access program was created to better regulate fishing and serve as a “living document” of sorts. Roughly 16% of Belize's divided water territories are no fishing zones (14.) 5. 6. New law is meant to regulate and clarify the role of local management and affiliated organizations	7. Reef health has improved over the years as opposed to other regions of the MAR. Corals were planted in parts of the reef as an attempt to restore the ecosystem	3. While the Belize gov’t is potentially much more involved than other countries there is a large host of private organizations that also partner for reef protection	3. 7. 15. Belize’s barrier reef section is the majority of the MAR. (14.) Belize takes up 300 km of the MAR. Many citizens have pushed for environmental action. 23. Island is 22,966 sq km, 160 km of water. The population is 395, 598.

Guatemala	<p>4. Guatemala has “hard” and “soft” laws. Additionally there are targeted initiatives that serve more as a framework than anything else</p> <p>4. Despite ^ there is still a lack of united legal framework.</p> <p>*Table 3 is helpful pg. 102</p>	<p>4. Guatemala is one of the most vulnerable and at risk countries for natural disasters. Creating a more naturally resilient community and greatly reducing emissions are priority concerns</p>	<p>20. Most populous country in Central America. Big agricultural focus, agriculture accounts for 13.5% of the GDP. Unequal distribution between wealthy and poor. Have one of the largest rates of child malnutrition in the world.</p>	<p>20. The island is 108,889 sq km, 1,730 sq km of which is water. The population is 17,153,288.</p>
Honduras	<p>15. Patrolling is done to check for poaching and overfishing</p>	<p>7. Honduras has a poor Reef Health Index (RHI). Fish groups have decreased but coral cover has increased.</p>	<p>15. Heavy reliance on fishing for families on islands. Disconnect from local residents and law enforcers/patrols “outsiders”</p> <p>19. Second poorest country in Central America. Depend heavily on US trade.</p>	<p>19. Island size is 112,090 sq km, 200 sq km of which are water. The population size of the island is 9,235,340.</p>
Grenada	<p>10. Policy was formed by gov’t officials, organization heads and local individuals</p> <p>-Has a 5 them focus</p>	<p>16. Coral cover is good but overall RHI is fair. Biomass of herbivorous fish is low. As of 2016</p>	<p>10. Fisheries keep most of the economy afloat and greatly alleviate poverty</p>	<p>17. 113,094 people is the rough estimate as of 2020. 344 sq km is size of island</p>

	involving fisheries, sustainability, development potential, maintenance and positive economic interactions	there are only 3 MPAs on the coast of the island. 44 designated MMAs protect 526 km <sup>2</sup> of marine resources	17. St. George's University and tourism are the main draws to the GDP of Grenada which has seen a steady increase over the last 5 years.	
Jamaica	11. Issues of poaching and underreporting fishing lead to a Coastal Capital initiative. There is a general lack of policy or political concern for protecting the environment	11. Area is heavily overfished but there are few alternate livelihood options and food sources	11. Poaching and underreporting are issues and cause for an initiative. 18. Most money comes from services, tourism, and remittances. High crime and debt to GDP ratios have significantly stunted the GDP growth.	18. 10,991 sq in size, 160 sq is water. population size is 08,570.

Dominica n Republic	12. DR has a ban on fishing of herbivore fish but the enforcement of such policies is still not strong.	12. Students from different organizations were assigned regions to monitor. Provided more data on the reef health. Public awareness for such issues has increased.	22. Used to be a big agriculture economy but now more geared toward services such as tourism and free trade. High unemployment and inequality in income are still major issues.	22. 48, 670 sq km total, 350 sq km of water. Population size is 10,499,707.
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The World Wildlife Fund (WWF) is a non-governmental organization whose mission is “...to conserve nature and reduce the most pressing threats to the diversity of life on Earth” (WWF cite). The organization’s work expands the whole planet with projects on almost every continent. Their project in the Mesoamerican Reef (MAR) encompasses the Yucatan Peninsula down to the Honduran Islands. The reef also includes the coasts of Guatemala and Belize. Belize occupies most of the region, taking up a total 300 km of the \_\_\_\_ km that is the Mesoamerican Reef system(14). The Mesoamerican Reef is one of the largest reef systems on the planet and is home to hundreds of fish, turtle and shark species. Naturally, the beauty of the environment draws many tourists to the areas along the reef. According to WWF, while tourism could be a benefit and great tool for sustainability it is more often problematic (cite WWF pg). The project focuses on education and local partnerships to foster a healthier marine ecosystem and sustainable economy. While it sounds somewhat simple the project is actually quite complex and involved. The Mesoamerican Reef covers four different countries which includes distinct governments, country sizes and economies. The specific actions being taken to remedy threats and concerns facing the reef are dependent on the partnerships of many organizations along with local and government involvement. Each of the countries in question have varying intensities of law enforcement regarding sustainable development and conservation. As seen in Mexico, where the political and economic climate has been turbulent, the citizens and government are not necessarily focused on environmental improvements. Mexico has a loose legal framework and some MPAs in place to encourage sustainability but given that the country size is significantly larger than the others that make up the reef area, other issues take precedence. Mexico’s economy draws mainly from services and oil and is one of the largest in the world. Mexico also has the second largest export market relations with the United States (21). The country of Guatemala has “hard” and “soft” laws which represent the different degrees of enforcement. Guatemala also has nature reserves and national parks which are working to further protect and preserve the already vulnerable environment (27). Guatemala’s economy is heavily reliant on agriculture and they are one of the most populous countries in Central America. Unfortunately, due to their unequal distributions of

wealth between the poor and wealthy have led them to hold one of the highest child malnutrition rates in the world (20). The countries of Belize and Honduras both have patrolling in place to monitor fishing numbers and poaching activity, which is outlawed in most places. Honduras is a country whose coastal communities heavily rely on fishing and by many the monitoring patrols are viewed negatively and not well accepted (15). Furthermore, Honduras is the second poorest country in Central America and their economy relies heavily on trade with the United States (19). Belize seems to have the most government involvement out of all the countries in this project. Their economy is heavily based on tourism followed up closely by their exports of sugar, bananas, citrus, marine products, and oil (23). The country does still face large debt and income inequality between classes but their economy is one of the more stable in Central America. The WWF's main reports and resources regarding the project are located on their webpage. This information focuses solely on how they are working in the reef region. According to the webpage, WWF is committed to improving the MAR through a holistic and inclusive process of listening to locals, scientists and governments. In Belize and Honduras, management plans were created in this collaborative format and many mangroves were planted to protect against natural disasters and try to rejuvenate biodiversity in the regions (MAR pg). WWF also focuses on coral health by implanting corals that are grown in a nursery and may prove to be more resilient against climate change and natural disasters. They also partner with The Nature Conservancy and many other NGOs to monitor coral reef health over time. There are also animal focused efforts such as a sea turtle monitoring program in Belize and improving management practices to protect the spiny lobster and its habitat. The NGO has also created an agreement of sorts with farmers ensuring that if they protect water-producing forests then they will be given access to land where they may grow and outsource food crops for themselves (WWF pg).

The Nature Conservancy is a non-profit organization that operates in 79 countries across six continents and they work to “create a world where people and nature can thrive” (TNC pg). Their project in the Caribbean area is titled the Resilient Islands initiative. This project aims to improve climate adaptation in a number of ways to establish more resilient islands in the face of climate change and natural disasters. The Resilient Islands initiative covers coastal and marine ecosystems in Grenada, Jamaica and the Dominican Republic. As with the WWF each of these countries have their own laws regarding certain issues with the environment. The Nature Conservancy would like to create new legislation, raise awareness, form a coalition among stakeholders and create new demonstration projects in each country. The countries included in this project vary vastly in population size which impacts their involvement and their respective needs. Jamaica and Grenada are smaller countries that both rely more on services like tourism and industry. Grenada's economy and Gross Domestic Product seems to be on the rise while Jamaica and the Dominican have high unemployment and crime rates that inhibit their economic success (chart). The Dominican Republic used to have a large economy drawn from agriculture which is now directed more towards free trade and services. The Nature Conservancy's plan for building awareness is to train local leaders to become ecosystem-based adaptation ambassadors and foster more nature based solutions in their respective communities (TNC PDF). They also aim to create an adaptation toolkit that will provide disaster risk management guidance that is specifically for that local area.



## Discussion

The Sustainable Development Goals, The Nature Conservancy, and The World Wildlife Fund all aim to make the world a better place. Despite the positive goal setting, there has to be a partnership of practicality when setting these goals. The enactment of the project and Sustainable Development Goals is a lot more complex than each organization may present on their respective webpages. Each SDG has a list of target goals and each project also has goals to achieve. The Mesoamerican Reef project from the World Wildlife Fund spans four countries and the Resilient Islands Initiative from the Nature Conservancy spans three countries. The Sustainable Development Goals were created by the United Nations which means that they are obviously intended for all member states of the United Nations. The demographics and economy of each of these nations is different in a variety of ways. Due to this fact, when goals are set and projects are created there has to be a level of ambiguity to them in order for the information to apply to all the involved parties. When looking at the WWF project it would be unrealistic to set one given standard for all four countries involved when discussing monetary involvement or government involvement. Each of the countries is a different size with a different economy and different political climate. Moreover the MAR is predominantly located within the country of Belize with only fractions of the reef being located in the other three countries. Systematically, vague guidelines are in place to allow them to be tailored to fit the specific country and all that may entail. Yet this lack of detail within guidelines and framework may be the downfall of the sustainability movement. With each target goal mentioned under the SDGs there is the use of language that sets an expectation of fulfillment without clearly defining any method of measuring or carrying out the listed expectation. Without defining how and what is being measured there is a loss of any practical application for the guidelines that were set. In the literature, the projects and even many laws there is a lack of stable foundation to establish sustainable systems upon. Conceptually, sustainable development has come a long way and efforts are being made to create more sustainable and holistic coastal ecosystems. Correspondingly, the data collected on reef health in each area ranked poor to fair with the exception of Belize. Belize is the only country who actually had reef health improve over the last decade. Though it is a smaller island in terms of population and size, it is at the forefront of sustainably managing its resources and improving the health of its abundant environment. Belize utilizes government involvement, aid from non-government organizations and local support. This joint effort has allowed Belize to progress in a way that other countries have not. Belize also continually renews their legislation and amends it as necessary. Schwabb, who played part in the newest reef related legislation, claims that Belize is so effective because of the community advocates and partnerships between government, organizations, and locals (5). Goals that are set to accomplish these large ideas that may not be fully operationalized may have to remain ambiguous but that does not mean everyone in the process must function in the same manner.

With each Sustainable Development Goal, from every angle, there is a two-fold responsibility. It is up to each individual to educate themselves about the economic, environmental and social concerns of the world around them. Additionally, it is each individual's responsibility to do what they can to further educate others and take action in any way that they can. Furthermore, it is up to organizations to partner with other organizations and governments to truly enact the change that they intend to create. There must be accountability for oneself and one another in order to achieve sustainable goals. It is not a task that is field or country specific. Sustainability is multi-disciplinary, everyone in their respective field can offer aid, advice, ideas and practical solutions.

**Conclusion**

There were several limitations to this research due to the nature of the project and external world circumstances. The project was purely qualitative research done via computer search and observation. To gain further insight it would be beneficial to take a more direct approach by contacting local fisher, legislators and representatives of each NGO. Sustainable tourism and the practical application of such a concept should also be analyzed closely but was not researched thoroughly for this paper. According to many sources tourism is growing and can be used for environmental gain if managed well but from the resources used here there does not seem to be a provided management plan for a way to do that. The literature and current efforts that were observed in this project give insight to the surface of a very diverse, deep and complex concept that the nations of the world will continue to interact with moving forward.

## References

- About Marine Protected Areas. (n.d.). Retrieved August 18, 2020, from <https://marineprotectedareas.noaa.gov/aboutmpas/>
- ACP Fish II (2012). Support to formulate a fisheries and aquaculture policy for the commonwealth of Dominica, Grenada, and St. Vincent and the Grenadines. *SOFRECO*, 4-9.
- Belize's new fisheries bill: A 'model for how to manage marine resources' · Global Voices. (2020, January 10). <https://globalvoices.org/2020/01/09/belizes-new-fisheries-bill-a-model-for-how-to-manage-marine-resources/>
- Bosque L. Y. (2012). Climate change and the protection of Guatemalan marine-coastal ecosystems. *The United Nations–Nippon Foundation Fellowship Programme*, 2-13. [https://www.un.org/Depts/los/nippon/unnnff\\_programme\\_home/fellows\\_pages/fellows\\_papers/yon\\_1112\\_guatemala.pdf](https://www.un.org/Depts/los/nippon/unnnff_programme_home/fellows_pages/fellows_papers/yon_1112_guatemala.pdf)
- Caribbean Resilient Islands Program. (n.d.). Retrieved August 18, 2020, from <https://www.nature.org/en-us/about-us/where-we-work/caribbean/stories-in-caribbean/caribbean-resilient-islands-program/>
- Cortes L. R. (2011). Legal and management framework for the sustainable management of marine protected areas in the mesoamerica barrier reef system: an analysis for the mexican approach. *The United Nations–Nippon Foundation Fellowship Programme*, 1-5. [https://www.un.org/Depts/los/nippon/unnnff\\_programme\\_home/fellows\\_pages/fellows\\_papers/cortes\\_1112\\_mexico.pdf](https://www.un.org/Depts/los/nippon/unnnff_programme_home/fellows_pages/fellows_papers/cortes_1112_mexico.pdf)
- Endangered Species Conservation. (n.d.). Retrieved August 18, 2020, from <https://www.worldwildlife.org/>
- Foster N. L. (2016). Management plan port honduras marine reserve. *Toledo Institute for Development and Environment For the Belize Fisheries Department*, 6-8. [https://data.nodc.noaa.gov/coris/library/NOAA/CRCP/project/1395/Port\\_Honduras\\_Mgmt-Plan-NA09NOS4630014.pdf](https://data.nodc.noaa.gov/coris/library/NOAA/CRCP/project/1395/Port_Honduras_Mgmt-Plan-NA09NOS4630014.pdf)
- Goal 11: Sustainable cities and communities. (n.d.). Retrieved August 18, 2020, from <https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-11-sustainable-cities-and-communities.html>
- Goal 13: Climate action. (n.d.). Retrieved August 18, 2020, from <https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-13-climate-action.html>
- Goal 14: Life below water. (n.d.). Retrieved August 18, 2020, from <https://www.undp.org/content/undp/en/home/sustainable-development-goals/goal-14-life-below-water.html>

- Griffin, J. (2019, August 14). Why tiny Belize is a world leader in protecting the ocean  
<https://www.theguardian.com/environment/2019/aug/14/why-tiny-belize-is-a-world-leader-in-ocean-protection>
- Healthy Reefs for Healthy People, (2020). Mesoamerican reef report card.  
[https://www.healthyreefs.org/cms/wp-content/uploads/2020/02/2020\\_Report\\_Card\\_MAR.pdf](https://www.healthyreefs.org/cms/wp-content/uploads/2020/02/2020_Report_Card_MAR.pdf)
- Marine protected areas are helping the Mesoamerican Reef recover. (2016, December 29).  
<https://news.mongabay.com/2016/01/marine-protected-areas-are-helping-the-mesoamerican-reef-recover/>
- Mesoamerican Reef. (n.d.). Retrieved August 18, 2020, from  
<https://www.worldwildlife.org/places/mesoamerican-reef>
- Practical Law. (n.d.). Retrieved August 18, 2020, from  
<https://uk.practicallaw.thomsonreuters.com/w-013-2794?transitionType=Default>
- The Nature Conservancy, (2016). Grenada coral reef report card.  
[https://www.agrra.org/wp-content/uploads/2016/05/GRD-Report-Card\\_2016\\_WebLowRes.pdf](https://www.agrra.org/wp-content/uploads/2016/05/GRD-Report-Card_2016_WebLowRes.pdf)
- The World Factbook: Belize. (2018, February 01). Retrieved August 18, 2020, from  
<https://www.cia.gov/library/publications/the-world-factbook/geos/bh.html>
- The World Factbook: Dominican Republic. (2018, February 01). Retrieved August 18, 2020, from  
<https://www.cia.gov/library/publications/the-world-factbook/geos/dr.html>
- The World Factbook: Grenada. (2018, February 01). Retrieved August 18, 2020, from  
<https://www.cia.gov/library/publications/the-world-factbook/geos/gj.html>
- The World Factbook: Guatemala. (2018, February 01). Retrieved August 18, 2020, from  
<https://www.cia.gov/library/publications/the-world-factbook/geos/gt.html>
- The World Factbook: Honduras. (2018, February 01). Retrieved August 18, 2020, from  
<https://www.cia.gov/library/publications/the-world-factbook/geos/ho.html>
- The World Factbook: Jamaica. (2018, February 01). Retrieved August 18, 2020, from  
<https://www.cia.gov/library/publications/the-world-factbook/geos/jm.html>
- The World Factbook: Mexico. (2018, February 01). Retrieved August 18, 2020, from  
<https://www.cia.gov/library/publications/the-world-factbook/geos/mx.html>
- Who We Are. (n.d.). Retrieved August 18, 2020, from  
<https://www.nature.org/en-us/about-us/who-we-are/>

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## The City that Never Sleeps: Civil Religion and Poetry in Plato and Aristotle

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## Abstract

*During a time of increasing civil unrest and distrust in the American system it seems that faith in The United States' democratic regime is at an all time low. Rather than proposing civil upheaval, an alternate solution appears to be present within ancient sources. Friendship as described through the writings of Plato and Aristotle could be a novel solution, however, their writings fall short when it comes to using friendship as a connection between a citizen and their government. Nevertheless, the encouragements of more modern political thinkers such as Abraham Lincoln offer a new method of promoting trust within a democratic system. Civil religion, which is what Lincoln proposes, is a system of encouraging unity and trust within one's citizenry and regime. Yet, the nature of democracy is such that it encourages a different form of civil religion than Lincoln proposes. Given that democracies are governed by the public, they are more capable than other regimes of engaging in friendship with their citizens. Unfortunately, democratic regimes lack the capability to truly engage in friendship with each of their citizens. Instead, they can engage in an image of friendship by creating a uniting poetry that can influence the public. I propose that through promoting civil friendship among their populace democratic regimes can solve the problems of unrest and uncertainty that may plague them.*

It is within the nature of political animals to create politics.<sup>1</sup> In a sense, all of human community is the science of politics, hence why Aristotle so famously claims it to be so.<sup>2</sup> Along with the community comes the necessity to govern the community properly. Hence, regimes are established to rule over communities. Of great import to the nature of the regime is the relationship that is adopted between the citizen and the regime. Tyrants and other unjust leaders will often be led about by passion and refuse to acknowledge the purpose of citizens.<sup>3</sup> It is therefore necessary to acknowledge the role of citizens and their place in the regime in order to rule justly. Of course, different regimes will expect different roles from their citizens. Democracies, because they are ruled by the people,<sup>4</sup> naturally expect that citizens will play an active role in ruling. As such, there is a greater amount of equality between ruler and citizen than there would be in other regimes. Indeed, the relationship that develops resembles friendship more closely than it does a relationship between a master and servant.<sup>5</sup> Because of this, scholars have named friendship to be analogous to

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<sup>1</sup> Aristotle, *Aristotle's Politics*. Translated by Carnes Lord. Chicago, IL: University of Chicago Press, 2013. Book 1, Chapter 2, Section 9.

<sup>2</sup> Aristotle, *Aristotle's Nicomachean Ethics*, Translated by Robert C. Bartlett and Susan D Collins. Chicago, IL: University of Chicago Press 2013. Book 1, Chapter 2, Sections 1-7.

<sup>3</sup> Plato, *The Republic of Plato*, Translated by Allan Bloom, (New York: Basic Books, 2016) 550c-553a. Unlike the philosopher king who is described as being able to see the souls of his or her citizens at 414d, the tyrant is unable to correctly identify the character of his or her citizens.

<sup>4</sup> Alexander Hamilton, "Federalist No. 1: Introduction," in *The Federalist*, ed. George W. Carey and James McClellan (Indianapolis: Liberty Fund, 2001) 1-4. Hamilton introduces the Federalist papers to the United States public by inviting them to take part in ratifying the Constitution themselves.

<sup>5</sup> Jill Frank, "Citizens, Slaves, and Foreigners: Aristotle on Human Nature," *The American Political Science Review*, 98, No. 2 (February 2004): 91-96. Frank here notes that democracies allow for a mutual influence of nature between citizens and democracy. As will be noted later, the give and take that

citizenship.<sup>6</sup> To ignore the role of friendship, or what Aristotle might call friendliness,<sup>7</sup> would be a mistake in the management of democracy. In order to properly manage a democracy, one must examine the role that friendship will have in a democratic regime. Ultimately, friendship fulfills the role of civil religion within a democratic regime.<sup>8</sup> In essence, friendship acts as the uniting sentiment and bond within a regime. It is that sense of community and trust that allows a democracy to function well (for indeed, democracies do not function as well if a citizen does not trust in the officials he or she has elected). Thus, in order to create friendship among the population of a democracy civil religion must also be created. Yet, it remains that the creation of civil religion is no easy task. Moreover, whereas in friendship one can be discerning as to the character of a friend, a democratic regime has no such luxury due to its size.<sup>9</sup> One can choose friends based on their virtue or interests but a democratic regime does not have the same amount of control over its population. Summarily, befriending one's citizens is a task that cannot be undertaken with the same caution or care that can be undertaken on the individual level. The solution to that problem appears to be poetry.<sup>10</sup> A democratic regime can befriend the population by presenting them an image of friendship that will lead them to taking part in friendship with the regime.<sup>11</sup> By using poetry to educate the young in friendship, the regime can create a strong sense of civil religion that will improve the function of the democracy itself.

### Friendship Defined

It must first be established what friendship is, and to what extent it differs from the friendships of utility that occur in the everyday life of humankind, if indeed there is any difference at all.<sup>12</sup> Friendship is defined as a relationship between humans that is characterized by reciprocal

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democracy allows is one of the necessary prerequisites for friendship that no other regime shares in the same fashion.

<sup>6</sup> P.E. Digeser, *Friendship Reconsidered: What it Means and How it Matters to Politics* (New York: Columbia University Press, 2016), 105. Digeser points out that friendship has long been used as a model for citizenship in the west.

<sup>7</sup> Aristotle, *Aristotle's Nicomachean Ethics*, Book 2, Chapter 7.

<sup>8</sup> Abraham Lincoln, "Address to the Young Men's Lyceum of Springfield, Illinois," in *Selected Speeches and Writings*, ed. Don E. Fehrenbacher (New York: Paperback Classics, 2009), 13-21. Specifically at pages 20 and 21 Lincoln calls for civil religion to unite United States citizens under the rule of the law.

<sup>9</sup> It is worth noting that although the regime that the interlocutors create in *The Republic* features leaders who legitimately know the character of each citizen, Socrates' description of democracy does not feature the same skill. See

<sup>10</sup> Both Plato and Lincoln agree that civil religion is most easily shared by spreading tales through education. See

<sup>11</sup> Bradley Bryan, "Approaching Others: Aristotle on Friendship's Possibility," *Political Theory* 37, no. 6 (December 2009):754-779. Bryan posits that the possibility of friendship, as seen by writings about it, serves to create an image of friendship within people.

<sup>12</sup> Julia Annas "Plato and Aristotle on Friendship and Altruism." *Mind*, New Series, 86, no. 344 (1977): 551. <http://www.jstor.org/stable/2253312>. Consider also Lorraine Smith Pangle's work, *Aristotle and the*

love, what Aristotle calls goodwill, and mutual admiration of the other's virtue, and is aimed at the goal of bringing all involved parties. It therefore differs from friendship of utility because although there can exist goodwill and well-wishing in lesser friendships, there is not the same admiration of the other for itself that exists in true friendship.<sup>13</sup> However, as stated above, friendships can occur between two beings of different status<sup>14</sup> to the extent that one being is able to transcend itself, meaning that they are able to reach the same status. Lastly, friendship involves a give and take between both parties. Friends influence and are influenced by each other. They share aspects of their lives and thus will become more like one another.

It is therefore within the nature of friendship to involve reciprocity, or a mutuality of affection between two parties, and goodwill. However, there is another factor of friendship that has not yet been considered. Friendship also involves the connection between two individuals, but the connection is not such that one individual is subsumed into the other.<sup>15</sup> In other words, though friends hold things in common, they do not hold everything in common.<sup>16</sup> For example, friends do not necessarily share beauty, nor questionably, honor.<sup>17</sup> Friends do not subsume each other's individuality, nor should they desire to. Mary P. Nichols argues that one of the most valuable aspects of a friendship is precisely the differences that each friend brings to the relationship.<sup>18</sup> Friendships allow for a give and take, a collaboration and deliberation that would not be possible between say a master and a slave or a student and a teacher. As Nichols goes on to elaborate, friendships can be made stronger through rivalries, and new perspectives.<sup>19</sup> Friendship necessarily involves two individuals who influence and are influenced by each other. Hence, as stated above,

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*Philosophy of Friendship*, especially pages 45-47 wherein Pangle discusses the possibility of goodwill among friendships of pleasure and friendships of utility.

<sup>13</sup> Lorraine Smith Pangle, *Aristotle and the Philosophy of Friendship*. Cambridge, NY: Cambridge University Press, 2003. Pages 45-52 especially stress that although friendships of utility and pleasure share some similarities with true friendship there are also differences when it comes to what is truly admired. Nancy Sherman concurs in her essay "Aristotle on Friendship and the Shared Life" especially on page 610 wherein she remarks on Aristotle's implication that true friendship allows one to emulate the virtue in another.

<sup>14</sup> Friends of different status means friends who differ from one another in the degree of their goodness.

<sup>15</sup> David Bolotin, *Plato's Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*. Ithaca: Cornell University Press, 1989, 79-81. Bolotin posits that the questions that Socrates asks to Lysis and Menexenus at 207b-e show that friendships do not allow for friends to completely share all aspects of one another.

<sup>16</sup> Bolotin, *Plato's Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*, 216c.

<sup>17</sup> Bolotin, *Plato's Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*, 77-81.

<sup>18</sup> Mary P. Nichols, "Friendship and Community in Plato's 'Lysis,'" *The Review of Politics*, Winter, 2006, Vol. 68, No. 1 (Winter, 2006), pp. 1-19. Although it appears here that it is a difference of kind that brings benefit to friendship, meaning that different opinions result in growth and change, it is also worth noting that differences in degree can also lead to growth in change. In the same sense that teaching others can lead to greater understanding, teaching a friend to be virtuous can lead to a greater understanding of virtue.

<sup>19</sup> Nichols, "Friendship and Community in Plato's 'Lysis,'" 13-15.



friendships cannot necessarily form between two unequal parties such as masters and slaves and students and teachers because it is unlikely that there will be the same level of deliberation and community that would otherwise be possible between two equal parties.

Plato and Aristotle do not lie in complete agreement regarding what friendship is, its importance, or to what extent it should be regarded as a human good. However, between the two of them there is some agreement. The main issue between the two of them seems to be a discrepancy regarding friendship with inanimate objects or ideas. Aristotle posits that friendship can only be possible between humans because they have the ability to feel mutual goodwill. In other words, the concept of goodness cannot possess goodwill for someone nor can it strive to bring about good things for someone. On the other hand, Plato states that one can be friends or “dear to” the concept of wisdom in general, otherwise philosophers would have little hope of progression. If friendship is only limited between two humans who can have mutual goodwill for each other then there is no ultimate end that humans strive for in friendship. Friendship would merely be a way of relating to one another and would therefore have possibly less intrinsic worth.<sup>20</sup> Ronna Burger, in a book that clarifies the similarities between Plato and Aristotle states the following about Aristotle’s views, “...the *Ethics* maintains that a master cannot be the friend of a slave as a slave but only to the extent the slave transcends, as a human being, his slavish role.”<sup>21</sup> In the *Nicomachean Ethics* Aristotle writes on the subject of friendship and in several locations he brings up the work of Plato and refutes Socrates on several points.<sup>22</sup> However, Burger’s book claims that the refutations are not as extreme as they seem to be and allows for a greater synergy between the two philosophers. Thus, while Aristotle may indeed appear to refute Plato’s claim that a person can be friends with something as abstracted as goodness or wisdom, Burger implies that Aristotle would allow the possibility of such a friendship given that one is able to transcend their status to a certain extent. In other words, to the extent that one can overcome their own flaws and become more like the end they are striving for, they can befriend abstractions. Furthermore, it is clear that some abstractions are more intense than others. Jill Frank argues, for example, that a democratic regime, which at first appears to be an abstract entity, is capable of befriending its citizens to an extent.<sup>23</sup> Yet, friendship is only possible between a citizen and its regime to the extent that both parties influence one another’s nature.<sup>24</sup> In other words, through effort, and a kind of poetry that citizens can strive for,<sup>25</sup> regimes can engage in an image of friendship with citizens.

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<sup>20</sup> Bolotin, *Plato’s Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation* 220e. The interlocutors here agree that people befriend each other for some goal beyond mere relation to one another.

<sup>21</sup> Ronna Burger, *Aristotle’s Dialogue with Socrates on the Nicomachean Ethics*. Chicago, IL: University of Chicago Press, 2009 171.

<sup>22</sup> Aristotle, *Aristotle’s Nicomachean Ethics*, 1144b lines 27-32. See also Aristotle’s *Politics* 1124b lines 15-40 wherein he addresses and disagrees with various aspects of Socrates’ arguments.

<sup>23</sup> Jill Frank, “Citizens, Slaves, and Foreigners: Aristotle on Human Nature,” 94-97. Frank argues that democratic regimes and citizens are able to influence one another’s identity in the same manner that friends are able to.

<sup>24</sup> *Ibid.* For Frank, the nature of the regime and the citizen is tied up in the identity that they create.

<sup>25</sup> Bryan, “Approaching Others: Aristotle on Friendship’s Possibility,” 754-757.

The conflicting views of friendship create a paradox. On one hand, friendship requires two parties who are capable of feeling goodwill for one another, yet, on the other hand friendship can exist between humans and abstract things. At the very least, democracy allows for the paradox to be lifted. Democracies are made up by the same people that they govern, hence, there is an equality and concern for the other that exists between the regime and the individual.<sup>26</sup> A democracy can therefore descend to an individual level in a different and more concrete way, allowing it to participate in an image of friendship. Thus, although there may be a paradox within this view of friendship, at the very least democracy is able to defy norms such that it can relate to its citizens on a level of friendliness.

### The City and the Soul

It is clear from Plato and Aristotle's literature that there is a significant connection between the individual and the regime. Aristotle goes so far as to call humans political animals<sup>27</sup> and Plato on several occasions creates an analogy between a city and a soul.<sup>28</sup> Hence, neither philosopher is a stranger to making connections between an individual life and the life of politics. Regimes act as a sort of parent for their citizens in a sense. As a parent, regimes help to dictate how citizens relate to one another. Democracies in particular encourage their citizens to befriend one another because of their reliance on deliberation which benefits from friendly interaction and esteem for others. However, the disposition of a regime is inherently linked to the disposition of its citizens. In particular, Jill Frank argues, democracies and citizens influence one another rather than citizens simply being influenced from the top down.<sup>29</sup> Democracies influence their citizens from the top down but are also influenced by their citizens from the bottom up. In order to properly bring about a regime's vision of friendship the regime must educate its citizens from the top down. Bradley Bryan argues, the regime can show an image of proper friendship and citizenship that will allow for citizens to strive for the best.<sup>30</sup> When both parties are capable<sup>31</sup>, friendship becomes possible between regime and citizen. Hence, a democratic regime must create an image of friendship that must incorporate personal friendship. Otherwise the image will never drop from the top to the

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<sup>26</sup> Frank, "Citizens, Slaves, and Foreigners: Aristotle on Human Nature," 94-97. There would not be the same kind of ease that Frank points out for a regime and its citizens to influence one another's identity if they did not directly participate in one another as they do in a democracy.

<sup>27</sup> Aristotle, Aristotle's *Politics*, Book 1, Chapter 2, Section 9.

<sup>28</sup> Plato's *Republic* features several connections between a city or a *polis* and a soul see 368b-369b for an example. Plato's *Laws* continues in the same theme, see 624a-628e for example. Here the Athenian Stranger states that the city that one is in influences the state of one's soul.

<sup>29</sup> Jill Frank, "Citizens, Slaves, and Foreigners: Aristotle on Human Nature," 94-97.

<sup>30</sup> Bryan, "Approaching Others: Aristotle on Friendship's Possibility," 763-767. Bryan points out that Aristotle does not think that friendship is truly possible, but the existence of writings about friendship makes others strive to reach friendship. The same idea can apply for other myths of citizenship and virtue.

<sup>31</sup> In order for a regime and a person to be capable of friendship they must be able to engage in mutual goodwill and influence of each other. If one were not willing to change or listen to a friend they would be precluded from engaging in truly educative friendship.

bottom. Friendship within the regime must be made to correlate with personal friendship in order for any true change to be seen, and doing so involves creating a poetry of personal friendship.

Friendship on the scale of the regime leads to friendship on a personal level as the poetry from the regime drops down to the personal level it remains to be established why a regime would wish to befriend their citizens. It would surely require increased effort to befriend all the citizens of a regime. However, civil religion is of imminent importance especially to regimes such as democracies. Civil religion is the uniting mythos, or culture, which serves to create loyalty within a regime.<sup>32</sup> The loyalty created by civil religion is greater than that created by fear of punishment.<sup>33</sup> Civil religion influences citizens to follow the laws out of pure love for one's regime rather than through fear or through some other means. This is especially important within a democracy wherein citizens who respect the regime will be more likely to follow laws. Democracies do not have the luxury of being able to befriend their citizens on a personal level, they must approach them on a broad scale through poetry.

### The Problems of Friendship

Because humans are truly political animals as Aristotle states in the *Politics* it seems that for humans to make friends is a natural thing.<sup>34</sup> The nature of politics and political science is to learn how to better govern a community. Part of justly governing a community must involve addressing how the members of that community interact with each other. The ideal form of relationship for one's citizens to have with one another would seem to be friendship rather than animosity or indifference. Indeed, democracies especially would benefit from a friendship between citizens and between the regime and citizens. It is within the potential of humans to be able to make friends, but potential does not equal possession. Nevertheless, some scholars go so far as to interpret Aristotle as stating that friendship is necessary for humanity.<sup>35</sup> Others claim that not all people will be able to actualize the potential for friendship, and may end up similar to Socrates, constantly desiring a friend but never able to realize it.<sup>36</sup> Therefore, it is of extreme importance to discover how one can make friends and what one should do as a friend. However, Aristotle's claim that

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<sup>32</sup> Lincoln, "Address to the Young Men's Lyceum of Springfield, Illinois," 17-21. The civil religion that Lincoln proposes is one that is built from the top down and incorporates the goals and mores of the regime.

<sup>33</sup> Lincoln, "Address to the Young Men's Lyceum of Springfield, Illinois," 13-21. One of the issues that Lincoln raises with the state of the United States is that the people are straying from the spirit of the law out of fear. The people are not obeying the laws that are created out of law of their country, they are instead warping the laws to suit their own fears. They must be taught to obey the laws from love rather than fear to truly uphold the spirit of the law.

<sup>34</sup> Aristotle, Aristotle's *Politics*, Book 1, Chapter 2, Section 9.

<sup>35</sup> Ronna Burger, *Aristotle's Dialogue with Socrates on the Nicomachean Ethics*. Chicago, IL: University of Chicago Press, 2009 181. Burger posits that if one is to be a serious man that Aristotle's *Ethics* teaches one to become through habituation to moral and intellectual virtues, then one's happiness also depends on making friends and living together with them. See also page 161 where she states the necessity of friendship in human life.

<sup>36</sup> Bolotin, *Plato's Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*, 212a. Here Socrates states to Menexenus his desire to have a friend in comparison to the desires of others to have a horse, a dog, etc.

humans are political animals does not in and of itself imply that perfect friendship is possible, much less that it can be inherent from birth. Indeed, man's position as a political animal only seems to imply that at least friendships of utility are necessary for a human's existence. Scholars agree at least partly with the claim that friendships of utility are needed for existence, hence why Julia Annas claims in her essay about friendship and altruism, "The mistake [of overcomplicating the search for friendship] seems to lie in trying in the first place to provide a proof for what is just a fact about people- that they need at least some friends for a satisfactory life."<sup>37</sup> Superior forms of friendships that are above friendships of utility however, give rise to problems for Plato and Aristotle, for both agree that there lies difficulty in establishing how true friendship functions and, indeed, if true friendship is even possible. Scholars have offered several interpretations into the responses that Plato and Aristotle offer and their efforts can be largely boiled down into two schools of thought, those who believe that friendship is not truly possible or that friendship is based solely on egoism, and those who believe that friendship is real and exists not only for egocentric reasons but also for the good of a friend simply. However, it is also true that few of the preexisting ideas offer forms of how one can befriend one who is vicious to turn him into a more virtuous person overall nor the role that a regime would have in creating friendship among citizens. Democracies are in particular need of friendship in order to function well.<sup>38</sup> Nevertheless, if friendship does not exist at all, or if it does exist but serves only to benefit oneself, then the question of how a regime should befriend a vicious citizen through civil religion is pointless because it is either impossible, or too much trouble to be bothered with.

Aristotle's writings do not even imply that friendship is possible between a human and something more abstract like a regime. Additionally, Plato's writings seem to lead to the conclusion that friendship is only used in order to lead one to some ultimate end rather than valuing a friend for their own sake which paints a much more selfish and bleak view of friendship. In Plato's *Lysis*, which is his preeminent dialogue about friendship, Socrates meets up with an acquaintance of his, Hippothales. Hippothales has been struck with love for a young, beautiful boy named Lysis. Of course, the lovestruck man asks Socrates for help courting the boy and Socrates offers to speak with Lysis in an attempt to show Hippothales how one ought to speak with their beloved. This leads to Socrates conversing with Lysis and Lysis' friend Menexenus about friendship. One of the most preeminent translators of the *Lysis* is David Bolotin.<sup>39</sup> Bolotin is also the loudest advocate of the school of thought that states that friendship is not possible, or too selfish to be worth the name. Bolotin posits based on Socrates' arguments and line of questioning that friendship in the truest

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<sup>37</sup> Julia Annas, "Plato and Aristotle on Friendship and Altruism," *Mind*, New Series, 86, no. 344 (1977): 551. Annas here points out that just to live an everyday life, a human must rely on friendships of utility in some form to subsist. (Eg friendships with grocers, doctors, etc.)

<sup>38</sup> Hamilton, "Federalist No. 1: Introduction," 2-3. Alexander Hamilton alludes to the necessity of friendliness in the first federalist paper when he calls for the public to work together and deliberate on whether the new constitution should be ratified. In a sense, the public must engage in a sort of dialectic that is only possible among people who are friendly with one another. Aristotle lists friendliness as a virtue that is necessary for proper maintenance of government. Once again, the emphasis is on the relationship between statesmen.

<sup>39</sup> Bolotin and his translation are cited by several other scholars including Mary Nichols, Ronna Burger, and Julia Annas.

form is not possible.<sup>40</sup> This is the case because, according to Bolotin, “What each desires [in a friendship as well as in life] primarily is its own nourishment.”<sup>41</sup> Indeed, this seems to be in line with the *Lysis* for Menexenus does agree with Socrates on the claim that friends become friends for “some end” or a “first friend” -- meaning an ultimate goal that is “dear to” or a friend of oneself.<sup>42</sup> The first friend is what one most desires to be dear to, whether it be wisdom, goodness, or riches. It should come as no surprise that this first friend is, for Socrates, wisdom, the end of philosophy.<sup>43</sup> Therefore, Bolotin goes on to state that friendships are more or less, means for one to reach what one holds to be one’s ultimate good. To the extent that a friend can help one come closer to the goal that one cherishes, a friendship will be maintained, however, if a friend cannot help one become closer to the good, then there will not be a friendship. Hence the claim in the *Lysis* that to the extent that friends are similar, meaning possessing the same characteristics and flaws, they are not useful to one another and they will not be treasured. Because ultimately, Socrates seems to state the friendship must come from a desire to be friends, or a lack that one feels, and since one cannot desire and therefore lack what one already possesses then it makes no sense for one to befriend one who is similar to oneself.<sup>44</sup> Bolotin goes on to state, “According to this argument, only those who can be treasured as friends who offer one another something different from what they can each find in themselves.”<sup>45</sup> Thus, because friendship, at least according to Bolotin’s interpretation, is not possible in the sense that is commonly held by the public, as a relationship wherein one values a friend for the friend’s own sake, there is no true friendship in the world besides the one between one and the “first friend”. All other friendships serve as only a way for one to reach the first friendship.

In agreement with Bolotin is Julia Annas. She states, “If it is right to take Plato this way, then the analysis of friendship can not unfairly be called egoistic, giving an I-referring basis to feelings and actions that are apparently altruistic.”<sup>46</sup> The “way” that Annas refers to is to interpret Plato as saying that friendship is a purely selfish affair meant to advance one’s goal. No matter how hard one tries to convince oneself that friendship is altruistic and formed in order to do good unto others, it still remains that there will be an overall selfish inclination that is hidden beneath the surface according to Annas. In other words, friendship cannot be defined as completely free of self-centered designs. Annas then goes on to state that unless there is an infinite regress of friendships

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<sup>40</sup> Bolotin, *Plato’s Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*, 61 and 139.

<sup>41</sup> Bolotin, *Plato’s Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*, 138.

<sup>42</sup> The *Lysis* famously plays with the Greek term *philia* because it can either mean a friend as a noun, or mean dear to as an adjective. Plato often leaves off the article that would allow translators to know precisely what he means so that he can play with the relationship between dear things and friends.

<sup>43</sup> Bolotin, *Plato’s Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*, 218d-219a.

<sup>44</sup> Bolotin, *Plato’s Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*, 215a-c.

<sup>45</sup> Bolotin, *Plato’s Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*, 132.

<sup>46</sup> Annas, “Plato and Aristotle on Friendship and Altruism,” 537.

that all offer something to someone, one must arrive at a first friendship or goal that one is aiming toward.<sup>47</sup> Thus, in a similar fashion to Bolotin, Annas states that all friendships, outside of the first friendship that is the goal of each man, are instruments that are used by humans in order to progress to a goal. This is not to say that there cannot be some altruistic leanings in friendships, however, it is saying that friendships commonly understood between humans are “I” centered and more or less hollow compared to the good that one is ultimately striving for.

### The Possibility of Friendship

Whereas Platonic texts are for the most part dialogues, Aristotle wrote several treatises and is considered to be more practical than Plato. Mary P. Nichols is perhaps the most prolific scholar in this school of thought. Nichols critiques Bolotin’s interpretation of the *Lysis*. As opposed to Bolotin, Nichols posits that instead of philosophy being the first object that all humans seek out, philosophy represents the friendships that already exist in life, “It is not, then, that philosophy serves as the experience that friends ultimately seek, free of the illusions of friendship. Rather, philosophy must find its model in the experience of friends—an experience of one’s own as another who cannot be assimilated or subordinated.”<sup>48</sup> According to Nichols, it is not that friendships are used as a means for one to reach one’s ultimate goal, rather, it is the other way around, that philosophy, the first object that a virtuous man is searching for, is defined by friendship. Nichols offers that friendships perfectly personify a relationship with one’s good. In the same way that friendships are a constant “acquiring” of a friend<sup>49</sup>, mankind is in constant “acquiring” of its good.<sup>50</sup> Friends must both release and acquire each other, while holding things in common they must also allow some things to remain private to themselves. In the same sense, as Aristotle states, men are halfway between beasts and gods. It is impossible to fully take possession of one’s good, or, in other words, to become friends with one’s “first friend” completely without allowing for it to be released. Therefore, friendship is not only possible for humanity, but it is also necessary for one to learn about how to reach one’s “first friend.” Friendships are not valued for shared similarities, they are valued for the role they take in educating us.<sup>51</sup> Lastly, friendship must be possible because one

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<sup>47</sup> The alternative is that friendship is cyclical, however, based on the conversation in the *Lysis* wherein Menexenus states that one becomes with someone for something, it is implied that friendship is neither cyclical nor on an infinite regression.

<sup>48</sup> Nichols, “Friendship and Community in Plato’s *Lysis*,” 11.

<sup>49</sup> Nichols, *Socrates on Friendship and Community*, 165-170. Nichols here means that friendship is an ongoing process. A person never really arrives at the point where they are fully the friend of another. “Friends are always becoming friends,” thus, they are always giving themselves to a friend and always acquiring aspects from a friend.

<sup>50</sup> Nichols, *Socrates on Friendship and Community*, 168. Here Nichols makes a point similar to one that is often offered by interpreters of Plato. That humans are constantly in a state of being and becoming, thus, when engaged in a friendship, “Friends are always becoming friends.”

<sup>51</sup> Nichols, *Socrates on Friendship and Community*, 172. Nichols here makes a point that “if we love those we love only for our own sakes,” as Bolotin implies, “we have little reason to become acquainted with them, for they serve as extensions of ourselves.”

of the primary goals of the philosopher, according to Nichols, is to participate in friendship within one's soul, a relationship that cannot be partaken in without first having experience in friendship with others. The friendship of the soul is not one that can be formed without valuing the friendship of others. As Ronna Burger claims, friendship is what allows one to gain self-knowledge and observe their own happiness because the friend is "another self."<sup>52</sup> Thus, valuing friendship with another for the simple admiration of the other is necessary if one is to also value oneself and engage in friendship with oneself.

James Haden is another prominent thinker within those who believe that friendship is not only possible but that it can be practiced for the sake of a friend. Haden posits this because the *Lysis* revolves around the concept of desire, especially in regards to the dialogue taking place at the festival of Hermes. Thus, the dialogue is rife with desire and Haden makes the claim that it is desire that drives mankind toward goodness because it causes them to recognize what they lack.<sup>53</sup> However, though it may seem that Haden is moving toward the same conclusions that the authors in the school of thought that friendship is impossible or ego-centered, Haden resists this by stating, "Plato is not thinking of animal survival but rather of the inner condition in which we are able to endure the loss or absence of particular things."<sup>54</sup> Haden then states, "The individuality [of the friends] is transcended, though not erased, by the Good, which is not constrained by particularity."<sup>55</sup> Haden therefore resists Socrates' apparent conclusion that the like would be useless to each other in friendship, or that they would be assimilated into one to the extent that they are exactly the same. Rather, the nature of the first good is such that there is no need to state that friends exist only as goals to reach the good, they have their own intrinsic value and help to fulfill the desires of humankind.

Lorraine Pangle evaluates the works of Aristotle to analyze his views of friendship. Pangle posits that Aristotle believes, much more strongly than Plato, that friendship is possible and is engaged in almost primarily for the good of the other and for the sake of the other alone, not for some external goal that the other can help lead one to. Indeed, Aristotle does not consider the "neediness" that Bolotin's impression of Plato implies worthy of the truly manly and virtuous men who alone can engage in the perfect form of friendship.<sup>56</sup> Friendships can be formed out of true

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<sup>52</sup> Ronna Burger, *Aristotle's Dialogue with Socrates on the Nicomachean Ethics*. Chicago, IL: University of Chicago Press, 2009 173. "Friendship with another is the extension of an inner harmony."

<sup>53</sup> James Haden, "Friendship in Plato's 'Lysis,'" *The Review of Metaphysics* 37, no. 2 (1983): 327-56. Haden holds that the desires that are prevalent in the dialogue point to the ultimate desire that humankind has, the "first friend" that other authors have discussed. For Haden, the way that one can reach the desire, and therefore be fulfilled is through friendship.

<sup>54</sup> Haden, "Friendship in Plato's 'Lysis,'" 352.

<sup>55</sup> Haden, "Friendship in Plato's 'Lysis,'" 353.

<sup>56</sup> Pangle, *Aristotle and the Philosophy of Friendship*, 43. Pangle points out that if Plato is to be interpreted as Bolotin states, then it shows a neediness within one who makes friends. Otherwise, one would not need to make friends in order to reach the first goal that they have. Since Aristotle's focus on moral and intellectual virtues allows for men with overflowing virtue, there must exist perfect friendships which are formed not out of necessity but out of pleasure and desire to spend time together.

altruism, “Somehow there is an element of true goodwill in every friendship that turns upon pleasure, and even in the alliances and business partnerships...”<sup>57</sup> If lesser friendships of pleasure and utility also include goodwill and pleasure in each other’s company, then it is surely the case that the perfect form of friendship includes these characteristics to an even larger degree. Perfect friendships therefore are formed from a sense of goodwill and well-wishing for a friend whom one admires for the friend’s virtue.<sup>58</sup>

The debate over whether friendship is possible and for what purpose it is engaged in has a clear resolution. However, scholarship still leaves out the problem of how, or if, one can engage in friendship with a vicious person. Most take it as a given what Socrates states in the *Lysis*, that there is not a possibility to engage in friendship with a vicious man, because, similar to conclusions by Nichols, the vicious are not even friends to themselves and therefore cannot be friends with others.<sup>59</sup> However, as Bolotin himself addresses, this seems to be in conflict with bands of criminals who work together and thus, to use an Aristotelian term, are at least friends of utility.<sup>60</sup> Therefore, there must exist some form of friendship that can exist between unjust men and just men and just men are even motivated to befriend unjust men.<sup>61</sup> If one can gain more happiness and become closer to living the good life by making friends and living in common to work towards a virtuous goal, then surely befriending vicious men in order to rehabilitate them is also of worth for living a life that is the most virtuous and enjoyable among all other lives.<sup>62</sup> Indeed, one who is able to bring to the sight of justice those who are lost in ignorance and vice, they would surely be lauded and praised as one who is so overflowing with virtue that they are able to pass it off to another.

The same concept from above can be applied to regimes. Regimes, similar to people, have a common good that they are striving for.<sup>63</sup> However, the struggle to reach the common good can be hindered by the more vicious members of a population. Vicious citizens must be taught

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<sup>57</sup> Pangle, *Aristotle and the Philosophy of Friendship*, 46.

<sup>58</sup> Pangle, *Aristotle and the Philosophy of Friendship*, 55. “Thus Aristotle shows that pleasure is not a bonus that comes incidentally out of the friendship of virtue but, instead, is absolutely fundamental to complete friendship.” Pangle makes the point that an admiration of another’s virtue for itself is necessary for true friendship.

<sup>59</sup> Bolotin, *Plato’s Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*, 214c-e.

<sup>60</sup> Bolotin, *Plato’s Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*, 128. Bolotin does point out that bands of robbers and thieves would not be considered to be truly unjust to Socrates, they would be misguided, but not truly full of injustice.

<sup>61</sup> Nancy Sherman, “Aristotle on Friendship and the Shared Life.” *Philosophy and Phenomenological Research* 47, no. 4 (1987): 593-594. doi:10.2307/2107230. Sherman points out that virtue is not enough in and of itself to provide happiness to mankind. They are in need of other resources, chief among which is friendship.

<sup>62</sup> Sherman, “Aristotle on Friendship and the Shared Life,” 595-597. In almost a utilitarian sense, Sherman points out that happiness for a virtuous man also incorporates the happiness of others.

<sup>63</sup> The United States Declaration of Independence declares that it is the role of governments to ensure that citizens have the rights to, “Life, Liberty, and the pursuit of Happiness.” The guarantee of these rights is the common good of the democratic regime of the United States.



friendship so that they can participate in the regime in a friendly manner that allows for dialectic and discussion. Otherwise, there would be a complete breakdown of the channels used for democratic governance.<sup>64</sup> Around one hundred years later Lincoln laments that citizens of the United States are still not treated with equal emphasis on their good. One of the major factors contributing to the abuse of the minority is the growth of vicious citizens who are convincing other citizens to join them in their depravity.<sup>65</sup> Lincoln and Madison are not the first writers to worry about the common good of citizens within their regime. Using friendship as civil religion would bring citizens together while rehabilitating vicious citizens and uniting both types together with the regime.

Nevertheless, regimes are only able to engage in an image of friendship with the citizens they rule. Regimes cannot relate individually with their citizens, and because of that deficiency-true friendship cannot be created. However, the image can still help bring everyone closer to making the image a reality. The possibility and vision of friendship between the regime and citizens allows the growth of both parties toward friendship.<sup>66</sup>

### Civil Religion and Poetry

For the most part, laws within a regime are obeyed out of fear of punishment. The existence of a police force or some other executor of laws ensures that laws are carried through by punishing those who disobey the law. For example, if someone were to break the speed limit they would be issued a fine, if someone vandalized property they would be sued, and if someone were to commit murder they would be placed in prison.<sup>67</sup> Although it is of imminent importance that laws be obeyed,<sup>68</sup> it is not always sufficient that laws only be enforced through fear. Indeed, Glaucon raises this very issue in Plato's *Republic* when he asks Socrates why anyone should follow the laws if they would not be punished for disobeying them.<sup>69</sup> In Glaucon's question, he raises that if someone

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<sup>64</sup> James Madison, "Federalist No. 10: The same subject continued," in *The Federalist*, ed. George W. Carey and James McClellan (Indianapolis: Liberty Fund, 2001) 42-49. Madison argues that if the citizens of the United States are unable to communicate properly with one another they will dissolve into factions that will tyrannize the minority. Such tyranny would undermine the common good established in the previous footnote.

<sup>65</sup> Lincoln, "Address to the Young Men's Lyceum of Springfield, Illinois," 13-15. Lincoln recounts how the rise in lynchings in Springfield came about by citizens continually coming together to alienate minorities.

<sup>66</sup> Bryan, "Approaching Others: Aristotle on Friendship's Possibility," 763-779.

<sup>67</sup> Alexis de Tocqueville, *Democracy in America*, trans. Harvey C. Mansfield and Delba Winthrop (Chicago: The University of Chicago Press, 2000) 235-249. The tyranny of the majority that Tocqueville describes here and especially from 243-249 stresses the power that fear can hold over the citizen. Although it is great, it can be isolating, an effect that friendship will overcome.

<sup>68</sup> Alexander Hamilton, "Federalist 70: The same view continued, in relation to the unity of the executive, and with an examination of the project of an executive council," in *The Federalist*, ed. George W. Carey and James McClellan (Indianapolis: Liberty Fund, 2001) 362-369.

<sup>69</sup> Plato, *The Republic of Plato*, 357c-361e.

were to have a magic ring that allowed them to turn invisible and commit crimes without fear of repercussions they would unflinchingly do so. The state of the executive is such that crimes are only avoided because they result in negative consequences to oneself. One does not follow the speed limit, or refrain from vandalism and murder out of respect for the regime and surety of the law, but rather to avoid being harmed. Glaucon's criticism shows that the regime of Athens, and indeed other regimes that exist today are on infirm foundations.<sup>70</sup> Furthermore, in such a position it appears unlikely to Glaucon that there would be justice. To the extent that one can avoid punishment and be unjust they will do so, Glaucon is hoping that Socrates will present him with a model of a regime where justice will be done because it is right to do so, not for reward nor out of fear.<sup>71</sup>

When justice is ultimately found in the *Republic* it is found within the just city.<sup>72</sup> It is worth noting that justice within the city that the interlocutors have created relies upon respecting one's position in the regime and seeing to their own business.<sup>73</sup> The just in the city do not spend their time becoming busybodies who worry about punishment, they instead spend their time doing their duties to the city out of respect for themselves and for the hierarchy that has created this way of life for them.<sup>74</sup> When a regime uses respect and adoration as a basis for obedience the infirmity that Glaucon highlights ceases to be a problem. Ultimately, if a citizen who respects his or her regime they will obey the laws because they believe them to be just, even if they were given a magic ring that would allow them to avoid punishment they would still obey the laws from adoration of their regime.

Aristotle similarly frames justice to be found in relation with others.<sup>75</sup> For Aristotle, friendship provides the stage for justice to thrive. The reason for this is perhaps because, as stated above, friendship requires mutual goodwill and concern for the other. In other words, a friendship requires that each party respect one another. Thus, if a regime were able to capture the same sense of friendship and respect it would be able to govern with respect and love rather than fear.

Summarily, there is a problem regarding loyalty to one's regime. The solution to that problem is respect and love for the regime. Civil religion creates loyalty by convincing citizens that the laws of a regime are just.<sup>76</sup> In democracies this lesson must be taught especially well considering that each citizen helps contribute to which laws are created. It follows that, if one does not believe in the justice of the law one does not believe in the justice of oneself or one's government. Citizens

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<sup>70</sup> *Ibid.*

<sup>71</sup> Plato, *The Republic of Plato*, 357a-b.

<sup>72</sup> Plato, *The Republic of Plato*, 432c-433c.

<sup>73</sup> *Ibid.*

<sup>74</sup> Plato, *The Republic of Plato*, 431c-432a. Socrates notes that moderation exists within the city because each person acknowledges and is ruled by those who are deserving of it. In other dialogues such as the *Laws* Plato also notes that moderation is a part of justice.

<sup>75</sup> Aristotle, *Aristotle's Nicomachean Ethics*, Book 8, Chapters 1-3. Aristotle argues here that friendship exists between friends and is how friends treat one another.

<sup>76</sup> Lincoln, "Address to the Young Men's Lyceum of Springfield, Illinois," 13-21.

must be educated that laws created by them are laws that are created because they are just and therefore worth following.<sup>77</sup> To be a citizen must be taught to mean being willing and able to continue in the regime as it is passed down from one generation to another out of love, friendship, and belief in one's regime.

In many ways friendship can be correlated to good citizenship. Indeed, this concept is thoroughly explored by P.E. Digeser in his book *Friendship Reconsidered: What it Means and How it Matters to Politics*. Here Digeser makes the point that in the west friendship has long been considered to be analogous to good citizenship.<sup>78</sup> In essence, the idea is that friends are better able to understand one another's motives and recognize each other's desires.<sup>79</sup> Hence, friendly citizens are more likely to understand each other and therefore allow more credence for fellow citizens' ideas and opinions. Such open-mindedness to deliberation is surely of incredible support for regimes which are democratic in nature. Democratic polities are in extreme need of deliberation in order to govern and to the extent that friendship means recognizing the desires of a friend and being open to considering them friendship is a novel model for citizenship. Indeed, as has been stated above, the reciprocity shared between citizens and their government would also lead to creating laws which would be meant to improve one another without disregarding the individuality of the other. Democracies in particular are unique because of how well they emulate friendship. A democracy unlike other regime types such as monarchies and aristocracies are ruled by the public yet are also made up by that same public. Thus, democracies are capable of the same sort of give and take that makes up a good friendship.<sup>80</sup> Moreover, because of the nature of democracy there is also an equality that would allow for friendship that cannot be found in other regime types. Overall, democracies are the best regime type to allow for friendship to proliferate and also the regime type that would be most improved by the introduction of friendship between the government and its citizenry.

Nevertheless, friendship is far from perfect. The best that a regime can strive for is to make the image that it creates into a reality. True friendship would require the connection of two virtuous individuals who possessed mutual goodwill and equality.<sup>81</sup> The best that a regime could do is imitate these requirements through a poetry of citizenship. This poetry would serve as the civil religion that a regime would then work to actualize.

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<sup>77</sup> *Ibid.* See also *The Republic of Plato* 424c-e where Socrates stresses the importance of raising up the guardians in respect of the goodness of their laws. Additionally, Plato makes a similar point in *The Laws of Plato* at 664a and 666e-667b.

<sup>78</sup> P.E. Digeser, *Friendship Reconsidered: What it Means and How it Matters to Politics*, 105. Digeser points out that friendship has long been used as a model for citizenship in the west.

<sup>79</sup> Digeser, *Friendship Reconsidered*, 109-112. Digeser makes the point that friendship on a large scale such as one within a polis can be more superficial and amount to considering one another's desires and needs.

<sup>80</sup> Frank, "Citizens, Slaves, and Foreigners: Aristotle on Human Nature," 93-96. Frank points out that democracies are created by citizens for citizens, allowing both the government and the public to influence one another..

<sup>81</sup> Bryan, "Approaching Others: Aristotle on Friendship's Possibility," 757-760 and Aristotle, *Aristotle's Nicomachean Ethics*, Book 8, chapter 3.

### Education and Slow Progress

Civil religion is a slow process that requires the education of generations that come closer and closer to actualizing the image that has been created. Instead, the virtuous are motivated to keep to themselves and assist each other with their growth rather than attempting to help the less fortunate. A regime could simply rely on their most prosperous and benevolent citizens rather than funneling resources into assisting citizens who would potentially act as a drain on the regime. Nevertheless, it remains that there is always benefit in assisting the vicious and sharing the good with one another. For one thing, the good is only good when it is shared with others. Indeed, it would also seem that sharing the good with the vicious would also result in gain for the virtuous. The good should be shared with as many people as possible. Nichols suggests that by making a friend one is able to gain a new perspective on the good. Without differing perspectives it is easy and possible to confuse one's particular good with what is good simply. Hippothales falls into this trap in the *Lysis*.<sup>82</sup> As stated above, there is an inherent danger in this because it can also lead to one receiving a warped perspective on what is good. In terms of the regime acting as the virtuous friend for its citizenry it means that in helping the more vicious citizens the government can bring about the common good completely without tyrannizing a minority faction.<sup>83</sup> By promoting friendliness in the public the government can benefit from the greater contribution of citizens who will aid the government as the government aids them.

Moreover, as the friendship between Menexenus and Lysis in Plato's *Lysis*, shows, differences and rivalries need not always result in the end of a friendship. Indeed, rivalries can instead lead to a greater appreciation of the other. Lysis and Menexenus are friends who recognize that they have differences, but they are able to laugh about them rather than coming to a disagreement.<sup>84</sup> This is not to say that rivalries among friends can be compared to the differences a vicious and virtuous person possesses, rather, the friendship between Lysis and Menexenus serves to show that differences are important to sustaining a healthy friendship. Indeed, one of the views of friendship that the three interlocutors dismiss is that like can be friend to like. In essence, to the extent that someone is exactly like another, a friendship between the two is redundant and meaningless. Thus, the *Lysis* seems to indicate that there must be some form of difference between beings in order for them to participate in a friendship.

The nature of a democracy is such that it has no choice but to approach creating friendship but through a wide scale approach. A regime qua regime is incapable of befriending each and every one of their citizens individually and turning them into model citizens.<sup>85</sup> Due to the scale of democratic regimes the best, and possibly only route to take is creating an image of friendship through poetry. A regime would befriend all the citizens of a nation by providing a general poetry of friendship. By relying on the Platonic notion of the forms, or the idea that everything exists in a greater, truer sense than can commonly be observed among the everyday life that all people

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<sup>82</sup> Nichols, "Friendship and Community in Plato's 'Lysis,'" 12-13.

<sup>83</sup> James Madison, "Federalist 10: The same subject continued," 42-43.

<sup>84</sup> Bolotin, *Plato's Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*, 207c-d.

<sup>85</sup> Digeser, *Friendship Reconsidered*, 109-112.

experience. This concept can be applied to friendship, there is a true form of friendship that exists between a citizen and their country. While this concept may seem useless at first, because the presence of an image does not create any real effects among the citizenry. However, as Bryan Bradley argues, the very presence of a possibility is enough to effect real change in the populous.<sup>86</sup> Aristotle never expected for there to be a true form of friendship that any two people could legitimately participate in. Rather, by creating the idea that there is a true form of friendship the citizens of a country are able to attempt to live up to that standard.<sup>87</sup> If a regime creates a form of poetry that encourages friendship, public spiritedness and other encouragements to participate in government, the idea that such participation can exist and is beneficial will promote friendliness.<sup>88</sup> The populace will attempt to come closer to the image portrayed in the poetry even as the image is above and beyond what they would be capable of achieving. The regime will be creating a civil religion that the citizens will attempt to reach, and the regime will continue to retell the tales as their people continue to improve.

Practically speaking, civil religion would need to be spread through education. In Plato's *Laws*, the Athenian Stranger states that laws should come along with preludes that justify why the laws should be followed.<sup>89</sup> The preludes to laws serve to educate citizens and create civil religion within the public. Plato posits almost exactly the same idea in the *Republic*. The Guardian class, a class of citizens within the city in speech that Socrates and his fellow interlocutors create throughout the dialogue are meant to guard the citizens and create order within the regime. Because of their importance the interlocutors spend a lot of time discussing their education. Socrates proposes the education of the guardians should be half musical and half physical and that they should be brought up in knowledge of the laws that they will enforce.<sup>90</sup> Of particular importance to the theme of this paper is musical education. The musical education of the guardians involves teaching them to value the mores of the regime, to love one's own, and judge fellow citizens with justice.<sup>91</sup> In essence, the guardians need a robust understanding of the reasonableness of the law and how to apply it.<sup>92</sup> They need to know the preludes of the law in order to enforce them properly. The guardians are united in a civil religion with one another.

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<sup>86</sup> Bryan, "Approaching Others: Aristotle on Friendship's Possibility," 765-773

<sup>87</sup> *Ibid.*

<sup>88</sup> Aristotle, *Aristotle's Nicomachean Ethics*, Book 2, Chapter 7.

<sup>89</sup> Plato, *The Laws of Plato*, trans. Thomas L. Pangle (Chicago: University of Chicago Press, 1988) 722d-724b. The Athenian Stranger argues that laws should come with a prelude or a justification as to why the law is just and why it ought to be followed. The prelude goes beyond simply ordering a citizen to follow a law because they must.

<sup>90</sup> Plato, *The Republic of Plato*, 376e and 424c-425a.

<sup>91</sup> Plato, *The Republic of Plato*, 375d-e. Socrates likens the guardian who is able to judge the city well to a dog.

<sup>92</sup> *Ibid.* Socrates posits that the guardians must execute the laws that the philosopher king enacts. They must act like noble puppies who treat citizens with equity and love without allowing those within the regime to go unmonitored.

Poetry acts as a sort of myth that will help to bind a people together and prepare them to actualize the image of friendship that is given to them. Poetry has the power to influence the thoughts and sentiments of entire generations.<sup>93</sup> Poetry can therefore be used as an image that would be easily accessible and spread throughout a country. Socrates suggests this very notion when he provides the Myth of Er at the end of the *Republic*.<sup>94</sup> It is worth noting that the Myth of Er involves why one would wish to live a virtuous life. In other words, the myth is of imminent importance for the city in speech that the interlocutors have created throughout the course of the *Republic*. Without it, it is less clear why one would desire justice. The Myth of Er weaves together necessity and agency so completely to show citizens that life is not completely in their control, nor is it entirely out of their control.<sup>95</sup> Plato thus believed that poetry can be used to create a uniting myth which can cause others to act justly, it is not a far stretch to then posit that poetry can cause people to become better citizens. Poetry supports and creates ideal citizenship within a country. By creating a poetry of citizenship and unity within a nation one is able to more completely bind a nation together. Poetry is necessary, and as stated above it allows for quick and easy influence and friendship between a country and its citizens. Poetry should be used to allow friendship between a country and its citizens. By doing so, friendliness will be spread among citizens and a nation will become stronger as a whole through the unity that friendship provides.

However, education is not a quick solution to the problems within a regime. Socrates and other interlocutors admit that education is a slow process because older citizens take to education much slower.<sup>96</sup> At one point, Plato goes so far as to state that in order to create a truly just regime one would need to start fresh with a population of only children. Children would need to be educated from birth in order to best understand justice. Children would need to be brought up in civil religion in order for it to take effect, the image of friendship brought forth by the regime would need to be planted within them from birth, just as Lincoln prescribes.<sup>97</sup> Educating the public is a process that would take generations. Poetry needs to take time in order to become a part of the public to the extent that it will influence their lives directly. Friendship needs to be spread among the public and to do so children must be taught to love their regime and one another.

Over generations, poetry would lead to a public that would become immersed with friendship. Friendship would lead to more deliberation among the public, and more concern for the well being of the regime and for each other. However, the regime must not give up on the slow

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<sup>93</sup> Plato, *The Republic of Plato*, 362b, 363b, 363c, 364d, 364e, and several other locations throughout *The Republic* make ample reference to the influence that poets such as Homer have on the public.

<sup>94</sup> Plato, *The Republic of Plato*, 614b-621d. Although Socrates has just cast aside poetry and with it most other forms of myth, he brings them back in the end by providing the Myth of Er.

<sup>95</sup> Plato, *The Republic of Plato*, 616b-617a. All the souls are allowed to see the Spindle of Necessity which shows that there is an aspect of necessity in each soul's life. However, afterwards they are granted the agency to choose the next life they will live. The souls have both necessity and agency.

<sup>96</sup> Plato, *The Laws of Plato*, 665e. Beginning from here the Athenian Stranger remarks that the elderly have trouble with forming new ideas. In order to make up for this deficiency the Athenian Stranger suggests that the elderly be given ample wine.

<sup>97</sup> Lincoln, "Address to the Young Men's Lyceum of Springfield, Illinois," 17-21.

moving progress of education. If they stick to it then gradual change will become the eventual huge change that would lead to growth within a regime that is necessary and beneficial.

### Works Cited

- Annas, Julia. "Plato and Aristotle on Friendship and Altruism." *Mind*, New Series, 86, no. 344 (1977): 532-54. JSTOR.
- Aristotle. *Aristotle's Nicomachean Ethics*. Translated by Robert C. Bartlett and Susan D. Collins. Chicago, IL: University of Chicago Press, 2011.
- Aristotle. *Aristotle's Politics*. Translated by Carnes Lord. Chicago, IL: University of Chicago Press, 2013.
- Bolotin, David. *Plato's Dialogue on Friendship: An Interpretation of the Lysis, with a New Translation*. Ithaca: Cornell University Press, 1989.
- Bryan, Bradley. "Approaching Others: Aristotle on Friendship's Possibility." *Political Theory* 37, no. 6 (2009): 754-79. JSTOR.
- Burger, Ronna. *Aristotle's Dialogue with Socrates on the Nicomachean Ethics*. Chicago, IL: University of Chicago Press, 2009.
- Frank, Jill. "Citizens, Slaves, and Foreigners: Aristotle on Human Nature." *The American Political Science Review*, 98, No. 2 (February 2004): 91-96. JSTOR.
- Haden, James. "Friendship in Plato's 'Lysis'." *The Review of Metaphysics* 37, no. 2 (1983): 327-56. JSTOR.
- Hamilton, Alexander. "Federalist No. 1: Introduction." In *The Federalist*, edited by George W. Carey and James McClellan, 1-4. Indianapolis: Liberty Fund, 2001.
- Hamilton, Alexander. "Federalist No. 70: The same view continued, in relation to the unity of the executive, and with an examination of the project of an executive council." In *The Federalist*, edited by George W. Carey and James McClellan, 362-369. Indianapolis: Liberty Fund, 2001.
- Hoerber, Robert G. "Plato's 'Lysis'." *Phronesis* 4, no. 1 (1959): 15-28. JSTOR.
- Lincoln, Abraham. "Address to the Young Men's Lyceum of Springfield, Illinois." in *Selected Speeches and Writings*, edited by Don E. Fehrenbacher 13-21 New York: Paperback Classics, 2009.
- Madison, James. "Federalist No. 10: The same Subject continued." In *The Federalist*, edited by George W. Carey and James McClellan, 42-49. Indianapolis: Liberty Fund, 2001.
- Nichols, Mary P. "Friendship and Community in Plato's 'Lysis'." *The Review of Politics* 68, no. 1 (2006): 1-19. JSTOR.
- Nichols, Mary P. *Socrates on Friendship and Community*. Cambridge, NY: Cambridge University Press, 2009.
- Pangle, Lorraine Smith. *Aristotle and the Philosophy of Friendship*. Cambridge, NY: Cambridge University Press, 2003.
- Plato. *The Laws of Plato*. Translated by Thomas L. Pangle. Chicago: The University of Chicago Press, 1988.
- Plato. *The Republic of Plato*. Translated by Allan Bloom. New York: Basic Books, 2016.
- Sherman, Nancy. "Aristotle on Friendship and the Shared Life." *Philosophy and Phenomenological Research* 47, no. 4 (1987): 589-613. doi:10.2307/2107230.
- Tocquevill, Alexis de. *Democracy in America*. Translated by Harvey C. Mandfield and Delba Winthrop. Chicago: The University of Chicago Press, 2000.
- Wolfsdorf, David. "Φιλία in Plato's 'Lysis'." *Harvard Studies in Classical Philology* 103 (2007): 235-59. JSTOR.



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## PD-L1 Expression of Melanoma Cells Treated with Indole-3-Carbinol (I3C)

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## ABSTRACT

*Certain phytochemicals such as apigenin and curcumin have been shown to decrease PD-L1 expression within melanoma cells. Decreased PD-L1 expression can limit the cancer cell's ability to repress T cell activation and allows the host's immune system to properly dispose of cancerous cells. In this study, we would like to test the effects of Indole-3-carbinol (I3C) on PD-L1 expression. In order to do this, western blots will be used to visualize IFN-gamma induced PD-L1 protein expression alone and in response to our treatments. Western blots will also be used to determine if the phytochemical dampens PD-L1 expression by inhibiting phosphorylation of the STAT1 protein into its active form. We will also use caspase and MTT assays to look at cell viability and proliferation. We expect that our treatments will inhibit PD-L1 expression through preventing STAT1 phosphorylation and promote cytotoxicity within our melanoma cell line.*

## INTRODUCTION

### *Indole-3-carbinol*

Indole-3-carbinol (I3C) is a phytochemical derived from cruciferous vegetables that has shown anti-cancer properties. I3C is considered an indole glucosinolate that comes from the *Brassica* family of vegetables. This family of green vegetables includes broccoli, brussels sprouts, cabbage, cauliflower, kale, and turnips. Glucosinolates induce antioxidant action, detoxifying enzymes, apoptosis, and cell cycle regulation (Maruthanila, V L et al). Major players involved in cell cycle regulation that are affected by I3C include p21, p27, and the PTEN tumor suppressor (Manson, Margaret M.). I3C contributes to the PI3K-Akt pathway which regulates cell proliferation, survival, and growth in response to extracellular signals (Manson, Margaret M.). Bioactive compounds of the *Brassica* family can also induce apoptosis through caspase activation (Maruthanila, V L et al).

### *Melanoma*

Melanoma is a cancer that begins when melanocytes begin to grow uncontrollably. While melanoma is the ninth most common malignancy, incidence of malignant melanoma is increasing at higher rates than many other cancers worldwide. There are 100,000 new cases of melanoma each year in the United States in addition to 9,000 deaths that result from this disease. UV exposure is one of the major environmental risk factors for this skin cancer. Genetic mutations such as BRAF mutations are the most common genetic factors associated with melanomas (Ralli, Massimo et al.).

### *PD-L1 and cancer immunotherapy*

Programmed Cell Death Protein 1 (PD-1) and Programmed Death-Ligand 1 (PD-L1) are targets for cancer immunotherapy. PD-L1 can be expressed on cancer cells whereas PD-1 is found on active T cells. When PD-1 and PD-L1 are expressed concurrently they can interact to induce T cell repression. It can be dangerous for the human body to have cancer cells that express PD-L1 because this is how the cancer cells can evade the host's own immune system. When PD-L1 on the cancer cell interacts with PD1 of T cells this can prevent the T cell from destroying the cancer cell (Ralli, Massimo et al.).

## **MATERIALS & METHODS**

### ***Cell Culture***

The cells used in the following experiments were A375 melanoma cells from ATCC. The cells were cultured in Gibco Dulbecco's Modified Eagle Medium (DMEM), which was supplemented with 10% FBS and 1% penicillin/streptomycin (Fisher Scientific). Cell cultures were incubated at 37°C and 5% CO<sub>2</sub>. Sterile technique was used for all experiments.

### ***Antibodies and other reagents***

Rabbit anti-PD-L1, rabbit anti-phosphoSTAT1, and rabbit anti-STAT1 antibodies were purchased from Cell Signaling Technology. Recombinant human interferon- $\gamma$  (IFN- $\gamma$ ) was from T&L Biotechnology. Indole-3-carbinol was purchased from Cayman Chemical Company.

### ***Indole-3-carbinol Treatments***

To study the effect of I3C, A375 melanoma cells were treated with or without 200 $\mu$ M I3C and harvested after 48 hours for western blot analysis, MTT assays, and caspase assays. I3C was dissolved in 100% ethanol which was used for control treatments. After treatment with I3C or ethanol, the cells were then treated with 10ng/ml of IFN-gamma 4 hours later to induce PD-L1 expression.

### ***MTT Cell Proliferation Assay***

Melanoma cells were seeded in a 96-well plate in triplicates and treated with either ethanol or 200 $\mu$ M I3C for approximately 48 hours. Inhibition of proliferation was assessed using the CyQUANT MTT Cell Proliferation Assay Kit as per the rapid protocol in the user's manual (ThermoFisher). DMEM media in each treated well was replaced with Hyclone media without phenol red. Three wells were also supplemented with Hyclone media for negative controls. 10 $\mu$ L of 12-mM stock solution was added to each well containing media. 50 $\mu$ L of DMSO was mixed with 25 $\mu$ L of the media/MTT solution in each well. Cells were incubated at 37 degrees Celsius for 10 minutes. Each sample was mixed thoroughly before reading the absorbance at 570nm.

### ***Cell Lysis and Western Blot Analysis***

Cells were lysed on ice in RIPA lysis buffer. Cell lysates were centrifuged at 2,500 x g for 5 min to remove debris. Protein concentrations were measured by the BCA assay. Equal amounts of protein samples were separated by SDS-PAGE and protein bands were transferred to a nitrocellulose membrane. Membranes were blocked with 5% Bovine Serum Albumin (BSA) in TBST for 1 hour at room temperature and then incubated with indicated primary antibodies with gentle shaking at 4 °C for overnight. Membranes were washed with TBST for three times and incubated with corresponding secondary antibodies. Image acquisition and quantitation of band intensity were performed.

### ***Caspase and NucBlue Assay***

A375 melanoma cells were treated with ethanol or 200 $\mu$ M I3C. They were treated with IFN-gamma 4 hours later. The controls were simply treated with ethanol or I3C without IFN-gamma. All cells were incubated for 48 hours at 37 degrees Celsius and 5% CO<sub>2</sub>. CellEvent

Caspase-3/7 Green (Thermofisher) and NucBlue (Thermofisher) was added to the cells and incubated for 30 minutes at 37 degrees Celsius and then imaged using FLoid.

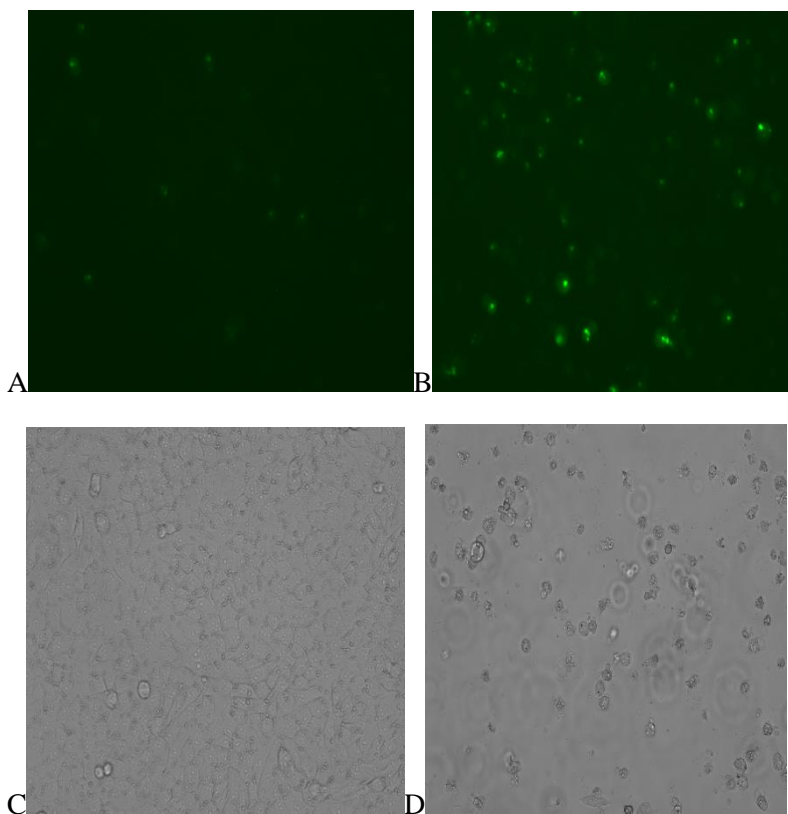
### *Statistical Analysis*

A statistical analysis of the results was performed in order to determine statistical significance using GraphPad Prism's one-way ANOVA statistical test followed by a Newman-Keuls Multiple Comparison Test.

## **RESULTS**

### *Cell Viability*

Figure 1 shows what appears to be a clear decline in cell viability in response to 200uM concentrations of I3C. There is very little caspase activation in 1A which should be expected for a control experiment. Figure 1B contains the I3C treatment which had a cell viability of approximately 20% judging by the amount of caspase activation we see in this image. The cell death is also evident in the white light images(C&D) where we see 100% confluency in the control and very few cells still alive after the treatment.

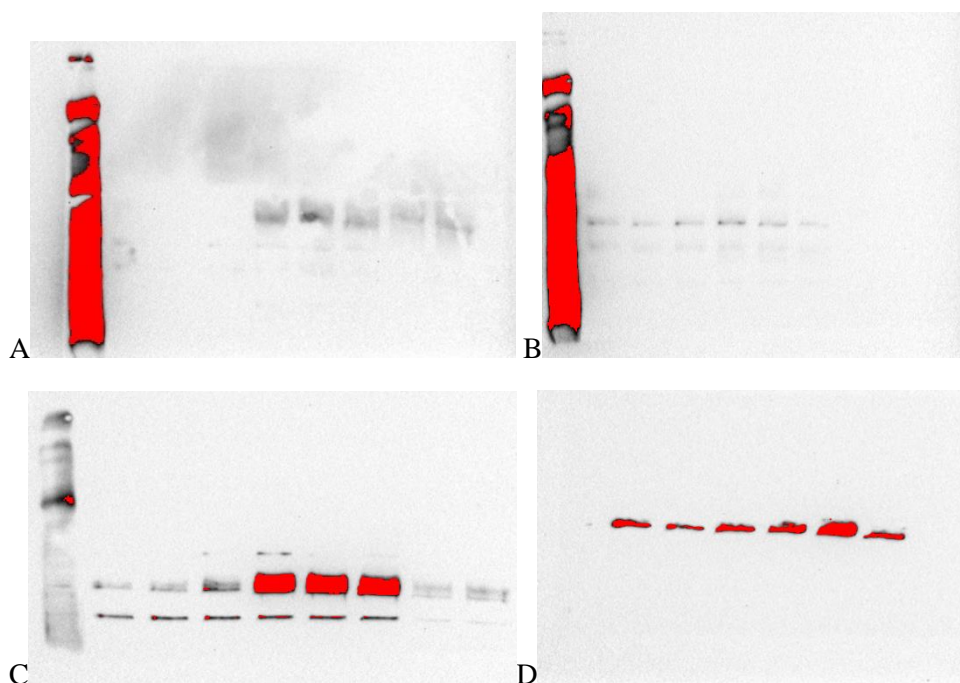


**Figure 1. Cell viability of I3C treatments.** Cell viability results from a caspase assay following treatment of A375 melanoma cells with I3C and IFN-gamma in comparison to an ethanol control.

A) Green light image taken of A375 cells after treatment with ethanol for 48 hours. B) Green light image taken of A375 cells after 200uM I3C and 10ng/ml treatment for 48 hours. C) White light image taken of A375 cells after treatment with ethanol for 48 hours. D) White light image taken of A375 cells after treatment with 200uM I3C and 10ng/ml for 48 hours.

### **Western Blot Analysis**

Figure 2A shows a western blot probed for PD-L1. PD-L1 only appears to be expressed in the samples treated with IFN-gamma so we know that the IFN-gamma is functional in inducing PD-L1 expression as expected. Figure 2B represents pSTAT1 expression. It appears that pSTAT is only expressed in our control lanes that were not treated with I3C. Figure 2C shows STAT1 expression. Each sample contained STAT1 although the control lanes with IFN-gamma have a higher band intensity for presence of STAT1. Figure 2D represents the western blot probed for beta-actin as a loading control.



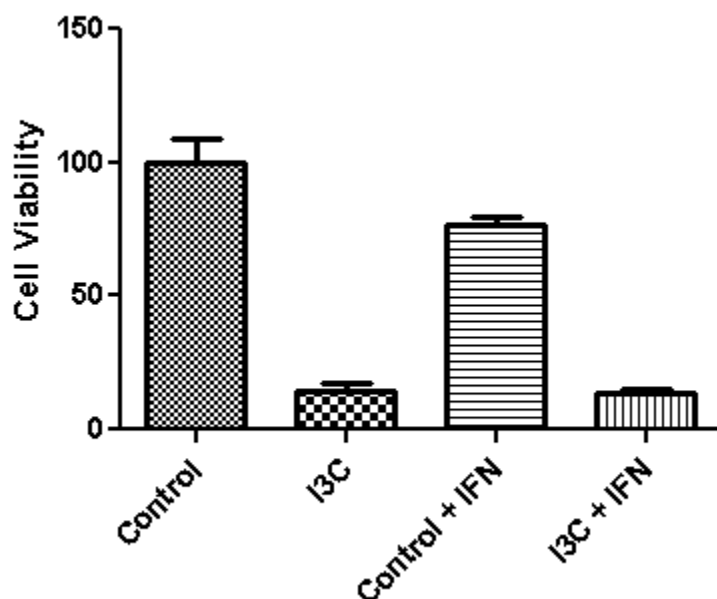
**Figure 2. Western Blot Analysis of controls & I3C treatments with or without IFN-gamma.**

A) PD-L1 B) pSTAT C) STAT1 D) beta-actin

### **MTT Assay**

Figure 3 shows the results of the MTT Assay with the control groups being normalized at 100%. There is a statistically significant difference between each group except between the two I3C treatment groups. Both I3C treatment groups have lesser cell viability compared to the controls.

This is supporting evidence that our 200uM I3C treatments do induce significant cell death resulting in 10-20% cell viability in melanoma cells.



**Figure 3.** Average cell viability results from MTT Assays following I3C treatment of A375 cells in comparison to ethanol controls. Each bar is an average of 3 experiments. P-value following one-way ANOVA test is <0.0001. Error bars represent standard error.

## DISCUSSION

The results provide supporting evidence for the hypothesis that the 200uM I3C treatments decrease IFN-gamma induced PD-L1 expression (Fig.1). According to MTT and caspase assays, the I3C treatments also induce melanoma cell death (Fig.1&3). In these experiments, IFN-gamma was used to induce PD-L1 expression in melanoma cells. According to the western blot analysis, PD-L1 was only seen in the samples treated with IFN-gamma as should be expected. When viewing western blots for pSTAT1 we saw that only the controls expressed pSTAT1. PD-L1 is normally expressed upon phosphorylation of STAT1. Because no pSTAT was seen in the I3C treated samples, we believe that this resulted in a dampened signal of PD-L1 seen in Fig.1A. Cell viability was also determined to decline to as low as 10% upon treatment with 200uM I3C. The images in figure 1 show caspase activation while the MTT assay provided statistically significant evidence for greater cell death in the treated samples compared to controls.

In summary, 48hr treatments with 200uM I3C reduce PD-L1 expression by preventing STAT1 phosphorylation and promote cytotoxicity within our melanoma cell line. Future studies can observe the effects of other phytochemicals and include a 24hr treatment of I3C. We also noticed a statistically significant difference between the cell viability for the ethanol controls treated with or without IFN-gamma that was not expected. This could also be further analyzed.

## REFERENCES

Maruthanila, V L et al. "Attenuation of Carcinogenesis and the Mechanism Underlying by the Influence of Indole-3-carbinol and Its Metabolite 3,3'-Diindolylmethane: A Therapeutic Marvel." *Advances in pharmacological sciences* vol. 2014 (2014): 832161. doi:10.1155/2014/832161

Manson, Margaret M. "Inhibition of survival signalling by dietary polyphenols and indole-3-carbinol." *European journal of cancer (Oxford, England : 1990)* vol. 41,13 (2005): 1842-53. doi:10.1016/j.ejca.2005.05.008

Ralli, Massimo et al. "Immunotherapy in the Treatment of Metastatic Melanoma: Current Knowledge and Future Directions." *Journal of immunology research* vol. 2020 9235638. 28 Jun. 2020, doi:10.1155/2020/9235638

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## Monodromy Group Proofs

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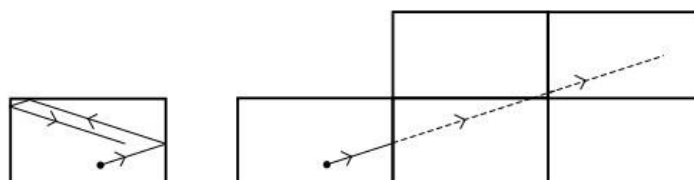


## Abstract

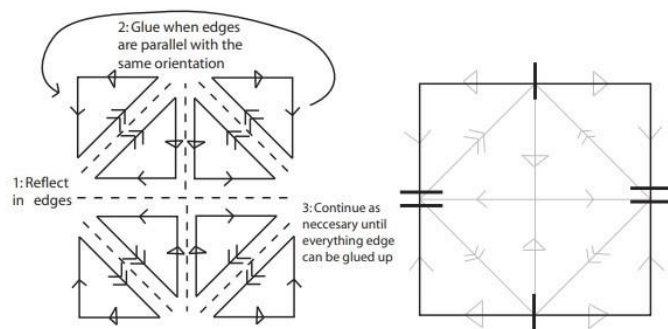
A rational billiards surface is the outside of a three-dimensional shape (such as a donut) that allows one to view the path of a billiards ball as a continuous path instead of a jagged path obtained from numerous bounces off the sides of a billiards table. As one changes the shape of the billiards table, one obtains different billiards surfaces. Throughout the scope of this project, we investigated triangular billiard surfaces and their corresponding monodromy groups. These monodromy groups are permutation groups that map the dessin d'enfant from a sphere onto another sphere or a torus. We developed theorems for the general non-exceptional case for all triangles and are still in discovery of the exceptional case.

## Background

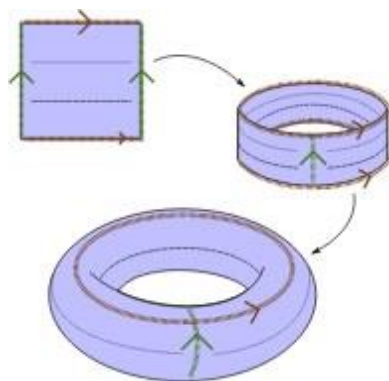
**0.1. Billiard Surfaces.** A basic definition of a billiard surface is a (Riemann) surface constructed from a polygon with angles (in radians) that are rational multiples of  $\pi$ . A billiards surface is a topological construction that allows one to view the path of a billiards ball as a continuous path on a surface instead of a chaotic path of bounces off the sides of the billiards table. This concept is best illustrated via a picture involving the billiards surface associated with the rectangle. One constructs the billiards surface by beginning with one copy of the rectangle and then reflecting it a certain number of times as pictured below. This is referred to as unfolding the path.



Once one has enough copies of the initial polygon, one “identifies” edges in the surface that are parallel and have the same orientation. In essence, this amounts to “gluing” different sides of our shape. Here is an example of how edges are identified in the billiards surface for the equilateral right triangle.

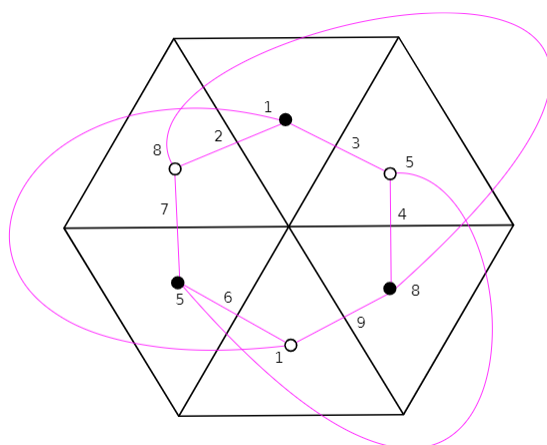


Although the diagram above might not look like a surface, one obtains the following surface after gluing together the sides with one tick mark and two tick marks.



The donut shape above is called a one-torus because of the fact that it has one hole. In fact, all billiards surfaces are tori with one or more holes.

**0.2. Cayley Graph.** A graph is a mathematical object that is composed of vertices and the edges that connect them. The Cayley graph of a billiards surface is the graph obtained by placing a vertex at the center of each polygon and an edge between two polygons if they are adjacent. An example of the Cayley graph of a billiards surface is shown below:



Just as one can study the genus of a billiards surface, one can also study the genus of a graph. The genus of a graph is the smallest non-negative integer, such that the graph can be drawn on a surface of genus  $g$  (e.g. a  $g$  holed torus). Although billiards surfaces of triangles can have arbitrarily large genera, the genus of the Cayley graph of a triangular billiards surface is always zero or one!

**0.3. Notation for Triangles.** To be specific about which triangles we were working with, we adopted a system of notating each triangle by its triple. Each triangle can be labeled using three integers  $(a, b, c)$ . If we let  $n = a + b + c$ , then the triangle will have angles  $(\frac{a\pi}{n}, \frac{b\pi}{n}, \frac{c\pi}{n})$ . We investigated the triangles with billiard surfaces that could be constructed by reflecting across two sides or rotating around a single angle. This is a situation that only occurs when one of the integers from the triple is relatively prime to  $n$ . However, there is no specific order for  $(a, b, c)$ , so we can allow  $a$  to indicate this integer. This brings up a necessary assumption for this proof:  $\gcd(n, a) = 1$ .

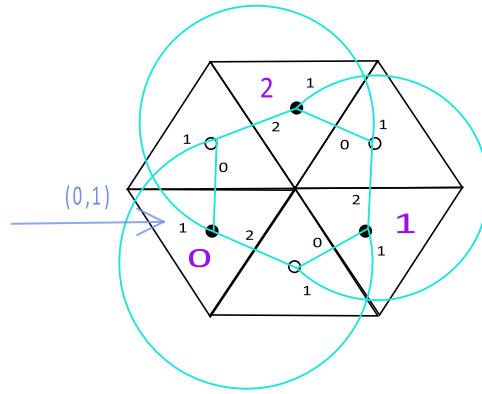
**0.4. Labeling System.** We chose a very specific labeling system to help emphasize the patterns found in the operations  $\sigma_0$  and  $\sigma_1$  for any given triangle. We made some basic assumptions regarding our Cayley graph throughout the proof that should be stated at this point:

- (1) The Cayley graph will have  $n$  open circles and  $n$  closed circles.
- (2) Each circle in the Cayley graph has degree 3.
- (3) The Cayley graph will have  $3n$  edges.

These three assumptions are properties of the Cayley graphs of all triangles. We defined  $\sigma_0$  as the operation that rotates counterclockwise around closed circles and  $\sigma_1$  as the operation that rotates counterclockwise around open circles. Given the three properties of the Cayley graphs, the following properties of  $\sigma_0$  and  $\sigma_1$  can be derived:

- (1) The operations  $\sigma_0$  and  $\sigma_1$  will each have  $n$  cycles.
- (2) The group generated by  $\sigma_0$  will have order 3 and the group generated by  $\sigma_1$  will have order 3.

Observe the labeling for these groups in the figure below:



Notice, we have chosen to be specific about our labeling, where we use an ordered pair to define each edge. There will always be  $n$  closed circles that do not share any edges, so we can use a parameter  $m$  in modulo  $n$  to describe where our edge is in relation to a closed circle. Each circle has 3 edges connected to it, so we can use a parameter  $i$  in modulo 3 to describe which edge of a closed circle we are looking at. This labeling of the edges in the Cayley graph allow us to define  $\sigma_0$  and  $\sigma_1$  in rigorous terms:

$$\sigma_0[(m, i)] = \begin{cases} (m, 1) & \text{if } i \equiv 0 \\ (m, 2) & \text{if } i \equiv 1 \\ (m, 0) & \text{if } i \equiv 2 \end{cases} \pmod{3}$$

$$\sigma_1[(m, i)] = \begin{cases} (m - b, 2) & \text{if } i \equiv 0 \\ (m - a, 0) & \text{if } i \equiv 1 \\ (m - c, 1) & \text{if } i \equiv 2 \end{cases} \pmod{3}$$

The input  $(m, i)$  defines the starting edge before the operation, and the output is the resulting edge when the operation is completed. Notice that the input and output have a parameter in modulo  $n$  and modulo 3, which accounts for the total  $3n$  edges.

Theorem

**Theorem 1.** *The group  $G = \langle \sigma_0, \sigma_1 \rangle$  is equivalent to the semi direct product of  $N$  and  $H$  where  $N = \langle \sigma_0 \sigma_1, \sigma_1 \sigma_0 \rangle$  and  $H = \langle \sigma_0 \rangle$ .*

**Lemma 1.** *The groups  $A = \langle \sigma_1 \sigma_0 \rangle$  and  $B = \langle (\sigma_0 \sigma_1)(\sigma_1 \sigma_0)^{-s} \rangle$  have only the trivial intersection.*

$$(\sigma_1 \sigma_0)^{a^{-1}}[(m, i)] = \begin{cases} (m-1, 0) & \text{if } i \equiv 0 \\ (m - ca^{-1}, 1) & \text{if } i \equiv 1 \pmod{3} \\ (m - ba^{-1}, 2) & \text{if } i \equiv 2 \end{cases}$$

*Proof.* Notice, that since  $a$  exists we also have  $a^{-1}$  and thus since we have  $\gcd(n, a) = 1$ , we also have  $\gcd(n, a^{-1})$ . Let's examine  $(\sigma_1 \sigma_0)^{a^{-1}}$ ,

$$(\sigma_1 \sigma_0)^{a^{-1}}[(m, i)] = \begin{cases} (m-1, 0) & \text{if } i \equiv 0 \\ (m - (-s-1), 1) & \text{if } i \equiv 1 \pmod{3} \\ (m-s, 2) & \text{if } i \equiv 2 \end{cases}$$

Let  $s = ba^{-1}$ , and recall that  $a + b + c \equiv 0 \pmod{n}$ , and thus if we raise to the  $a^{-1}$  power, we get  $1 + ba^{-1} + ca^{-1} \equiv 0 \pmod{n}$ , which can also be written as  $1 + s + ca^{-1} \equiv 0 \pmod{n}$ , which concludes  $ca^{-1} = -s - 1$ . It follows:

We can describe this element of a module over a ring as something like a vector. Let us call the ring  $R$  and the element a  $R$ -vector. Then the  $R$ -vector would be as follows:

$$(\sigma_1 \sigma_0)^{a^{-1}} = \begin{bmatrix} -1 \\ s+1 \\ -s \end{bmatrix}$$

$$(\sigma_0 \sigma_1)(\sigma_1 \sigma_0)^{-ba^{-1}}[(m, i)] = \begin{cases} (m+b-b, 0) & \text{if } i \equiv 0 \\ (m + cba^{-1} - a, 1) & \text{if } i \equiv 1 \pmod{3} \\ (m + bba^{-1} - c, 2) & \text{if } i \equiv 2 \end{cases}$$

Now examine  $(\sigma_0 \sigma_1)(\sigma_1 \sigma_0)^{-ba^{-1}}$ ,

$$(\sigma_0 \sigma_1)(\sigma_1 \sigma_0)^{-ba^{-1}}[(m, i)] = \begin{cases} (m+0, 0) & \text{if } i \equiv 0 \\ (m - (s^2 + s + 1), 1) & \text{if } i \equiv 1 \pmod{3} \\ (m + s^2 + s + 1, 2) & \text{if } i \equiv 2 \end{cases}$$

Notice that similarly we can also raise  $(\sigma_0 \sigma_1)(\sigma_1 \sigma_0)^{-ba^{-1}}$  to the power of  $a^{-1}$  and arrive at a conclusion similar to the previous one:

Recall that  $ba^{-1} = s$ , thus translating this into a  $R$ -vector gives the following,

$$[(\sigma_0 \sigma_1)(\sigma_1 \sigma_0)^{-s}]^{a^{-1}} = \begin{bmatrix} 0 \\ -(s^2 + s + 1) \\ s^2 + s + 1 \end{bmatrix}$$

To examine the orders of these generators, it is easiest to examine their matrices.

For  $(\sigma_0 \sigma_1)(\sigma_1 \sigma_0)^{-s}$  we notice  $\gcd(n, s^2 + s + 1) = \alpha$  and  $\text{lcm}(n, s^2 + s + 1) = \frac{n(s^2 + s + 1)}{\alpha} \equiv 0 \pmod{n}$ , and therefore the order of  $(\sigma_0 \sigma_1)(\sigma_1 \sigma_0)^{-s}$  is  $\frac{n}{\alpha}$ . Recall that  $\gcd(n, a) = 1$  and  $\gcd(n, a^{-1}) = 1$ , and thus

raising  $(\sigma_0\sigma_1)(\sigma_0\sigma_1)^{-s}$  to the  $a^{-1}$  power will not change the order, and thus its order is still  $\frac{n}{\alpha}$ . Similarly, we can conclude that the order of  $\sigma_1\sigma_0$  will be  $n$ .

Let  $B' = \langle (\sigma_0\sigma_1(\sigma_1\sigma_0)^{-ba^{-1}})^{a^{-1}} \rangle$  and  $B = \langle \sigma_0\sigma_1(\sigma_1\sigma_0)^{-ba^{-1}} \rangle$ . Because the generator of  $B'$  is just a power of the generator of  $B$  and the two groups have the same order, the two groups are equal. Similar reasoning can be used to show that the group  $A' = \langle (\sigma_1\sigma_0)^{a^{-1}} \rangle$  is equal to the group  $A = \langle \sigma_1\sigma_0 \rangle$ . Then because  $A'$  and  $B'$  have the trivial intersection, the groups  $A$  and  $B$  will also have the trivial intersection.

**Lemma 2.** *The operations  $\sigma_0\sigma_1$  and  $\sigma_1\sigma_0$  commute.*

*Proof.* The operations  $\sigma_0$  and  $\sigma_1$  can be defined as the following:

$$\sigma_0[(m, i)] = \begin{cases} (m, 1) & \text{if } i \equiv 0 \\ (m, 2) & \text{if } i \equiv 1 \pmod{3} \\ (m, 0) & \text{if } i \equiv 2 \end{cases}$$

$$\sigma_1[(m, i)] = \begin{cases} (m - b, 2) & \text{if } i \equiv 0 \\ (m - a, 0) & \text{if } i \equiv 1 \pmod{3} \\ (m - c, 1) & \text{if } i \equiv 2 \end{cases}$$

where  $m$  is in modulo  $n$ . Given these definitions, the compositions  $\sigma_0\sigma_1$  and  $\sigma_1\sigma_0$  can be defined as the following:

$$\sigma_0\sigma_1[(m, i)] = \begin{cases} (m - b, 0) & \text{if } i \equiv 0 \\ (m - a, 1) & \text{if } i \equiv 1 \pmod{3} \\ (m - c, 2) & \text{if } i \equiv 2 \end{cases}$$

$$\sigma_1\sigma_0[(m, i)] = \begin{cases} (m - a, 0) & \text{if } i \equiv 0 \\ (m - c, 1) & \text{if } i \equiv 1 \pmod{3} \\ (m - b, 2) & \text{if } i \equiv 2 \end{cases}$$

Observe for the compositions  $(\sigma_0\sigma_1)(\sigma_1\sigma_0)$  and  $(\sigma_1\sigma_0)(\sigma_0\sigma_1)$

$$(\sigma_0\sigma_1)(\sigma_1\sigma_0)[(m, i)] = \begin{cases} (m - a - b, 0) & \text{if } i \equiv 0 \\ (m - c - a, 1) & \text{if } i \equiv 1 \pmod{3} \\ (m - b - c, 2) & \text{if } i \equiv 2 \end{cases}$$

$$(\sigma_1\sigma_0)(\sigma_0\sigma_1)[(m, i)] = \begin{cases} (m - b - a, 0) & \text{if } i \equiv 0 \\ (m - a - c, 1) & \text{if } i \equiv 1 \pmod{3} \\ (m - c - b, 2) & \text{if } i \equiv 2 \end{cases}$$

Notice that the two operations are equivalent. Then  $\sigma_0\sigma_1$  and  $\sigma_1\sigma_0$  commute.

**Corollary 1.** *The groups  $A = \langle \sigma_1\sigma_0 \rangle$  and  $B = \langle (\sigma_0\sigma_1)(\sigma_1\sigma_0)^{-s} \rangle$  are subgroups which are normal in  $N = \langle \sigma_0\sigma_1, \sigma_1\sigma_0 \rangle$ .*

*Proof.* To show that some group  $A$  is normal to a group  $N$ , it is necessary to show for all  $a \in A$  and any  $n \in N$   
 $nan^{-1} \in A$

Given certain properties of groups, the conditions can be reduced to showing that for all generators of  $A$  and any generators of  $N$ , the above equation must be satisfied. However, in the case where the generators of  $A$  and  $N$  commute, it is trivial to show normality:

$$nan^{-1} = ann^{-1} = a \in A$$

Then because the generators of  $A$ ,  $B$ , and  $N$  are all compositions of elements that commute, it is clear that  $A \in N$  and  $B \in N$ .

**Lemma 3.**  $AB=N$

*Proof.* Let  $A = \langle \sigma_1 \sigma_0 \rangle$ ,  $B = \langle \sigma_0 \sigma_1 (\sigma_1 \sigma_0)^{-ba^{-1}} \rangle$  and  $N = \langle \sigma_0 \sigma_1, \sigma_1 \sigma_0 \rangle$ . Proving the following is equivalent to proving that  $AB = N$ :

1. There exists  $a \in A$  and  $b \in B$  such that  $ab = \sigma_0 \sigma_1$ .
2. There exists  $a \in A$  and  $b \in B$  such that  $ab = \sigma_1 \sigma_0$ .

For the first case, let  $a = (\sigma_1 \sigma_0)^{ba^{-1}}$  and  $b = \sigma_0 \sigma_1 (\sigma_1 \sigma_0)^{-ba^{-1}}$ . Then  $ab = \sigma_0 \sigma_1$ . For the second case, let  $a = \sigma_1 \sigma_0$  and  $b = \{e\}$ . Then  $ab = \sigma_1 \sigma_0$ . The two conditions are fulfilled, therefore,  $AB = N$ .

**Proposition 1.** *The group  $N$  is the direct product of  $A$  and  $B$ .*

*Proof.* Let  $N = \langle \sigma_0 \sigma_1, \sigma_1 \sigma_0 \rangle$ ,  $A = \langle \sigma_1 \sigma_0 \rangle$ , and  $B = \langle \sigma_0 \sigma_1 (\sigma_1 \sigma_0)^{-s} \rangle$ . There are four conditions to prove in order to show that  $N$  is the direct product of  $A$  and  $B$ :

- I.  $A \subset N$
- II.  $B \subset N$
- III.  $A \cap B = \{e\}$
- IV.  $AB = N$

The first two conditions are proven by Corollary 1. The third condition is proven by Lemma 2. The fourth condition is proven by Lemma 3. Then  $N$  is the direct product of  $A$  and  $B$ .

**Lemma 4.** *The group  $N = \langle \sigma_0 \sigma_1, \sigma_1 \sigma_0 \rangle$  is a normal subgroup of  $G = \langle \sigma_0, \sigma_1 \rangle$*

$$\begin{array}{ll} \sigma_0(\sigma_0 \sigma_1) \sigma_0^{-1} \in N & \sigma_0(\sigma_1 \sigma_0) \sigma_0^{-1} \in N \\ \sigma_1(\sigma_0 \sigma_1) \sigma_1^{-1} \in N & \sigma_1(\sigma_1 \sigma_0) \sigma_1^{-1} \in N \end{array}$$

*Proof.* Given  $N$  is the group  $\langle \sigma_0 \sigma_1, \sigma_1 \sigma_0 \rangle$  and  $G$  is the group  $\langle \sigma_0, \sigma_1 \rangle$ , showing that the following four cases are true is equivalent to showing that  $N$  is a normal subgroup of  $G$ :

$\sigma_1(\sigma_0 \sigma_1) \sigma_1^{-1}$     $\sigma_0(\sigma_1 \sigma_0) \sigma_0^{-1}$  Two of the cases are trivial. The case  $\sigma_0(\sigma_1 \sigma_0) \sigma_0^{-1}$  reduces to  $\sigma_0 \sigma_1$ , and the case  $\sigma_1(\sigma_0 \sigma_1) \sigma_1^{-1}$  reduces to  $\sigma_1 \sigma_0$ , both of which are in  $N$ . To solve the other two cases,

$$\sigma_0(\sigma_0 \sigma_1) \sigma_0^{-1} = \sigma_0^2 \sigma_1 \sigma_0^2 = (\sigma_0^2 \sigma_1^2)(\sigma_1^2 \sigma_0^2) = (\sigma_1 \sigma_0)^{-1} (\sigma_0 \sigma_1)^{-1}$$

notice that  $\sigma_0^{-1} = \sigma_0^2$  and  $\sigma_1^{-1} = \sigma_1^2$ . It follows that

$$\sigma_1(\sigma_1\sigma_0)\sigma_1^{-1} = (\sigma_0\sigma_1)^{-1}(\sigma_1\sigma_0)^{-1}$$

Then  $\sigma_0(\sigma_0\sigma_1)\sigma_0^{-1} \in N$ . The proof for  $\sigma_1(\sigma_1\sigma_0)\sigma_1^{-1}$  is similar with the conclusion

Then  $\sigma_1(\sigma_1\sigma_0)\sigma_1^{-1} \in N$ . Therefore,  $N$  is a normal subgroup of  $G$ .

**Lemma 5.**  $N \cap H = \{e\}$

$$\sigma_1\sigma_0\sigma_0^{-1} = \sigma_1 \in N$$

*Proof.* Recall that  $N$  is the group  $\langle\sigma_0\sigma_1, \sigma_1\sigma_0\rangle$  and  $H$  is the group  $\langle\sigma_0\rangle$ . Suppose the intersection of these groups is not trivial. Then because  $\sigma_0$  has order 3, there is an element in  $N$  that is equal to  $\sigma_0$  or  $\sigma_0^{-1}$ . If the element is equal to  $\sigma_0$ , the square of that element will be equal to  $\sigma_0^{-1}$ . Then the following should also be true:

Then the group  $N$ ,  $\langle\sigma_0\sigma_1, \sigma_1\sigma_0\rangle$ , is the same as the group  $\langle\sigma_0^{-1}, \sigma_1\rangle$ . However, this is a contradiction because  $N$  was proven to be abelian and the set  $\langle\sigma_0^{-1}, \sigma_1\rangle$  is not abelian. Then  $N$  and  $H$  can only have the trivial intersection.

**Lemma 6.**  $NH = G$

*Proof.* Given  $N = \langle\sigma_0\sigma_1, \sigma_1\sigma_0\rangle$  and  $H = \langle\sigma_0\rangle$ , examine  $nh$ , where  $n \in N$  and  $h \in H$ . Thus we have  $(\sigma_0\sigma_1)^a \sigma_0^b = \sigma_0$  when  $a = n$  and  $b = 1$ . Similarly,  $(\sigma_1\sigma_0)^a \sigma_0^b = \sigma_1$  when  $a = 1$  and  $b = 2$ . The proof for  $hn$  would be similar, where in both cases we arrive at the generators for  $G$ , and therefore  $NH = G$ .

### ***Proof of Theorem 1.***

The group  $G$  is a semi direct product of subgroups  $N$  and  $H$  if and only if the three conditions are true:

- I.  $N \subset G$
- II.  $N \cap H = \{e\}$
- III.  $NH = G$

Conditions 1, 2, and 3 are satisfied by lemmas 4, 5, and 6 respectively. Then  $G$  is a semi direct product of subgroups  $N$  and  $H$ .

### **Conclusion**

The progress made over the 8-week period has allowed us to draw conclusions about how the billiard surfaces of most triangles will behave. Our research was primarily focused on the triangles with billiard surfaces that can be constructed by reflecting across two sides. Our plans for the future are to investigate the cases where the billiard surfaces cannot be constructed without reflecting across all three sides.

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## Coping Methods Utilized by Collegiate Athletes Suffering from Season- Ending Injury.

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## Abstract

*The purpose of this study is to examine how Division II athletes cope with season ending injuries. There has been a vast amount of research that has studied injuries of athlete, but few have looked at the psychological response that athletes face. The many different models that explain the psychological responses and the many ways an athlete may cope show just how varied responses to an injury may be. This study examined the different coping mechanisms an athlete uses by implementing the Brief COPE Inventory to eligible athletes. The primary investigator emailed athletic trainers of the GSC Conference to explain the purpose of the study where they could reach out to eligible athletes at their respected university. Once the data was collected from 34 participants (m=15, f=19), the results were analyzed in an Excel spreadsheet. Our results showed athletes that suffered from season-ending injuries choose positive ways of coping over negative ways of coping with the top three coping mechanisms being acceptance, planning, and active coping. Our results were then compared to other similar articles to make sure our data was not a random fluke. Seeing that positive ways of coping were used over negative ways is something that can be useful in the future when an athlete faces a season-ending injury. We hope that our study will be able to be used by many medical professionals to enable athletes to more positive ways of coping for a faster recovery from an injury.*

## Introduction

“Few people play a sport for any length of time without experiencing an injury” (Grant, 2018, p.5). Injuries can be devastating to any athlete and can be traumatic to any athlete that faces one. Even though research on the physical response to injury is overwhelming, there is minimal research that looks at the psychological responses that injury and the recovery process has on athletes (Mainwaring, 2004). The vast amounts of research have seemed to focus more on the athlete’s physical recovery and overlooks the psychological process that the athlete goes through following injury. This literature is to help bring attention to the different psychological responses that an athlete may go through while they cope with injury. “An injury does not affect exclusively physical capabilities, but also contextual and psychological aspects” (Santo & Pietrantonio, 2013). An athlete that has recovered physically, may still not be at their psychological level to perform in their sport.

## Kubler Ross Stages of Grief Model

There are many different models of how people respond to and cope with sport injuries and a common one that is thought of is the stage models of grief and loss (Kubler Ross, 1969). This model was one of the first models, proposed in 1969. There are five stages to this model: denial, anger, bargaining, depression, and acceptance (Santi, 2013). This model can sometimes be unreliable, since the stages a person goes through may vary from person to person. The relationship between the stages of the model and the actual reaction that athletes’ have to injury are not strongly correlated. Athletes can have different reactions according to if they are coping with an injury for the first or second time, and their motivation may be different if they are not receiving the right social support (Brewer, 2007). The Kubler Ross model has been something that has been relied on for years, but now there are many other models that have a clearer picture when it comes to looking at the psychological reactions of athletes’ when facing injury.

## Biopsychosocial Model

The biopsychosocial model (figure 1) is another model that had been proposed to contextualize the rehabilitation process following a sport injury. This model is composed of seven dimensions and has a cause and effect relationship that can be seen from the different dimensions. The seven dimensions are: injury characteristics, socio-demographic characteristics, biological factors, psychological factors, social/contextual factors, biopsychological intermediate outcomes, and sport injury rehabilitation outcomes (Santi, 2013). As soon as an athlete has experienced an injury, the rehabilitation process begins for this model. Depending on the type, location, previous history, cause, and the severity of the injury, the outcome for biological factors, psychological factors, and social/contextual factors are determined. Socio-demographic characteristics, such as age, gender, race/ethnicity, and socio-economic status are other factors that can determine biological, psychological, and social/contextual factors. Following a downward motion through the diagram, these three factors can affect the biopsychological intermediate outcomes, such as range of motion, strength, endurance, joint laxity, and pain (Santi, 2013). This model concludes with the biopsychological intermediate outcomes affecting the outcomes of the sport injury rehabilitation, such as functional performance, quality of life, satisfaction of treatment, and readiness to return to sport (Santi, 2013). Santi and Pietrantonio state, “A central role in this model is played by psychological factors; in fact, they have a reciprocal relationship with biological and socio-contextual factors, and with intermediate and final outcomes (Santi, 2013).” The biopsychosocial model makes sure to consider the many factors that affect the rehabilitation process, as well as the intermediate and final outcomes.

### **Cognitive Appraisal Models**

Brewer’s method, proposed in 1994, the “cognitive appraisal model of psychological adjustment from athletic injury”, is another model that can be used to look at psychological responses of injuries in sports. This model is like the biopsychosocial model in that the two models have factors affecting other factors during the rehabilitation period. Santi and Pietrantonio study mention the top factors from this model are personal and situational factors, which influence the cognitive appraisal of athletes. The cognitive appraisal the individual has then determines the emotional response that the athlete will have from the injury, such as anxiety, depressions, fear of injury, or a positive attitude. The emotional response ends with affecting the behavioral response, such as how well the athlete adheres to the treatment program (Santi, 2013).

Brewer’s method was more recently revised by Weise-Bjornstal and colleagues (1998). The integrated and revised model, “integrated model of psychological response to the sport injury and rehabilitation process” (figure 2), includes personality as a personal factor and assumes psychological factors affect and are affected by intermediate and final rehabilitation outcomes (Santi, 2013). This model posits that mental toughness, hardiness, and the individual’s athletic identity helps to influence how an athlete may respond to injury (Leilani, 2014). Mental toughness represents a group of positive psychological factors that buffer the harmful effects of stress and anxiety and allow performance to be consistently well regardless of situational factors (Clough, Earler, & Sewell, 2002). This model is just one of many models that gives a perspective of how athletes may respond to an injury.

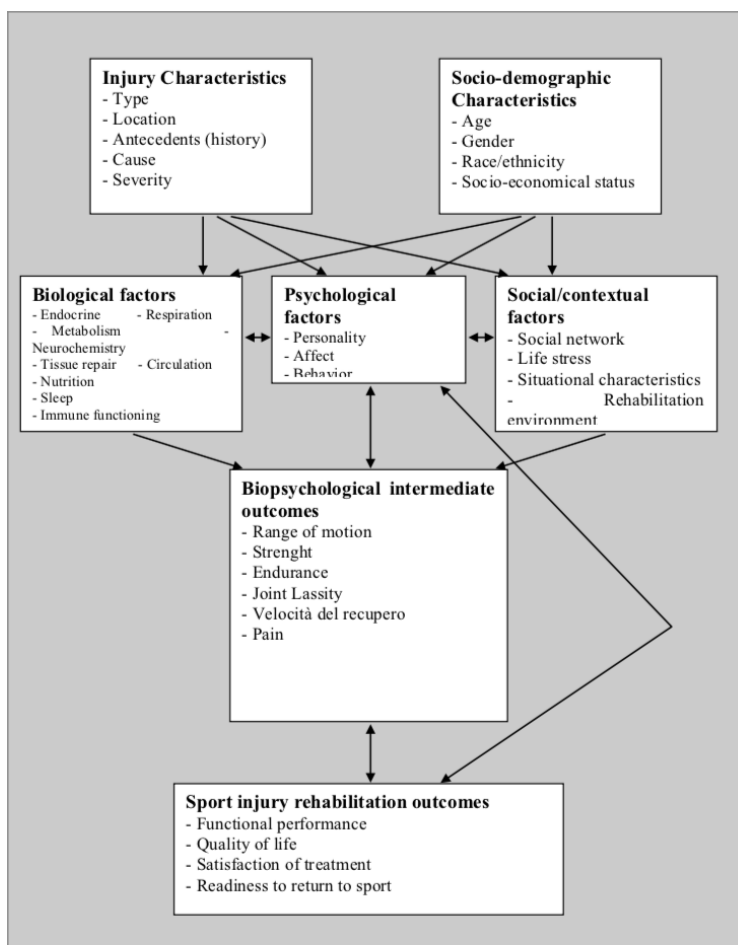


Figure 1. The biopsychosocial model (Brewer, 2007, 2009)

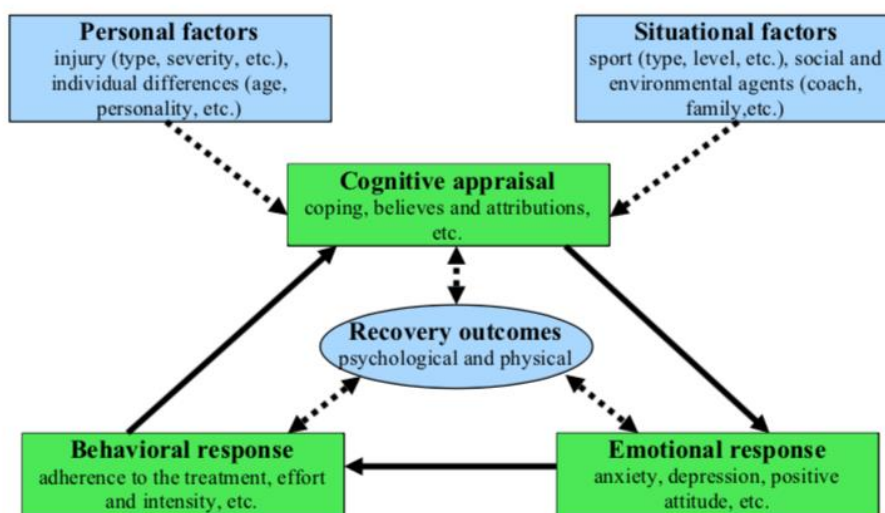


Figure 2. Integrated model of psychological response to the sport injury and rehabilitation process (adapted from Weise-Bjornstal et al., 1998).

### Stages of the return to sport models

A popular model that falls under this category is the model that was proposed by Kubler-Ross. This model though has already been explained at the beginning because it is so common to so many people. A more recent study that comes from O'Connor et al. (2005), proposed a model known as the “affective cycle of injury”. This model has less responses than the Kubler-Ross model with three different responses to injury: denial, distress, and determined coping (Santi, 2013). The denial response is something that can be common right after an injury, but it is not necessary to intervene when an individual is at this stage. However, if denial persists during the rehabilitation and interferes with treatment, psychological intervention may be needed. Athletes may experience denial about the severity of the injury, which can lead to them creating resistance to collaborate with the medical staff during treatment (Santi, 2013). Distress is another response of this model that can be derived from injury. Distress is the negative emotions such as anxiety, depression, anger, fear, feeling of loss and disruption of self-concept. The distress response is a common response at the beginning stages of rehabilitation and is where athletes may form relationships with the medical staff during their recovery (Santi, 2013). When an athlete can form a relationship with their medical staff, it can really be beneficial for the rehabilitation process. Distress can also be seen on the final stages of rehabilitation when the desire to return to play becomes boring and frustrating (Santi, 2013). Determined coping is the final response of the affective cycle of injury model. Determined coping is when the athlete begins to use new coping methods after having a passive attitude to start, which includes evaluating resources, making realistic goals, and maintaining focus with the program and with the medical staff (Santi, 2013). Determined coping is usually seen at the later stages of rehabilitation after the athlete has overcome denial and is able to manage distress. The determined coping response is where the most success during rehab comes from. The “affective cycle of injury” provides the different emotional phases that an athlete may go through, but it is more flexible, because there is no predetermined sequence (Santi, 2013). The responses that are included in this model have no specific sequence, which allows emotions to change from day to day, week to week, or month to month.

### **Motivational-based models**

The self-determination theory proposed by Ryan and Deci (2000) falls under motivational-based models, which say that the motivation during the rehabilitation program is an important factor in determining the adherence to the program (Chan et al., 2011). Santi and Pietrantonio explain that the self-determination theory says that the actions and behaviors of humans don't just come from intrinsic motivation, but that there is a continuum from demotivation to intrinsic motivation. The extrinsically motivated behaviors that come from demotivation and intrinsic motivation are external regulation, introjected regulation, identified regulation, and integrated regulation (Santi, 2013). External regulation comes from external rewards and punishments. An example of external regulation would be when a coach threatens to replace an athlete with another player (Santi, 2013). Introjected regulation involves the athlete behaving to avoid guilt and to achieve rewards, for example an athlete that wants to resume playing to make sure he does not disappoint his teammates (Santi, 2013). Identified regulation comes from the athlete's choice to return not necessarily for the satisfaction of playing, but to achieve an ego-oriented goal (Santi, 2013). Integrated regulation is the last extrinsically motivated behavior that this theory mentions and involves the athlete wanting to return to the sport to demonstrate their athletic abilities (Santi, 2013). The last level of self-determination comes from intrinsic motivation. Intrinsic motivation is where internally regulated

behaviors come from and the athlete wants to return because they truly enjoy the sport (Santi, 2013). Each regulation in this theory can create certain factors or behaviors and gives another view of how an athlete may think during an injury.

As can be seen through the many psychological models presented, an individual suffering from injury may respond psychologically in varied ways depending on their personal intrinsic and extrinsic factors. Athletes can suffer from depression, anxiety, fear of re-injury, social problems, etc. and if we have no understanding of these responses a prolonged recovery can take place if the athlete decides to use a negative psychological response (Grant, 2018). However, understanding of these models provides direction for the athletic trainer to better guide the athletes towards a positive psychological response and therefore increased compliance with rehabilitation and brings more successful return to play. If a person's psychological response to injury is varied due to many contextual factors, then it stands to reason an individual's choice of coping methods will also be varied. In this next section we will explore possible coping methods an individual may employ following an injury.

## **Coping Methods**

### **Active Coping**

Active coping is one of many coping mechanisms an athlete may use following an injury. This type of coping involves taking active steps to remove certain stressors that may have come from an injury (Carver, 1989). Active coping is referred to some people as problem-focused coping, which comes from the core of Lazarus and Folkman (1984) and is very similar to this type of coping. An example of active coping would be when an athlete adheres to their rehabilitation to make progress to a full recovery. The athlete takes the steps necessary to make sure that they can get back to being healthy and possibly competing again.

### **Planning**

Planning is a type of coping that allows the athlete to think about how they are going to cope with a stressor. This type of coping involves coming up with action strategies and then thinking about the steps to take and how to handle the problem best (Carver, 1989). An example of using planning would be an athlete doing research for the best rehabilitation techniques and thinking of their plan that they will take to get back to competing. There is no action that is taking place that is directed towards the stressor, rather the person is arranging how they will deal with the stressor.

### **Suppression of Competing Activities**

Suppression of Competing Activities means the athlete puts other things to the side to make sure they are focused to deal with a certain stressor (Carver, 1989). This type of coping is used to avoid becoming distracted by other events that make take time away from the stress that may come from an injury. An athlete may decide to decrease the amount of time they spend with friends to make sure they have more time to do rehab if they use this way of coping.

### **Restraint Coping**

Restraint coping is when an athlete may wait until they see an appropriate time to act and to not act prematurely (Carver, 1989). This type of coping falls under active coping because the person's

behavior is still focused on dealing with the stressor, but they are using restraint to ensure they act during the right time. An example of restraint coping used by an athlete may be when they decide to return to competition. The athlete wants to make sure that they are completely healthy before they return to play and decide to delay their return to make sure they are not returning prematurely.

### **Seeking Social Support for Instrumental Reasons or Emotional Reasons**

Seeking Social Support for Instrumental Reasons is a type of coping that involves seeking advice, assistance, or information and falls under the problem-focused coping (Carver, 1989). Seeking social support for emotional reasons involves getting moral support, sympathy, or understanding and is an aspect of emotion-focused coping (Carver, 1989). The two different reasons for seeking social support can easily be separated, but many times they are seen together during everyday practice.

### **Focusing on and Venting of Emotions**

Focusing on and venting of emotions is focusing on the stressor and venting the feelings that come from that certain stressor (Carver, 1989). This type of coping can be effective if the person does not get stuck in this way of coping. If this style of coping is used for too long, it can begin to impede on further adjustments that may need to be made to deal with a specific stressor. An example of this way of coping may be seen when an athlete decides to focus on an injury and express their feelings that come from it. This way of coping can be good, but if a person continues to cope in this manner, they may not progress through their injury rehabilitation like they should.

### **Behavioral Disengagement**

Behavioral disengagement is a coping method that may be defective in many situations that requires coping. This type of coping is when a person reduces their effort that they put towards dealing with a stressor (Carver, 1989). Coping in this way can lead to a person giving up on certain goals that the stressor is interfering with. Behavior disengagement is often identified with terms like helplessness (Carver, 1989) and is not good for an athlete who is facing the adversity of an injury.

### **Mental Disengagement**

Mental disengagement is a variation of behavioral disengagement, that occurs when conditions prevent behavioral disengagement. Coping in this way occurs when a person allows for a wide variety of activities to distract them from thinking about the goals that the stressor may be interfering (Carver, 1989). The main goal of this type of coping is to take one's mind off a problem.

### **Positive Reinterpretation and Growth**

This coping mechanism is a type of emotion-focused coping that focuses on managing the emotions that come from the stressor rather than dealing with the stressor itself (Carver, 1989). Though this way of coping may not directly deal with the stressor, allowing the person to get their emotions under control can allow them to continue forward during their psychological recovery. An athlete that experiences a season ending injury will be filled with emotions and this way of coping can help the athlete to manage those emotions and began the recovery process.

### **Denial**

Denial is a common way that people cope when facing a stressor. This type of coping can be controversial at times, but for some denial helps to minimize distress and facilitates coping. Using denial as a coping method can also create alternative problems, especially if an athlete is in denial of an injury and continues to play through the pain (Carver, 1989). Shuer states, “In chronically injured athletes in whom denial was prevalent, the athletes continued to minimize the extent and nature of the injury, denying its long-term sequelae (Shuer, 1997). Another study done by Grant, 2018, showed an athlete experiencing denial as he did not want to believe that he was injured and felt like the results of his test would come back with good results. The use of denial on his part lead him to lose a lot of self-esteem because he was such an active person (Grant, 2018).

### **Acceptance**

Acceptance is the opposite of denial and is seen as a more positive and functional way of coping compared to other coping mechanisms. Carver and Scheier states, “It is arguable that acceptance is a functional coping response, in that a person who accepts the reality of a stressful situation would seem to be a person who is engaged in the attempt to deal with the situation” (Carver, 1989). Acceptance can be one of the first steps of a person beginning their physical and psychological recovery.

### **Turn to Religion**

Data collected on turning to religion as a coping tactic shows that it may be quite important to many people (McCrae and Costa, 1986). There are a couple of different reasons that a person may turn to religion as a coping source. The reasons vary from a person turning to religion for emotional support, using it as a vehicle for positive reinterpretation and growth, or as a tactic for active coping (Carver, 1989). Depending how religious a person may be, may determine the reason they turn to religion for coping.

### **Alcohol-drug disengagement**

Alcohol-drug disengagement is when an alcoholic or drug substance is used to take a person’s mind off a stressor. This method of coping used to fall under mental disengagement, but Carver decided to separate it into two different factors (Carver, 1989). Alcohol-drug disengagement as a separate factor allows for a better insight of how someone may be coping with a stressor.

### **Humor**

Humor can be used by an athlete that may be having trouble with an injury they may be facing. A person using humor may make jokes of the injury or situation they are in either to lighten the mood or as a diversion mechanism. Humor can be good, but if the athlete does not become serious about the situation, the injury or situation may become worse.

There are many ways that an athlete can cope with an injury and above are just a few of them. Getting a better understanding of all the ways that an athlete may cope with an injury can help an athletic trainer distinguish between positive and negative coping methods. Perhaps, having a better understanding of how to measure coping and the different models that can be used will allow for athletes who suffer from season ending injuries to cope in a positive manner. The next section of this article will explore the different coping inventories and measures that are being used today.

## **Coping Method Measurement Inventories**

Though there are many different coping measures and they may differ in certain aspects, they all assess coping both problem-focused coping responses and responses that are directed to aspects other than the stressor. A few coping measures are Ways of Coping (Folkman and Lazarus, 1985; Folkman and Lazarus, 1984), the COPE inventory (Carver, Scheier, and Weintraub, 1989), and the Brief COPE inventory. Each of these measures look at coping methods that may seem dysfunctional as well as adaptive.

### **Ways of Coping**

The Ways of Coping measure examines coping processes that was developed by Folkman and Lazarus in 1980 and has since been revised in 1985. This measure has many different factors that it consists of which portrays the thoughts and actions that people exhibit when coping during stressful events. Carver states, “Respondents indicate whether they used each of these responses in a given transaction, either by giving a yes or no response or by making a rating on a multipoint scale (Carver and Scheier, 1989). Folkman and Lazarus initial factor analysis resulted in the results yielding eight coping subscales, which were confrontive coping, distancing, self-controlling, seeking social support, accepting responsibility, escape-avoidance, planful problem-solving, and positive reappraisal (Liew, 2016). Liew et al. explains that Folkman and Lazarus initial factor analysis and their replication of the factor analysis in 1986 resulted in the same eight coping subscales, but Folkman recommended testing the factors across many populations, because they believed the factors may change (Liew, 2016). The Ways of Coping measure has been used by many people when they have examined how people may cope though it does seem that the factors that come from this model vary from population, which make it unreliable to use. Liew’s article shows 13 different studies that used the Ways of Coping model and each one resulted in different factors depending on the population that was looked at.

### **COPE Inventory**

The COPE Inventory is a measure that was developed by Carver and Scheier in 1989 to assess the different ways people may respond to certain stressors. This measure that was developed is very multidimensional and includes the many ways a person may cope with stress. This measure of coping is a 60-item instrument with 4 items per scale. Carver, Scheier, and Weintraub, 1989, states,

“Five scales (of four items each) measure conceptually distinct aspects of problem-focused coping (active coping, planning, suppression of competing activities, restraint coping, seeking of instrumental social support); five scales measure aspects of what might be viewed as emotion-focused coping (seeking of emotional social support, positive reinterpretation, acceptance, denial, turning to religion); and three scales measure coping responses that arguably are less useful (Focus on and venting emotions, behavioral disengagement, mental disengagement)” (Carver, Scheier, and Weintraub, 1989).

This scale has been productive when assessing how people cope with certain stressors, but studies have also found this measure to be lengthy. This is one of the downfalls of this measure and why Carver set out to shorten the length of the measure. Carver found that many of the participants involved in completing the COPE inventory became impatient when doing so, due to its length and



its redundancies (Carver et al., 1993). The impatience that came from participants led to Carver making a measure that required less time to complete but kept its reliability and validity.

### **Brief COPE Inventory**

The Brief COPE Inventory is a measure that was created by Carver to be a briefer version of the original COPE inventory. The brief form is a 30-item modified version that was developed based on the original COPE inventory and has 15 different coping strategies that are assessed (Leilani, 2014). The scales of the brief form included, active coping, planning, positive reframing, acceptance, humor, religion, using emotional support, using instrumental support, self-distraction, denial, venting, substance use, behavioral disengagement, and self-blame (Carver, 1997). Carver states, “The Brief COPE thus provides researchers a way to assess potentially important coping responses quickly” (Carver, 1997). The brevity this measure allows is a big positive for using this measure as well as the reliability that has been seen when using it in studies. Data from a study of Hurricane Andrew survivors, indicate that the a priori scales are reliable (Carver, 1997). The success that has been seen when using this measure is remarkable.

Though there are many scales that we could have used for our study, we decided to use the Brief COPE Inventory to collect our data on how athletes cope with season ending injuries. We choose this measure because of the brevity and quickness that came with it, which allowed us to assess data at an exceptional rate of time. We also felt that the data would be more accurate, since there were less scales for the athletes to complete and they did not feel like they needed to be in a rush. The brevity and reliability of this measure are big positives compared to the length of the original COPE inventory.

### **Purpose**

This paper’s focus is how athletes cope with season ending injuries. There are many ways an athlete may cope and by doing this study, we will be able to look at how common or uncommon a coping mechanism may be. The information that is discovered from this study will then be able to be used by medical professionals to create a better understanding of how athletes cope and allow athletic trainers to provide tools to ensure positive coping measures are being used.

### **Methods**

NCAA Division II athletes in the Gulf South Conference (GSC) suffering from season-ending injury, as defined by the NCAA medical redshirt rule, were contacted to participate in this study. Inclusion criteria for this research study was the athlete had to be in the GSC and have suffered a season-ending injury during the 2015-2020 academic years. The primary investigator emailed all athletic trainers in the GSC describing the purpose of the study asking for help distributing the participation email to all eligible former and current athletes. The athletes were then contacted through email by their respective athletic trainers’ after researchers emailed out the Brief COPE questionnaire in a link to a Google Doc with specific instructions on how to participate in the study. Reminder emails were sent to all athletic trainers at 2 and 4 weeks following the initial email. Informed consent was provided by completing the inventory. This study was approved by the Lee University Institutional Review Board.

The Brief COPE was utilized in this study and has an internal reliability for all questions greater than .60. The Brief COPE is comprised of 28 questions divided into 13 subcategories assessing various coping mechanisms. For each scored item, the participant is asked to think of how they respond to a very stressful situation and then provided a prompt such as “I take additional action to try to get rid of the problem.” Participant’s then rate how they respond to each prompt on a 4-point Likert scale as follows: "I usually don't do this at all," "I usually do this a little bit," "I usually do this a medium amount," and "I usually do this a lot" (scored from 1-4 respectively). A Google Form of the Brief Cope was constructed by the primary investigator and tested to ensure reliability and ensure no issues with scoring. An informed consent was placed at the beginning of the inventory for the participants to read before beginning the questionnaire and completing the inventory was considered consent. The researchers were notified every time upon completion of the survey and when the data collection period ended, the data was analyzed to determine any significant differences between coping strategies based on each category utilizing an ANOVA with a Bonferoni post hoc.

## Results

Data from the Google sheet based Brief Cope inventory was downloaded directly into an Excel spread sheet and saved onto a secure server. Subject demographic data was analyzed and is found in table 1. While in Excel the data was organized by combining the mean scores of the 2 questions of each of the 14 sub-categories to provide mean category scales. The Excel spreadsheet was then uploaded into JASP statistics software for statistical analysis. Means and standard deviations were provided for each sub-category and then organized from most to least utilized coping mechanism (table 2). A repeated measures ANOVA with a Bonferroni post hoc was conducted to determine any significant differences within the Brief Cope sub-categories. Significance was set at  $p > 0.05$ . ANOVA revealed a significant difference of  $p < 0.001$  with an  $\eta^2$  effect size of 0.43. The Bonferroni post hoc analysis is found in table 3 to see the specific differences between categories.

**Table 1: Demographic data**

Male	44.1% (n= 15)
Female	55.9% (n= 19)
Mean Age	20.4 yo (Range= 18-24)
Baseball	1
Basketball	3
Cross-Country/Track&Field	5
Football	2
Lacrosse	9
Soccer	11
Softball	1
Volleyball	1
Hockey	1

**Table 2: Brief Cope category means**

Brief Cope Category	Mean	SD
Acceptance	3.471	0.629
Planning	3.397	0.628
Active Coping	3.221	0.806
Positive reframing	2.941	0.793
Instrumental Support	2.912	0.8
Self-Distracton	2.853	0.636
Emotional Support	2.838	0.846
Religion	2.75	1.066
Humor	2.588	1.003
Self-Blame	2.25	0.91
Venting	1.971	0.785
Denial	1.529	0.757
Behavioral Disengagement	1.529	0.685
Substance Abuse	1.279	0.609

**Table 3: Brief Cope ANOVA Post Hoc analysis**

		Mean Difference	SE	t	p <sub>holm</sub>
Acceptance	Active Coping	0.25	0.152	1.641	1
	Behavioral Disengagement	1.941	0.181	10.739	< .001
	Denial	1.941	0.197	9.832	< .001
	Emotional Support	0.632	0.129	4.92	0.001
	Humor	0.882	0.21	4.2	0.009
	Instrumental Support	0.559	0.119	4.692	0.002
	Planning	0.074	0.142	0.517	1
	Positive reframing	0.529	0.116	4.57	0.003
	Religion	0.721	0.186	3.878	0.02
	Self-Blame	1.221	0.197	6.202	< .001
	Self-Distracton	0.618	0.155	3.989	0.015
	Substance Abuse	2.191	0.148	14.822	< .001
	Venting	1.5	0.181	8.286	< .001

Active Coping	Behavioral Disengagement	1.691	0.22	7.693	< .001
	Denial	1.691	0.198	8.555	< .001
	Emotional Support	0.382	0.19	2.011	1
	Humor	0.632	0.225	2.813	0.276
	Instrumental Support	0.309	0.186	1.664	1
	Planning	-0.176	0.124	-1.418	1
	Positive reframing	0.279	0.149	1.869	1
	Religion	0.471	0.232	2.03	1
	Self-Blame	0.971	0.236	4.107	0.011
	Self-Distracton	0.368	0.187	1.965	1
	Substance Abuse	1.941	0.178	10.88	< .001
	Venting	1.25	0.21	5.944	< .001
Behavioral Disengagement	Denial	0	NaN	0	1
	Emotional Support	-1.309	0.191	-6.845	< .001
	Humor	-1.059	0.192	-5.514	< .001
	Instrumental Support	-1.382	0.2	-6.917	< .001
	Planning	-1.868	0.173	-10.79	< .001
	Positive reframing	-1.412	0.209	-6.771	< .001
	Religion	-1.221	0.207	-5.89	< .001
	Self-Blame	-0.721	0.167	-4.321	0.007
	Self-Distracton	-1.324	0.142	-9.331	< .001
	Substance Abuse	0.25	0.151	1.656	1
	Venting	-0.441	0.149	-2.963	0.194
Denial	Emotional Support	-1.309	0.206	-6.353	< .001
	Humor	-1.059	0.207	-5.121	< .001
	Instrumental Support	-1.382	0.209	-6.611	< .001
	Planning	-1.868	0.168	-11.106	< .001
	Positive reframing	-1.412	0.212	-6.675	< .001

	Religion	-1.221	0.216	-5.647	< .001
	Self-Blame	-0.721	0.172	-4.196	0.009
	Self-Distraction	-1.324	0.145	-9.142	< .001
	Substance Abuse	0.25	0.156	1.598	1
	Venting	-0.441	0.172	-2.559	0.469
Emotional Support	Humor	0.25	0.233	1.073	1
	Instrumental Support	-0.074	0.107	-0.689	1
	Planning	-0.559	0.157	-3.556	0.047
	Positive reframing	-0.103	0.176	-0.585	1
	Religion	0.088	0.212	0.417	1
	Self-Blame	0.588	0.235	2.503	0.519
	Self-Distraction	-0.015	0.157	-0.094	1
	Substance Abuse	1.559	0.181	8.624	< .001
	Venting	0.868	0.18	4.814	0.002
Humor	Instrumental Support	-0.324	0.22	-1.473	1
	Planning	-0.809	0.194	-4.159	0.01
	Positive reframing	-0.353	0.228	-1.549	1
	Religion	-0.162	0.263	-0.615	1
	Self-Blame	0.338	0.225	1.502	1
	Self-Distraction	-0.265	0.184	-1.442	1
	Substance Abuse	1.309	0.233	5.621	< .001
	Venting	0.618	0.226	2.739	0.312
Instrumental Support	Planning	-0.485	0.151	-3.207	0.115
	Positive reframing	-0.029	0.146	-0.201	1
	Religion	0.162	0.172	0.938	1
	Self-Blame	0.662	0.241	2.751	0.312
	Self-Distraction	0.059	0.171	0.344	1
	Substance Abuse	1.632	0.186	8.778	< .001
	Venting	0.941	0.2	4.717	0.002

Planning	Positive reframing	0.456	0.147	3.103	0.142
	Religion	0.647	0.211	3.073	0.15
	Self-Blame	1.147	0.195	5.881	< .001
	Self-Distract	0.544	0.143	3.817	0.023
	Substance Abuse	2.118	0.158	13.443	< .001
	Venting	1.426	0.178	8.029	< .001
Positive reframing	Religion	0.191	0.155	1.235	1
	Self-Blame	0.691	0.22	3.144	0.131
	Self-Distract	0.088	0.161	0.549	1
	Substance Abuse	1.662	0.16	10.404	< .001
	Venting	0.971	0.21	4.622	0.003
Religion	Self-Blame	0.5	0.269	1.86	1
	Self-Distract	-0.103	0.19	-0.542	1
	Substance Abuse	1.471	0.2	7.363	< .001
	Venting	0.779	0.232	3.358	0.08
Self-Blame	Self-Distract	-0.603	0.188	-3.214	0.115
	Substance Abuse	0.971	0.149	6.508	< .001
	Venting	0.279	0.185	1.513	1
Self-Distract	Substance Abuse	1.574	0.136	11.555	< .001
	Venting	0.882	0.152	5.801	< .001
Substance Abuse	Venting	-0.691	0.168	-4.119	0.011

## Discussion

To our knowledge, our study is the first to examine how Division II athletes cope with season ending injuries. At the beginning of this study, it was hypothesized many athletes would use negative ways of coping to deal with their season ending injuries, but our results showed the exact opposite. Acceptance, planning, and active coping were the top three coping mechanisms used by athletes, which are all seen as positive ways of coping. The coping mechanisms that were used the least fall under negative coping responses with the lowest three being denial, behavioral disengagement, and substance abuse. Grant states, “The research has shown that if an athlete holds a positive attitude then they will have a better experience as they go through the recovery process (Grant, 2018). Knowing what Grant states and the results of our study showing athletes used

positive ways of coping over negative ways of coping, is something that can be used in the future when other athletes may face the stress of a season ending injury.

In a study done by Dias, Cruz, and Fonseca, one variable they examined was the coping strategies that were used by Portuguese athletes from many different sports. They examined more than just how athletes coped with season ending injuries, but their results still showed the athletes using a positive way of coping over a negative way of coping (Dias, 2010). In fact, the top three coping mechanisms their results showed, active coping, planning, and positive reframing, included two of our top three coping mechanisms that were used the most. While the data from Dias et al. used the Brief COPE Inventory; they did modify the range they used to calculate the mean for the coping methods that were used (4 to 8) (Dias, 2010). This slight modification to the range still allowed us to see the similarity between the results of our study and of their study.

Another study by White, 2008, used the Brief COPE Inventory to examine how freshmen athletes coped with their day to day stressors. They decided to use freshmen for their population because they knew college students, especially freshmen, are a group that tend to stress due to the transitional nature of college life (White, 2008). Combining the stress of being a freshman and a student athlete seems to make the perfect population to examine how someone may cope with certain stressors. This study resulted in similar results to our study as well, with the most frequently reported mechanisms of coping being positive in nature. The results from this study took a mean for each subscale having, "I've been accepting the reality of the fact that it has happened" (White, 2008). Even though they took the mean of each subscale and we took the mean of the 14 styles of coping, both of our results showed athletes picking a positive way of coping over a negative way of coping in most instances.

Kasi et al. performed a study that looked at the coping styles of patients with anxiety and depression. Their population for this study came from them doing a cross-sectional survey at three primary health care centers to find people who suffered from anxiety and depression (Kasi, 2012). Though they did not look particularly at athletes, anxiety and depression can be common with athletes that face season ending injuries. This study shared the same similarity as the other articles, in that positive ways of coping were used over negative ways of coping. Though with the population of this study and our study being different, the order that the styles of coping fell into were not as similar as the article from Dias et al. This study still shows that most people, whether they are athletes or not, lean towards positive ways of coping.

### **Limitations**

There were several limitations which may have impacted the results of this study. Two schools in the conference were not used in the results of this study due to no contact information being available on their website. Regarding the second school, another school with a similar name was contacted and this issue was not found until near the end of the present study. No athletic trainer was contacted by phone, which is something that could be done in the future to try to increase response rate. Another limitation of this study was the use of a self-report measure. This measure asked athletes to recall how they felt at the time of injury. In some cases, this was months or even years after the injury was sustained. The correctness of the athletes' responses could be in question because of this fact. Even with this in mind, however, a self-report measure is one of the only ways

to acquire psychological information from participants. Only NCAA division II athletes were contacted for this study due to convenience, therefore the results may not apply to athletes of all ages and levels of participation.

### **Conclusions**

The purpose of this study was to learn how Division II athletes cope with season ending injuries and after reviewing the results from this study we now have a better understanding of how athletes may cope. Positive ways of coping being used over negative ways can change many factors of an injury recovery, leading to the possibility of a faster recovery. As we compared our study with the results of other studies, we were able to see that our results were not a fluke. We hope that our study on how athletes cope with season ending injuries will be able to be used by medical professionals in the future to help athletes during the recovery period. In the future, a more thorough study of athletes from varying levels of participation may provide a better understanding of coping with season ending injuries. However, when comparing our results with other studies it appears the findings will be relatively similar. A main duty of athletic trainers is to prevent injuries before they happen, but if they are not able to prevent all injuries, we want them to be prepared with the best ways to help their athlete, and hopefully our study will help them do that.



## References

- Amirkhan, J. H. (1990). A factor analytically derived measure of coping: The Coping Strategy Indicator. *Journal of personality and social psychology*, 59(5), 1066.
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: a theoretically based approach. *Journal of personality and social psychology*, 56(2), 267.
- Carver, C. S. (1997). You want to measure coping but your protocol 'too long: Consider the brief cope. *International journal of behavioral medicine*, 4(1), 92.
- Dias, C. S., Cruz, J. F. A., & Fonseca, A. M. (2010). Coping strategies, multidimensional competitive anxiety and cognitive threat appraisal: Differences across sex, age and type of sport.
- Grant, T. (2018). The Effect of Psychological Response on Recovery of Sport Injury: A Review of the Literature.
- Kasi, P. M., Naqvi, H. A., Afghan, A. K., Khawar, T., Khan, F. H., Khan, U. Z., ... & Khan, H. M. (2012). Coping styles in patients with anxiety and depression. *ISRN psychiatry*, 2012.
- Madrigal, L., & Gill, D. L. (2014). Psychological responses of Division I female athletes throughout injury recovery: A case study approach. *Journal of Clinical Sport Psychology*, 8(3), 276-298.
- Marks, H. C. (2014). An Examination of Coping with Career Ending Injuries-An NCAA Division I and NCAA Division III Comparison.
- Putukian, M. (2016). The psychological response to injury in student athletes: a narrative review with a focus on mental health. *British Journal of Sports Medicine*, 50(3), 145-148.
- Santi, G., & Pietrantonio, L. (2013). Psychology of sport injury rehabilitation: a review of models and interventions. *Journal of Human Sport and Exercise*, 8(4), 1029-1044.
- Shuer, M. L., & Dietrich, M. S. (1997). Psychological effects of chronic injury in elite athletes. *Western Journal of Medicine*, 166(2), 104.
- Van Liew, C., Santoro, M. S., Edwards, L., Kang, J., & Cronan, T. A. (2016). Assessing the structure of the ways of coping questionnaire in fibromyalgia patients using common factor analytic approaches. *Pain research and management*, 2016.
- White, G. A. (2008). Levels of stress and mechanisms of coping among male freshman athletes.