

2023 Academic Journal



LEE & UNIVERSITY
MCNAIR SCHOLARS PROGRAM

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Introduction

The Ronald E. McNair Post-Baccalaureate Achievement Program is one of eight federally funded TRIO programs designed to support first-generation, income-eligible, and underrepresented students toward scholastic achievement. The McNair grant specifically prepares students for doctoral and terminal degrees through involvement in faculty-guided, undergraduate research and other scholarly activities. As the Program Director at Lee University, it is an honor and privilege to serve these scholars as they navigate through their academic aspirations, graduate school opportunities, and vocational calling. Our team has the opportunity to walk alongside scholars as they ask the difficult life questions, navigating prospective career options, and discern the often-intimidating process of identifying the “next steps.” Situated at a Christ-centered, liberal arts framework at Lee University, we believe scholars receive an exceptional experience to work out their Christian faith that will inform their vocational calling.

This journal is a representation of the scholars’ unwavering commitment, focused dedication, and unrelenting pursuit of scholarly excellence. The published work signifies the tenacity shown and trials faced by many of the scholars to make this accomplishment a reality. Scholars have already disseminated their research and creative endeavors at national and regional academic conferences. We continue to honor their work by publishing and publicizing their research studies for broad utilization for the academic community. Some of the papers in this journal are currently being reviewed in field publications and journals, with some already receiving distinguished awards in their disciplines.

With every program milestone, success and progress is improbable without the support and advocacy of several key contributors. I would like to recognize the support of President Dr. Mark Walker, and the executive cabinet for continuing Lee’s mission to intentionally serve TRIO-eligible students. I want to acknowledge University Provost Dr. Debbie Murray for her faithful dedication and advocacy towards undergraduate research alongside faculty mentors. The Director of Grants Foundation, Vanessa Hammond, cast the vision for the McNair Program at Lee over seven years ago and she remains an avid supporter each step of the way. I want to recognize team members in the Office of Institutional Risk and Compliance, Aubrey Graves and Byron Whittington, who have been ardent supporters with grant regulations and budgetary compliance.

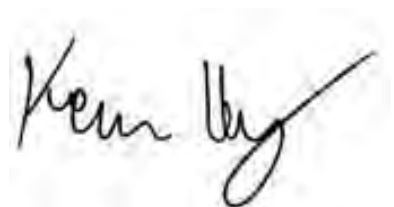
I want to extend my deepest gratitude to the McNair Advisory Council members: Dr. Michaelia Black, Dr. Christopher Blake, Mrs. Jennifer Cornett, Dr. Joe Daft, Dr. Racheal Lawler, and Dr. Ruthie Wienk. Last, but certainly not least, I want to recognize our Program Coordinator Jeni Turner for her relentless passion and pursuit in support of the overall mission of the McNair Program. Rarely do we have students, faculty, or visitors who enter our office suite and not leave feeling encouraged, empowered, and enthused by their interaction with Jeni. Through the tireless efforts of these individuals and many more

across campus, the program staff and scholars have enjoyed stability and continuity this year.

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 by bearing their names. Broadly, I would like to recognize the Council for Opportunities in Education's (COE) ongoing advocacy in Capitol Hill for continued access and equity on behalf of all TRIO Programs. I want to extend my appreciation to McNair Association of Professionals (MAP) colleagues around the country for their collective assistance in developing best practices and finding innovative solutions to serve scholars. McNair programs are small in numbers, but there is great strength in the community!

McNair Scholars, this journal is a testament of your hard work over the last year. In those moments when you felt like you were unable to continue further, let this journal be a reminder of your grit and tenacity to overcome any academic obstacles you may encounter now and in graduate school. When doubt creeps in and imposter syndrome is overwhelming, let this journal tell of your proven success! I hope this inspires you when you feel discouraged or have a momentary setback. You have lifetime supporters and advocates in the McNair and Lee University team. We pray the Lord will continue to keep you and bless you in your current and future endeavors.

With gratitude,

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

Dr. Kevin Ung
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Lee University

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Article 1

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Race and Ethnicity in Colombia and How They Pertain to The Individual

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Under the guidance of Alexander Steffanell, Ph.D.

Mestizaje is a prominent view of race found throughout Latin America. Described simply, it is the idea that the many cultures that comprise the Latin American countries, including (but not limited to) the indigenous, Spanish, and African cultures are mixed to form one united people. Countries that subscribe to this ideology believe it is what separates them from the rest of the developed world. However, the unity that *Mestizaje* brings both harm and good, as it masks the racial and ethnic discrimination of those with darker skin. Studies have shown that both discrimination and ignoring one's attempt to define and explore their ethno-racial identity can cause them to suffer declines in mental health, including depression, anxiety, and overall stress. This paper explores the immediate implications of *Mestizaje*'s faults on the mind of Latin Americans of color as well as their long-term psychological impacts.

Keywords: Colombia, race, ethnicity, mestizaje, discrimination, self-concept, Colombia, ethno-racial identity, colorblindness

Race and ethnicity are two complex ideas heavily discussed in the United States in recent times. People in the U.S. tend to use the terms interchangeably, unaware of the difference. Others understand there is a difference between the two words, but they are not aware of what that difference is. For the sake of this article, I will be using the definitions provided by Karen L. Suyemoto et al. in their article, "What Do We Mean by 'Ethnicity' and 'Race'?" (2020). They define race as "a social representation created for the purpose of devising social groupings related to physical appearance in order to create and maintain a power hierarchy between groups and enforce systems of privilege, most specifically between White people and people of color," and ethnicity as a "multifaceted, dynamic concept that develops and strengthens relationships through the formation of communities coming together around cultural similarity" (Suyemoto et al., 2020). However, the way the United States understands and perceives race is not necessarily

how the rest of the world perceives it. *Mestizaje* is a concept found throughout Latin America which refers to the mixing of many different cultures into one. It often involves identifying with one's country and people rather than identifying by their race. The idea was especially pushed by white elites in the early 20th century, as the science of the time claimed that nonwhites were less evolved and closer to animals (Telles & Gracia, 2013). The goal of *mestizaje* was to tear down racial boundaries and encourage racial mixing, both to whiten (which was thought to develop and civilize nations) and even eliminate certain cultures from the population. Normally, it was advertised as an idea worth striving for, one that separated Latin America from the rest of the world. That is not to say that every Latin American country embraced *Mestizaje* in the same way. For example, the Dominican Republic and Colombia excluded afro-descendants from their vision, while countries like Argentina and Panama refused it altogether. *Mestizaje* is not an entirely flawed world view, as it does provide its believers a sense of connectedness and unity. However, one of its flaws is that it historically has masked the discrimination of its people.

Mestizaje claims that it freed Latin America from racism. Thus, any discrimination that occurs, professional or otherwise, is not viewed as being rooted in race. Also, certain negative qualities, such as being dishonest or less civilized, are still linked with nonwhite races. What follows is a society that tells those of darker skin that they are genetically predisposed to struggle and evil and that they must strive to be more like whites. Any attempts they might make to redefine how their race or ethnicity are viewed are trampled, as the culture calls for people to identify with the collective. Meanwhile, people of color are discriminated against (consciously or otherwise) regardless of whether they identify with the general population because of the color of their skin. I hypothesize, then, that *Mestizaje's* double standard of ignoring one's race and ethnicity while also ignoring the struggles they face would cause immense mental and emotional harm to colored or

ethnically-distinct Latin Americans. Further than increased depression and stress, I believe that the conundrum those under *mestizaje* face may create a lasting feeling of loneliness and isolation.

My research will focus on Colombia, one of the many Latin American cultures that embrace *Mestizaje*, the mix of many distinct cultures from which springs an entirely new group. *Mestizaje* varies from country to country, but its main principle is that one is not white, black, indigenous, or any mix of those. Rather, one identifies with their nationality. This concept is not one found in the United States, with multiculturalism on the rise and overt racism still lingering (Schwartz-Marín & Wade, 2015). *Mestizaje* is not without its flaws, of course, including ignoring or simply being unable to recognize racial prejudice. However, I believe this view of unity may provide valuable insight on just how much race and ethnicity matter to an individual. My strategy was to review writers that pioneered *Mestizaje* like José Vasconcelos and Gilbert Freyre to understand motivations behind *Mestizaje* and what they envisioned this unity to look like. Next, I will cover the works of researchers like Peter Wade, Edward Telles, and more who not only have a lot of research on Latin America and Latin American cultures but also on the negative effects of *Mestizaje* in Colombia and other Latin American countries.

It is important to note that “Latin American Culture” varies by country (Corlett, 1999). Just as the European cultures are distinct from each other, so too are the Latin American countries. Edward Telles and Denia Garcia explain in their article “‘Mestizaje’ and Public Opinion in Latin America,” that each of them have their own version of *Mestizaje* (2013). For example, Mexico and the Dominican Republic largely ignored their black populations, not incorporating them into their vision of unity. Panama and Argentina disregarded the idea entirely, the latter continuing to practice segregation until _____. Brazil and, in recent years, Colombia have incorporated multiculturalism

into their societies. Colombia is a particularly interesting case because their shifts to recognize other cultures, while inspired by the civil rights movements in the U.S., were quite distinct, both in how the Afro-Colombian community presented their case and the results of their fight (Paschel, 2010).

Mestizaje rose in popularity around the early 20th century in response to the latest science, claiming that darker-skinned people were evolutionarily inferior to whites (Telles & Paschel, 2014). To be darker-skinned was to be uncivilized and animalistic, whereas to be white was to be developed and successful. White elites sought after *blanquiamiento* (whitening) to bring about this progress, and they achieved it through *mestizaje*; violent histories of Spanish conquests were altered to show the reliance the Spanish and the Indigenous had on each other and the bond they forged (Telles & Garcia, 2013). They also blurred the lines between races by teaching that everyone was mixed with everyone and that pure races didn't exist (Schwartz-Marín & Wade, 2015). People began to identify and continue to identify themselves as *mestizo* or mixed race. In breaking down racial barriers and individual racial identities, the elites encouraged further interracial marriage and, consequently, further whitening (Telles & Garcia, 2013). Even though lines between races were blurred, discrimination continued. This was especially a problem for Afro-Colombians, who, while undergoing prejudice and maltreatment for being racially and ethnically different, were fighting to be recognized by the government as racially and ethnically different (Paschel, 2010). While the social movements in Colombia in the 70s and 80s were inspired by those in the United States, it is important to note that they were not the same. For example, while the U.S.'s civil rights movement was focused on racial equality, Colombia's movements were based on defining blacks as an ethnic group (Wade, 2009). In her article, "Right to Difference: Explaining Colombia's Shift from Color Blindness to the Law of Black Communities," Tianna Paschel describes the uphill

battle the Afro-Colombian community had to face to be recognized by both anthropologists and the government. Anthropology at the time was focused on indigenous culture, and it argued that, unlike the indigenous, the Afro-Colombian community was not distinct from the Colombian people. On top of the lack of support from the academic community, the Afro-Colombian community faced much racism from both the anthropologists and other congressmen. Finally, following many harsh debates in Colombia's National Constitutional Assembly in 1991, Colombia's black community finally received government recognition: They were given Law 70, which secured seats in Colombia's house of representatives specifically for black communities, began the inclusion of Afro-Colombian history in school curriculums, and gave the communities the right to development. However, in their victory, the identity of Afro-Colombians as a people had been diminished; The government recognized them as those that lived in the Pacific Coastal regions of Colombia, entirely excluding urban blacks.

Even after receiving recognition and representation from the government, racist ideology regarding both the black and indigenous communities of Colombia did not fade away. In their article, "Explaining the Visible and the Invisible: Public Knowledge of Genetics, Ancestry, Physical Appearance, and Race in Colombia," Peter Wade and Ernesto Schwartz-Marín (2015) discuss how ideas of race and genes shape the Colombian population's view of race. Their study involved interviewing those with social science backgrounds and those with life science backgrounds, discussing ideas including how greatly genetics and race impact one's behaviors. One participant was quoted as saying, "we know that indigenous people are astute, and many times dishonest and treacherous." Another, when asked how he would respond if he found out that most of his racial genetic background was either black or indigenous, responded, "[upon receiving such results], I would laugh at myself, burst into tears... I would change my type of friends, because one

is accepted in many places because one is like this [indicating his blond hair and fair skin, but ignoring his dark eyes]. Normally, if we find black people then we would beat them... imagine the change...” Similarly to the United States, racism was not solved in Latin America, nor by extension Colombia, following the culmination of their civil rights movement. People still associate negative characteristics not only with those of dark skin but also with their genes. The idea that one inherits problematic behaviors or inequality from the genes associated with their race is especially problematic because it implies both that one is disadvantaged from birth and that there is nothing one can do about it. Though science has progressed far since the early 20th century, it seems that the racist ideas of yesterday may still have a strong hold on Colombia’s population.

An especially troubling form of racism follows from *Mestizaje* ideology. It begins by stating that all people within a country that subscribes to *Mestizaje* are mixed and should identify with their nationality over any other title, like black, white, indigenous, etc. This colorblindness is especially problematic when coupled with the idea that racism ended with *Mestizaje*. When discrimination and prejudice occur, it follows that these events will simply be overlooked, as:

- A. In the eyes of those under the ideology, discrimination no longer exists.
- B. One could not possible be discriminated against on the basis of race because everyone is *mestizo*.

All the while, racist beliefs are still held, including the aforementioned concept that traits that are harmful to society are linked with one’s race.

The self-concept, proposed by psychologist Carl Rogers, is our identity, defined by how we view ourselves and how others respond to us (Ismail & Tekke, 2015). One derives their values, worldview, rituals, religious beliefs, and more from their ethnicity. It is the foundation for other ideas, as cultural values are the first things we are taught. Ethnicity, therefore, must play a crucial

part in our identity. As one grows older, their concept of their ethno-racial identity (ERI) grows (Moffitt & Syed, 2020). Ethno-racial identity refers to how one perceives their own ethnicity and race and the process by which that perception is formed. Common ways one grows their ERI is through learning more about the culture of the group they identify with, participating in said cultural practices, and more (Find source). Ursula Moffitt and Moin Syed cover how conversations with peers and ethnic-racial identity relate in their article “Ethnic-Racial Identity in Action: Structure and Content of Friends’ Conversations about Ethnicity and Race” (2020). The authors explain that when someone is exploring their ethnic-racial identity (ERI) conversations with peers can often aid or discourage the process. For example, if one discusses discrimination and their friend moves to change the conversation, it may make one feel overlooked and ignored, leading to a negative experience that could affect their well-being. Of course, these conversations do not always occur. Ethnic-racial minorities often avoid conversations related to race and ethnicity because they want to avoid microaggressions and do not want to have to explain or defend their experiences. If one’s attempt to discuss or reason through their ethnicity, race, and their experiences affected by their ethnicity and race and is overlooked, one may begin to feel ignored. Being ignored when talking about one’s ethno-racial identity may make one feel as if there is a part of them they should be ashamed of. They may feel a certain disdain towards their cultural roots or the way they look, leading to psychological distress. Within society, there are cultural majorities and minorities. Certain culture groups will take up vast swathes of the general population, adopting a dominant position over all other cultures and ideas in a place. With majorities comes discrimination towards the less represented, “weaker” minorities. Practices, values, and even entire peoples that are not those of the majority then are perceived to be barbaric, bad, strange, and overall negative. Studies have shown that discrimination can worsen the mental

state of those being discriminated against. Effects of persistent discrimination include anxiety, depression, and overall greater stress. Going further, these burdens on the mind can even negatively affect one's physical health (Everett et al., 2016). The impacts of discrimination on one's health are likely so drastic because of how important ethnicity and race are in one's identity. Effects of racism go beyond just mental and physical health, even reaching into one's economic opportunities. In other parts of Latin America, it is less likely for those of African, indigenous, and other ancestries to get higher education (Paredes, 2018). A 2020 report from the United Nation's committee on the elimination of racial discrimination found that Afro-Colombians face discrimination from the structure of society, which has resulted in them facing "high levels of poverty and social exclusion [in comparison to the rest of the population]".

The problem with colorblindness is that it overlooks the struggles of people with color. In one saying that they do not see race, they choose to ignore a large reason people face discrimination and maltreatment. *Mestizaje* encourages a sort of colorblindness in idealizing putting off one's individual racial identity to adopt *la raza cósmica* and join the collective (Sue, 2012). In so doing, they better their nation, furthering their development and distinguishing them from other modern nations. However, racism is still alive in Colombia and throughout Latin America, and it cannot be fixed nor changed until it is first recognized. Colorblindness also chooses to look past a part of what makes someone unique, hoping that in eliminating difference, they can eliminate division. However, in overlooking part of one's identity or making one feel lesser than because of an aspect of their identity, one suffers mental, physical, and emotional damage. It follows that these aspects of *Mestizaje* actively harm Latin Americans of color.

Furthering this research would require the experiences of Colombians of color. *Mestizaje* is not a concept found in the United States, and my understanding of racism and discrimination

comes from the lens of society in the United States. If *mestizaje* teaches all the population that they are united, then Colombians of color may also feel as if they are united with all others in the population. Their understanding of racism is more than likely different than my own. There is also support for the idea that Colombians not only see racism but also recognize its roots in society (Telles & Bailey, 2013). At the time of writing, there is also a lack of research on the long-term effects that discrimination has on one's health. In fact, if someone is discriminated against often, the psychological and emotional effects of said treatment are found to be lesser than the effects on those who are not discriminated against on a regular basis (Everett et al., 2016). If someone is regularly discriminated against, there may not be adverse, long-term effects because they have become resilient over time. Regardless, racism in Colombia and the effects it has on its population as it is linked to *mestizaje* is still worth researching. The general population may still see racism, but as other research has confirmed, the Colombian population may still hold to racist ideologies that hold minority groups back from developing (Wade & Schwartz-Marín, 2015) ("Colombia: Situation of Afro-Colombians", 2020). Discrimination still poorly affects one's immediate mental state, regardless of whether one is used to it or not (Everett et al., 2016).

Though *mestizaje* varies from country to country in Latin America, its focus remains the same: the goal of mixing a variety of cultures into one to progress and develop the societies that follow it. However, the way in which it unites its people is by forcing them to ignore color and difference, denying those who are racially or ethnically-distinct their individuality and identity. Meanwhile, Latin Americans of color are still discriminated against for the color of their skin or their ethnic background. This is especially true in Colombia, where indigenous and black populations live in incredible poverty in comparison to other people groups within the nation. They are still perceived negatively and as less developed, with these traits being tied to their genes.

Discrimination itself has horrible effects on one's mind, including increased stress and depression, which can affect one's physical health. One can also be negatively impacted as they attempt to explore and understand their ERI, only to be ignored by those around them. Thus, *mestizaje*'s combination of ignoring one's race while also recognizing solely for the purpose of racism should negatively affect minorities within Colombia.

References

- Baumann, T. (2004, September). Defining Ethnicity. Washington, DC; The SAA Archaeological Record.
- Corlett, J. A. (1999). Latino Identity. *Public Affairs Quarterly*, 13(3), 273–295.
- Everett, B. G., Onge, J. S., & Mollborn, S. (2016, April 8). Effects of Minority Status and Perceived Discrimination on Mental Health. New York, NY; Springer.
- Hornberger, N. H., McKay, S., & Reyes, A. (2010). 15. Language and Ethnicity. In *Sociolinguistics and language education* (pp. 398–426). essay, Multilingual Matters.
- Huang, C. Y., & Stormshak, E. A. (2011). A longitudinal examination of early adolescence ethnic identity trajectories. *Cultural Diversity and Ethnic Minority Psychology*, 17(3), 261–270. <https://doi.org/10.1037/a0023882>
- Ismail, N. A. H., & Tekke, M. (2015). Rediscovering Roger's Self Theory and Personality. *Journal of Education, Health, and Community Psychology*, 4(3), 143–150.
- Paredes, C. L. (2018). Multidimensional Ethno-racial status in contexts of *mestizaje*: Ethno-racial stratification in contemporary Peru. *Socius: Sociological Research for a Dynamic World*, 4, 237802311876200. <https://doi.org/10.1177/2378023118762002>
- Paschel, T. S. (2010). The right to difference: Explaining Colombia's shift from color blindness to the law of Black Communities. *American Journal of Sociology*, 116(3), 729–769. <https://doi.org/10.1086/655752>
- Schwartz-Marín, E., & Wade, P. (2015). Explaining the visible and the invisible: Public knowledge of genetics, ancestry, physical appearance and race in Colombia. *Social Studies of Science*, 45(6), 886–906. <https://doi.org/10.1177/0306312715621182>
- Sue, C. A. (2013). Silencing and explaining away racial discrimination. *Land of the Cosmic Race*, 145–176. <https://doi.org/10.1093/acprof:oso/9780199925483.003.0007>
- Telles, E., & Bailey, S. (2013). Understanding Latin American beliefs about racial inequality. *American Journal of Sociology*, 118(6), 1559–1595. <https://doi.org/10.1086/670268>
- Telles, E., & Garcia, D. (2013). Mestizaje and public opinion in Latin America. *Latin American Research Review*, 48(3), 130–152. <https://doi.org/10.1353/lar.2013.0045>
- Telles, E., & Paschel, T. (2014). Who is black, white, or mixed race? how skin color, status, and nation shape racial classification in Latin America. *American Journal of Sociology*, 120(3), 864–907. <https://doi.org/10.1086/679252>

- Wade, P. (2009). Defining blackness in Colombia. *Journal de La Société Des Américanistes*, 95(1), 165–184. <https://doi.org/10.4000/jsa.10783>
- Wallace, S., Nazroo, J., & Bécaries, L. (2016). Cumulative effect of racial discrimination on the mental health of ethnic minorities in the United Kingdom. *American Journal of Public Health*, 106(7), 1294–1300. <https://doi.org/10.2105/ajph.2016.303121>

Summer 2023

How Does Parental Support Affect First- Generation College Students Mental Health and Academic Success

Anna Barbosa

Lee University

Under the guidance of Bryan Poole, Ph.D.

Abstract

The purpose of this study is to learn if parental support can affect first-generation college students' mental health and academic success. In the past, research has focused solely on the relationship between parental support and students' mental health or parental support and students' academic success. There has not been much research done combining all three aspects. The research approach used was mixed methods, which combined quantitative and qualitative data. Through surveys and interviews, the researcher was able to better analyze and understand recurring patterns. Participants were recruited through convenience sampling from college campuses in the United States. Results indicated that students who had positive parental support performed better academically and mentally. Through this experiment, the researcher hopes to encourage first generation college students to pursue higher academia, but also provide potential ways that can make their transition to college simpler. In addition, the researcher hopes to educate the parents of first-generation college students on how they can best support and help their children succeed in higher education, not only in academics, but also in their mental well-being.

How Does Parental Support Affect First Generation College Students Mental Health and Academic Success

Introduction

In the United States, by senior year of high school many students are anticipating attending college or university the following year. By fall semester, high school seniors are filling out the FAFSA (Free Application for Federal Student Aid), touring college campuses, getting ready for standardized tests like the ACT or SAT, applying for scholarships, and applying to potential schools (Venezia & Jaeger, 2013). Some students have the guidance of their parents, who also attended college, to help them with the college process. These students are considered continuing generation college students (CGCS). Other students must figure out how the college process “works” because they do not have the privilege of asking their parents for help since their parents did not attend college. These students are called first generation college students (FGCS). Regardless, both students are working towards a common goal: higher education (Fisherman, n.d.).

However, students cannot pursue higher education without having a support system behind them. For many, this includes the support from their parents or guardians. One of the reasons students pursue higher education is because they acknowledge what education can do for them. Higher education opens doors and opportunities that they might not have otherwise (Fisherman, n.d.). In the past, research has mainly focused on parental support and academic success or parental support and mental health. There has not been a lot of research done combining all three variables: parental support, mental health, and academic success. The researcher hypothesizes that FGCS who have a positive parental support system perform better academically and mentally than students who do not.

First-Generation College Students

First generation college students (FGCS) are defined as students whose parents did not receive a bachelor's degree. This also includes students whose parents received an associate degree or students whose parents received a bachelor's degree after the student was sixteen years old (Higher Education Act of 1965). There are three main types of support that students receive from their parents. This includes academic, emotional, and financial support. Since FGCS parents did not attend college, they do not know what the "college experience" is like. Therefore, some parents do not understand the struggles their children face daily and can be dismissive towards their children who are pursuing higher education (Whitesell, 2014). Parents of FGCS do not do this to be ignorant or hateful towards their children. They simply cannot relate to an experience they have never had; therefore, they cannot empathize when they see their children struggle in college (Pedersen, 2020).

The Three Types of Parental Support

1. Academic Support

Most FGCS parents cannot help their children with their academic course work because they do not have the educational background to do so, whereas CGCS do have that resource. Students whose parent's primary language is not English struggle even more (Havlik et al., 2017). Additionally, many FGCS tend to be minorities; therefore, they experience more setbacks, whether it is the language barrier or discrimination. As a result, many FGCS must seek outside resources to be successful at the university level including making connections with a faculty mentor, success coach, or peers. However, FGCS may not feel comfortable asking others for

help and may try to “figure it out” on their own just as they have had to do since the beginning of their college careers (Stephens et al., 2014).

2. Emotional Support

Moreover, these factors affect how FGCS perceive college. Students whose parents are not supportive may not feel comfortable sharing their pursuits with their parents because they are scared that they will be ridiculed or shut out. If students feel like they are not being validated, they can adopt an attitude that makes them believe that what they do or do not do does not matter. This can cause them to stop putting effort in college and potentially drop out (Irlbeck et al., 2014).

Additionally, FGCS may not want to stress their parents out by sharing their concerns or struggles they face in college causing the students to neglect their emotions even more. This can lead to students feeling unheard and isolated even more. If parents are not aware of the struggles in their child(ren)’s lives, then they cannot help their child(ren). Also, often FGCS parents do not offer their children emotional support, instead they offer a distant type of support like pushing their children to continue their education (London, 1989).

3. Financial Support

Many FGCS parents may not be able to support their children academically or emotionally, but many try to support their children financially. However, the cost to attend college is expensive and many FGCS end up spending more time working than in the classroom (Levine et al., 1996). This puts students' education at a higher risk of failing and potentially

dropping out. Unfortunately, some FGCS do not finish their degree or have the means to return to school once they drop out (Martinez et al., 2012).

College Readiness

FGCS may not feel ready to enter the college world because they feel unprepared pursuing higher education. Many FGCS come from low-income families. Often, low-income families are zoned for low performing schools, causing the student to not be at the same level as their peers once they enter college. Unfortunately, most of the time low performing schools are underfunded and do not have high performing teachers. The lack of school curriculum could affect FGCS readiness for college (Engberg et al., 2011). This could set FGCS further behind and set them up for failure once they are ready to pursue higher education. In addition, many low-income schools do not offer Advanced Placement courses or college preparation classes, therefore when FGCS attend college, they do not know what to expect and fail (Cates et al., 2019).

Academic Success

If FGCS are not receiving any sort of parental support, then they can suffer academically. FGCS might feel like they are going through the college journey alone. This can cause FGCS to lose self-motivation and forget why they are pursuing higher education in the first place. In addition, some parents might believe that if their children pursue higher education, then they will change too much. For example, FGCS character, values, religion, or political beliefs might change once they start attending college causing FGCS parents to pull away from their children (London, 1989).

Once FGCS start to notice the lack of parental support they are receiving, their grades are the ones that begin to suffer causing the student to be put on academic probation and potentially drop out. Once a student drops out of college, it is difficult for them to motivate themselves to go back. Additionally, parents of FGCS may not encourage their children to continue their education if they drop out (Blackwell et al., 2014). This can also cause FGCS to have bad mental health.

Mental Health

Interestingly, in a study that was conducted it was revealed that there is no significant difference between FGCS and CGCS mental health issues in higher education. This is noteworthy because often, FGCS typically report more stressors in their lives - such as family, financial, and acculturation stress which can lead to mental health problems (House et al., 2019). However, this is not to account for all the setbacks FGCS face compared to CGCS. Parental support is still an important factor to consider amongst FGCS mental health. Unfortunately, many FGCS underutilize mental health services compared to CGCS because they do not feel comfortable using the resources available causing the student to feel even more alone (Stebelton et al., 2014). That said, when FGCS feel that they are being encouraged and supported their mental health is positive because they feel that their parents are acknowledging the effort, they are putting into pursuing higher education.

Importance of Getting Involved on Campus

FGCS may not get the support they need from their parents. However, there are other ways that FGCS can academically succeed and have good mental health in college. A.W Astin's

theory of involvement suggests that the quantity and quality of a student's involvement influences how much they will learn and develop in college. Additionally, Tinto's theory of institutional departure states that for students to persist, they must separate their culture from the past and transition to the collegiate setting to integrate social and academic culture (Milem et al., 1997). This includes getting involved in the college campus in some way. Research has shown that peer support is one factor of academic success. Peer support can look like study groups, getting advice about what classes to take, sharing notes and experiences, etc. (Dennis, 2005). Another way to get involved in campus life could be joining a club, becoming a tutor or teaching assistant, playing a sport, getting an on-campus job, attending campus events, joining a sorority/fraternity, etc. (Astin, 1984).

Method

Participants

In this study, 832 participants were recruited through social media platforms like Instagram, Facebook, and LinkedIn. In addition, with the help of Dr. Kevin Ung, the researcher was able to recruit other national McNair participants through his network. The participants gathered ranged from ages 18 to 63 who all lived in the United States and attended colleges or universities in the United States. Out of 732 participants, 2 identified as genderqueer/gender non-conforming, 432 identified as male, 5 identified as non-binary, and 293 identified as females. The first 50 participants who took the survey received a \$5 Amazon gift card for their time. The first 20 participants who took part in the interview process received a \$10 Amazon gift card for their time as well. Out of 832 participants, 100 had to be removed because they did not consent to participate in the survey or had incomplete answers.

Procedure and Measures

After scanning the QR or clicking the link on the social media post, participants were taken to a Google Forms page where they took the survey. The survey consisted of their demographics, the 2023 CIRP (Cooperative Institutional Research Program) Freshman Survey questions, and their consent to participate in the interview process if they desired to. After finishing the survey, if the participant was one of the first 50 to submit their responses, then they were given a \$5 Amazon gift card. The 2023 CIRP Freshman Survey provides data on incoming college students. It provides data like background characteristics, their high school experiences, behaviors, attitudes, and what to expect from college. The survey examines the following sections: established behaviors in high school, academic preparedness, admissions decisions, expectations of college, interactions with peers and faculty, student values and goals, student demographic characteristics, and concerns about financing college (*Home*, n.d.). After taking the survey, participants had the opportunity to participate in an interview. 10 people participated in the interview process. Out of the 10 participants, 7 were male and 3 were female. The participants were asked a total of 16 questions. All 10 participants received a \$10 Amazon gift card.

Results

Quantitative Data

The first hypothesis that was tested involved parental income and students' grade point average in college. To test the hypothesis, a one-way ANOVA was run to determine if students with higher household incomes have higher GPAs (grade point average). The results indicated

that there is a significant difference between low-income and high-income students, $F(2,422) = 17.9, p = <.001$. The high-income group had a higher GPA than the students from the low-income group. The second one-way ANOVA that was run was between student GPA and the type of high school the student attended. There was a significant difference between students who attended public school versus students who attended private school, $F(2,5.28) = 12.2, p = .010$. Students from the public-school group had a higher GPA than students from the private-school group. Students from the home school group had the lowest GPA.

Qualitative Data

A thematic analysis was used to derive patterns from the interviews. The interviewees had multiple recurring themes. For emotional support, the recurring theme was emotional stability leads to positive mental health. Nine out of the ten participants stated that their parents checked up on them at least once per week to make sure their children are getting their emotional needs met. Regarding financial support, the recurring theme was the more hours a student worked, the lower their GPA would be. The last recurring theme regarded academic support. The less the participants' parents knew about the college process, the less confident and prepared the participants felt in college.

Discussion

This study focused on one question: how does parental support affect first generation college students' mental health and academic success? The results were broken up into three parts: parental academic support, parental emotional support, and parental financial support. First, findings indicated that students who had a higher familial income had higher GPAs. This

could be a result of students being able to focus on their academics more than students who must have a job. Many of the low-income students worked an average of at least 20 hours per week. This does not account for the extracurriculars these students may be involved in such as sports, clubs, volunteer work, and so on. Students whose parents cannot afford to fund them fully for college had to find ways to fund themselves. Since these students are spending less time on campus, many that were interviewed mentioned that they had a sense of imposter syndrome because they did not feel like they were a part of the traditional college experience. These students had a harder time becoming a part of the campus community because they were spending more time at work than on campus. This led many students to feel isolated and alienated.

Secondly, students who attended public high school had higher college GPAs than students who attended private high schools. This is interesting to note because there is a misconception that students who attend private schools outperform students who attend public schools. Typically, people who attend private schools are exposed to more opportunities than public school students, however, with parental emotional support and encouragement, public high school students outperformed private high school students.

Thirdly, students whose parents supported them emotionally stated that this helped them with adjusting to college life and their mental health. The students who were interviewed were asked in what ways their parents helped them emotionally and many stated that their parents call them at least once a week to make sure they are doing well. If possible, the parents visit their children at school as frequently as they can to further show their support to their children. Additionally, the students who were interviewed mentioned that they attend therapy or

counseling at least once per week. Especially when school became difficult because the students do not want to worry their parents about their mental wellbeing.

Lastly, many students did not receive academic support from their parents because their parents never attended college. Therefore, these students had to ask other resources how to be college students. The participants who were interviewed stated that they had to seek peers, teachers in high school, high school and college advisors, teachers, etc. how to complete tasks such as filling out the FAFSA, making their class schedule, negotiating financial packages, loans, etc. However, because of this the students were able to build a community with other students who are in similar situations. It helped the participants recognize that they are not alone.

The limitations in this study include the scale used to measure parental support and the sample size for interviews. In order to gain a better understanding of parental support, a scale with more relevant questions is needed. In addition, a sample size of at least 20 participants for qualitative data is encouraged to get a better representation. Despite the limitations, there is now more knowledge on what first generation college students face and ways that parents can support them.

References

- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 297–308.
- Blackwell, E., & Pinder, P. J. (2014). What Are the Motivational Factors of First-Generation Minority College Students Who Overcome Their Family Histories to Pursue Higher Education? *College Student Journal*, 48(1), 45–56.
- Cates, J. T., & Schaeffle, S. E. (2019). The relationship between a college preparation program and at-risk students' college readiness. *Critical Readings on Latinos and Education*, 288–301. <https://doi.org/10.4324/9780429021206-19>
- Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, 46(3), 223–236.
<https://doi.org/10.1353/csd.2005.0023>
- Engberg, M. E., & Allen, D. J. (2011). Uncontrolled destinies: Improving opportunity for low-income students in American Higher Education. *Research in Higher Education*, 52(8), 786–807. <https://doi.org/10.1007/s11162-011-9222-7>
- Fishman, R. (n.d.). 2015 college decisions survey: Part I deciding to go to college.
<https://www.luminafoundation.org/files/resources/deciding-to-go-to-college.pdf>
- Havlik, S., Pulliam, N., Malott, K., & Steen, S. (2017). Strengths and struggles. *Journal of College Student Retention: Research, Theory & Practice*, 22(1), 118–140.
<https://doi.org/10.1177/1521025117724551>
- Higher Education Act of 1965, 20 U.S.C. § 1070a–11 (2022).
<https://www.govinfo.gov/content/pkg/COMPS-765/pdf/COMPS-765.pdf>

Home. HERI. (n.d.). <https://heri.ucla.edu/cirp-freshman-survey/>

House, L. A., Neal, C., & Kolb, J. (2019). Supporting the mental health needs of First Generation College students. *Journal of College Student Psychotherapy*, 34(2), 157–167.

<https://doi.org/10.1080/87568225.2019.1578940>

Irlbeck, E., Adams, S., Akers, C., Burris, S., & Jones, S. (2014). First Generation College students: Motivations and Support Systems. *Journal of Agricultural Education*, 55(2), 154–166. <https://doi.org/10.5032/jae.2014.02154>

Levine, A., & Nidiffer, J. (1996). *Beating the odds: How the poor get to college*. Jossey-Bass Publishers.

London, H. B. (1989). Breaking away: A study of first-generation college students and their families. *American Journal of Education*, 97(2), 144-170.

Martinez, E. F., Bilges, D. C., Shabazz, S. T., Miller, R., & Morote, E.-S. (2012). To work or not to work: Student Employment, resiliency, and institutional engagement of low-income, first-generation college students. *Journal of Student Financial Aid*, 42(1).

<https://doi.org/10.55504/0884-9153.1040>

Milem, J. F., & Berger, J. B. (1997). A modified model of college student persistence: Exploring the relationship between Astin's theory of involvement and Tinto's theory of student departure. *Journal of college student development*, 38(4), 387.

Pedersen, D. E. (2020). Quantifying differences in cultural capital of first- and continuing generation undergraduates: parental support, involvement, and communication. *College Student Journal*, 54(3), 364+.

https://link.gale.com/apps/doc/A668397768/PPPC?u=tel_a_leeu&sid=bookmark-PPPC&xid=2a9d50f8

- Stebbleton, M. J., Soria, K. M., & Huesman, R. L. (2014). First-generation students' sense of belonging, mental health, and use of counseling services at Public Research Universities. *Journal of College Counseling*, 17(1), 6–20. <https://doi.org/10.1002/j.2161-1882.2014.00044.x>
- Stephens, N. M., Hamedani, M. Y. G., & Destin, M. (2014). Closing the social-class achievement gap. *Psychological Science*, 25(4), 943–953. <https://doi.org/10.1177/0956797613518349>
- Venezia, A., & Jaeger, L. (2013). Transitions from high school to college. *The Future of Children*, 23(1), 117–136. <https://doi.org/10.1353/foc.2013.0004>
- Whitesell, P. (2014). First-Generation Latino College Students, Parental Support and its Effects. *IU South Bend Undergraduate Research Journal*, 14, 23-32.

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Article 3

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Psychological Implications of Ageism

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Abstract

The objective of this study is to better understand ageism and its relationships to religiosity and psychological well-being. This study was composed of 112 participants. There were 85 females and 27 males in this study with an age range of 18-73. Four scales were used in a digitally disseminated survey including the Fraboni Ageism Scale, Brief Perceptions of Ageism Questionnaire, Warwick-Edinburg Psychological Well-Being Scale, and the Centrality of Religiosity Scale. These results demonstrated an inverse relationship between psychological well-being and perceived ageism. There was also an inverse relationship between psychological well-being and internalized ageism. There were no reported significant relationships between religiosity and perceived ageism or internalized ageism.

Keywords: ageism; psychological well-being; religiosity,

Psychological Implications of Ageism

Ageism has historically had various conceptual definitions within the scientific literature. Previous definitions have focused on several aspects of ageism, such as its cognitive, affective, or behavioral elements. One conceptual definition of ageism defines ageism as, "...negative or positive stereotypes, prejudice and/or discrimination against (or to the benefit of) aging people because of their chronological age [or perceived age]." (Iversen et al., 2009 p. 15). Ageism can be directed toward chronologically or perceived younger or older individuals.

Traditionally, definitions of ageism have focused on stereotypes, prejudice, and discriminatory acts towards older individuals. This is partially due to the definition of ageism provided by Robert Butler,

"1) Prejudicial attitudes toward the aged, toward old age, and toward the aging process, including attitudes held by the elderly, particularly in employment, but in other social roles as well; and 3) institutional practices and policies which, often without malice, perpetuate stereotypic beliefs about the elderly, reduce their opportunities for a satisfactory life and undermine their personal dignity." (Butler, 1980, p.8).

A majority of Robert Butler's works were foundational in ageism research that is continued today. In recent studies investigating ageism directed toward younger individuals, the phrases reverse ageism and adultism have been coined (Raymer et al., 2017; Corney et al., 2022). The isolation of ageism directed towards older individuals in Butler's work could be a contributing factor to reverse ageism or adultism and ageism ideological distinctions (Swift et al., 2021). However, several studies still use ageism as a blanket term for stereotypes, prejudice, and discrimination targeted toward older and younger individuals (Bratt et al., 2020; Werner et al., 2021; Rui et al., 2022).

Ageism can be analyzed in micro-level, meso-level, and macro-level dimensions. First, Micro-level ageism focuses on the cognitive, affective, and behavioral elements. Secondly, meso-level ageism focuses on discrimination in social networks. Finally, macro-level ageism focuses on institutional and cultural discrimination (Iversen et al., 2009). The dimensions of ageism can be analogized as building blocks. It begins with internalized ageism on a micro-level that begins to build up to meso-level and eventually macro-level ageism.

Exposure to age-based discrimination and prejudice can impact individuals in a variety of ways. In a recent article by the Gerontological Society of America, ageism was listed as a risk factor for chronic disease. The article postulates that age-based discrimination causes increased exposure to stress as one continues to age (Allen, 2016). Self-perceptions of aging have also been linked to longevity. The higher reported levels of positivity associated with aging; the longer participants lived (Levy et al. 2002). Perceived instances of ageism have also been linked to poor mental health (Lyons et al., 2018), a decrease in an individual's will to live (Levy, 2000), and harm to psychological well-being (Garstka et al., 2004). Studies have suggested an inverse relationship between psychological distress and negative ageist beliefs; however, most studies narrow in on perceived experienced ageism and mental health (Fiorini et al., 2023; Vogt Yuan et al., 2007). Internalized ageist attitudes have briefly been shown to be a worthwhile avenue of study as they were linked to psychological distress and higher reported levels of negative ageist beliefs were correlated with lower levels of psychological well-being (Fiorini et al., 2023). Excluding the one study previously mentioned, several searches on Google Scholar, PubMed, PsycINFO, EBSCOhost, and JSTOR failed to yield any studies that examined the relationship between psychological well-being, mental health, and internalized ageist beliefs. This study aims

to study the gap within the empirical data and examine the possible existing relationships between ageism, perceived ageism, and psychological well-being.

In a more recent study religiosity was suggested to act as a buffer against ageism and poor psychological well-being. The study focused on older populations across Europe. When comparing different religious climates, it was found that areas with higher religious climates reported higher levels of psychological well-being and lower levels of ageism (Kim et al., 2020). However, in a previous study on the will to live religiosity was inconsequential to a participant's will to live after being exposed to ageist stereotypes (Levy et al., 2000). There is a gap within the literature pertaining to the possible existence of an individual's reported religiosity and internalized ageist beliefs. Studies have touched on religious climates acting as a buffer from ageism (Kim et al., 2020) and religiosity in the context of one's will to live, (Levy et al., 2000) but there is a lack of empirical evidence to connect religiosity, perceived ageism, and internalized ageist beliefs. This study aims to examine the possible existing relationships between religiosity, ageism, and perceived ageism.

Hypothesis One:

In line with previous studies on perceived ageism and mental health, it is hypothesized that an inverse relationship will exist between psychological well-being and perceived levels of ageism. As an individual has a higher reported level of perceived ageism, they will have lower reported levels of well-being.

Hypothesis Two:

It is hypothesized that internalized ageism will have an inverse relationship with psychological well-being. As an individual has a higher reported level of ageism, they will have lower reported levels of psychological well-being.

Hypothesis Three:

It is hypothesized that religiosity will have an inverse relationship with perceived ageism. As in individuals with higher religiosity levels, will report lower levels of perceived ageism.

Hypothesis Four:

It is hypothesized that religiosity will have an inverse relationship with internalized ageism. As in individuals with higher religiosity levels, will report lower levels of ageism.

Methods

Participants

Online surveys were disseminated to 112 participants. All participants were residents of the east Tennessee/north Georgia area. The surveys were digitally sent to social clubs, religious groups, and slack chains. Out of the 112 participants who gave informed consent 27 of the participants were male and 85 of the participants were female. The age range was 18-73 years old.

Assessments and Measures

Four different scales were used in this study.

Fraboni Ageism Scale

The Fraboni Aging Scale (FSA) is composed of 29 Likert type scale questions (1= strongly disagree; 5=strongly agree). This scale examines ageism through the following subscales: antilocution, avoidance, and discrimination. This scale looks at an individual's attitudes towards others who are chronologically or perceived as old (Hofmeister-Tóth Á et al., 2021). Example items include: “Teenage suicide is more tragic among the old” for antilocution, “there should be special clubs set aside within sports facilities so that old people can compete at their own level”

for discrimination, and “I sometimes avoid eye contact with old people when I see them” for avoidance (Hofmeister-Tóth Á et al., 2021).

Brief Perceptions of Ageism Questionnaire

The Brief Perceptions of Ageism Questionnaire is composed of 17 Likert type scale questions (1=strongly disagree; 5= strongly agree). This questionnaire examines perceived ageism through the following subscales: timeline-chronic, consequence-positive, consequence and control negative, control-positive, and emotional-representations (Sexton et al. 2014). Example items include: “I always classify myself as old” for time-line chronic, “As I get older I get wiser” for consequence-positive, “I get depressed when I think about how aging might affect the things that I can do” for emotional representation, “Getting older makes me less independent” for consequences and control negative, and “The quality of my social life in later years depends on me” for control-positive (Sexton et al. 2014).

Warwick-Edinburg Psychological Well-Being

The Warwick-Edinburg Psychological Well-Being scale is composed of 13 Likert type questions (1= none of the time; 5= all the time) that evaluate an individual's psychological well-being (Taggart et al., 2013). Participants are asked to evaluate the past two weeks of their lives when answering these questions. This scale examines an individual's reported levels of well-being. Example items include: "I've been feeling optimistic about the future" and "I've been able to make up my own mind about things."

Centrality of Religion

The Centrality of Religion Scale is composed of 15 Likert style questions (1= none of the time; 5= all of the time). This scale examines religious importance in an individual. It measures the salience of religiosity in five different subscales: public practice, private practice, religious

experience, ideology, and intellectual subscales (Huber & Huber, 2012). Example items include: “How often do you think about religious issues?” and “How important is it to take part in religious services?”

Results

Pearson correlation coefficients are listed for all the variables in this study on Table 1.

Table 1

Pearson correlation coefficients and P-values

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1.) Frabroni Ageism Scale	-											
2.) Antilocution	0.804***	-										
	<.001	-										
3.) Discriminaition	0.803***	0.420***	-									
	<.001	<.001	-									
4.) Aviodance	0.858***	0.518**	0.621***	-								
	<.001	<.001	<.001	-								
5.) Brief Ageism Perception Quesionnaire	0.216*	0.303**	-0.014	0.221*	-							
	0.022	0.001	0.88	0.019	-							
6.) Time-line Chronic	0.144	0.148	0.088	0.149	0.473***	-						
	0.13	0.118	0.354	0.117	<.001	-						
7.) Consequence Positive	-0.134	-0.07	-0.149	-0.140	0.369***	-0.049	-					
	0.16	0.46	0.117	0.14	<.001	0.61	-					
8.) Emotional Representation	0.156	0.212*	-0.045	0.198*	0.761***	0.198*	0.086	-				
	0.101	0.025	0.638	0.037	<.001	0.037	0.365	-				
9.) Consequences and Negative Control	0.380***	0.373***	0.174	0.377**	0.751***	0.194*	0.028	0.512***	-			
	<.001	<.001	0.067	<.001	<.001	0.041	0.77	<.001	-			
10.) Control-positive	-0.220*	-0.017	-0.307***	-0.255**	0.226*	0.007	0.200*	0.085	-0.209*	-		
	0.02	0.861	<.001	0.007	0.016	0.941	0.035	0.373	0.027	-		
11.) Psychological Well-being	-0.361***	-0.289**	-0.284**	-0.324**	-0.388***	-0.334***	0.163	-0.450***	-0.306**	0.013	-	
	<.001	0.002	0.002	<.001	<.001	<.001	0.086	<.001	0.001	0.893	-	
12.) Centrality of Religion	-0.017	-0.013	-0.007	0.006	0.006	-0.081	0.117	-0.086	0.082	-0.060	0.13	-
	0.86	0.891	0.946	0.952	0.952	0.396	0.22	0.367	0.391	0.53	0.171	-

Note. * p < .05, ** p < .01, *** p < .001

Table 1 is a correlation matrix showing all the correlation coefficients and P-values that exist amongst variables present in this study. The results show a low-negative relationship with high significance levels between psychological well-being and ageism. A low-negative relationship with high significance levels was present between psychological well-being and Perceptions of ageism. There was no significant relationship between religiosity and ageism. There was not a significant relationship between Religiosity and perceived ageism either.

Discussion

The goal of this study was to examine the possible relationships that religiosity and psychological well-being might have with ageism and perceived ageism. The results demonstrated that ageism and perceived ageism have inverse relationships with psychological well-being. This means that as perceived ageism or internalized ageism increases reported levels of psychological well-being decrease. Other studies have found existing relationships between a decrease in psychological well-being and increased exposure to perceived ageism (Garstka et al., 2004). However, there are gaps within the literature examining the possible existing relationships between internalized ageism and psychological well-being (Fiorini et al., 2023). This study has shown a similar relationship between internalized ageism and psychological well-being to perceived ageism and psychological well-being. No significant results demonstrated a relationship between religiosity, perceived ageism, or ageism. These results were contrary to the findings present in another study where areas with high religious climates were found to have lower levels of internalized ageism (Kim et al., 2020). In this study, reported religiosity levels had no significant relationship to an individual's reported internal ageism. Likewise, reported religiosity levels were not shown to be related to perceptions of ageism.

Limitations and Future Research

This study examined the correlational relationships between variables; therefore, causal inference cannot be inferred in this study. The sample size in this study had a few participants over 70. Future studies should look to studying populations 70 and over as they have been underrepresented in past studies dealing with ageism and perceived ageism (Swift et al., 2021). Future studies should look at perceived negative ageism as it relates to psychological well-being and religiosity. Past studies have shown that chronologically older individuals are more likely to

experience age-based discrimination and psychological well-being was shown to be lower in older individuals with high levels of perceived ageism (Kang et al., 2022). Future studies should also include long-term studies to evaluate how levels of ageism and perceptions of ageism change over time. The literature reviewed in this study focused on cross-sectional studies. Longitudinal studies may be beneficial to understand the relationship between age, ageism, and perceptions of ageism.

References

- Allen J. O. (2016). Ageism as a Risk Factor for Chronic Disease. *The Gerontologist*, 56(4), 610–614. <https://doi.org/10.1093/geront/gnu158>
- Bratt, C., Abrams, D., & Swift, H. J. (2020). Supporting the old but neglecting the young? The two faces of ageism. *Developmental Psychology*, 56(5), 1029–1039. <https://doi.org/10.1037/dev0000903>
- Butler, R. N. (1980). Ageism: A foreword. *Journal of Social Issues*, 36(2), 8–11. <https://doi.org/10.1111/j.1540-4560.1980.tb02018.x>
- Cohen, E. S. (2001). The Complex Nature of Ageism: What Is It? Who Does It? Who Perceives It? *The Gerontological Society of America*, 41(5), 576–577.
- Corney, T., Cooper, T., Shier, H., & Williamson, H. (2022). Youth participation: Adultism, human rights and professional youth work. *Children & Society*, 36, 677–690. <https://doi.org/10.1111/chso.12526>
- Fiorini Bincoletto, A., Zanini, L., Spitoni, G. F., & Lingiardi, V. (2023). Negative and positive ageism in an Italian sample: How ageist beliefs relate to epistemic trust, psychological distress, and well-being. *Research in Psychotherapy: Psychopathology, Process and Outcome*, 26(2). <https://doi.org/10.4081/ripppo.2023.676>
- Garstka, T. A., Schmitt, M. T., Branscombe, N. R., & Hummert, M. L. (2004). How young and older adults differ in their responses to perceived age discrimination. *Psychology and aging*, 19(2), 326–335. <https://doi.org/10.1037/0882-7974.19.2.326>

- Gendron, T. L., Inker, J., & Welleford, A. (2017a). “How Old Do You Feel?” the Difficulties and Ethics of Operationalizing Subjective Age. *The Gerontologist*, 58(4), 618–624.
<https://doi.org/10.1093/geront/gnx098>
- Hofmeister-Tóth Á, Neulinger Á, Debreceni J. Measuring Discrimination against Older People Applying the Fraboni Scale of Ageism. *Information*. 2021; 12(11):458.
<https://doi.org/10.3390/info12110458>
- Huber, S., & Huber, O. W. (2012). The centrality of religiosity scale (CRS). *Religions*, 3(3), 710-724.; doi:10.3390/rel3030710
- Ismail, Z., & Desmukh, S. (2012). Religiosity and Psychological Well-Being. *International Journal of Business and Social Science*, 3(11), 20–28.
- Iversen, T. N., Larsen, L., & Solem, P. E. (2009). A conceptual analysis of ageism. *Nordic Psychology*, 61(3), 4–22. <https://doi.org/10.1027/1901-2276.61.3.4>
- Johnson, M. K., Rowatt, W. C., & LaBouff, J. P. (2012). Religiosity and prejudice revisited: In-group favoritism, out-group derogation, or both? *Psychology of Religion and Spirituality*, 4(2), 154–168. <https://doi.org/10.1037/a0025107>
- Kang, H., & Kim, H. (2022). Ageism and Psychological Well-Being Among Older Adults: A Systematic Review. *Gerontology & geriatric medicine*.
<https://doi.org/10.1177/23337214221087023>
- Kim, Harris & Jung, Jong Hyun. (2020). Ageism, Religiosity, and Wellbeing Among Older Adults: Evidence From the European Social Survey (ESS4). *Research on Aging*. 43. 016402752095363. 10.1177/0164027520953632.

- Krentz, M. "OK Boomer: Ageism Comes of Age in 2020." *Journal of Health and Human Experience*, VI, no. 1, 2020, pp. 37–56.
<https://doi.org/https://jhhe.sempervifoundation.org/pdfs/v6n1/03%20Krentz.pdf>.
- Levy, B., Ashman, O., & Dror, I. (2000). To be or not to be: The effects of aging stereotypes on the will to live. *OMEGA-Journal of Death and Dying*, 40(3), 409-420.
- Levy, S. R., & Macdonald, J. (2019). History of Ageism. In D. Gu & M.E. Dupre, M.E. (Eds.), *Encyclopedia of Gerontology and Population Aging*. Springer, Cham.
https://doi.org/10.1007/978-3-319-69892-2_597-1
- Levy, B. R., Slade, M. D., Kunkel, S. R., & Kasl, S. V. (2002). Longevity increased by positive self-perceptions of aging. *Journal of personality and social psychology*, 83(2), 261–270.
<https://doi.org/10.1037//0022-3514.83.2.261>
- Lyons, A., Alba, B., Heywood, W., Fileborn, B., Minichiello, V., Barrett, C., Hinchliff, S., Malta, S., & Dow, B. (2018). Experiences of ageism and the mental health of older adults. *Aging & mental health*, 22(11), 1456–1464.
<https://doi.org/10.1080/13607863.2017.1364347>
- Rui Dong, Wanxin Yu, Shiguang Ni & Qiaolong Hu (2022): Ageism and employee silence: the serial mediating roles of work alienation and organizational commitment, *Ethics & Behavior*, DOI: 10.1080/10508422.2022.2126843
- São José, J. M., Amado, C. A., Ilinca, S., Buttigieg, S. C., & Taghizadeh Larsson, A. (2017). Ageism in health care: A systematic review of operational definitions and inductive conceptualizations. *The Gerontologist*, 59(2). <https://doi.org/10.1093/geront/gnx020>
- Sexton, E., King-Kallimanis, B.L., Morgan, K. *et al.* Development of the Brief Ageing

- Perceptions Questionnaire (B-APQ): a confirmatory factor analysis approach to item reduction. *BMC Geriatr* **14**, 44 (2014). <https://doi.org/10.1186/1471-2318-14-44>
- Snellman, F. (2016). Whose ageism? the reinvigoration and definitions of an elusive concept. *Nordic Psychology*, 68(3), 148–159. <https://doi.org/10.1080/19012276.2015.1125301>
- Swift, H.J., Abrams, D., Lamont, R.A. (2021). Ageism Around the World. In: Gu, D., Dupre, M.E. (eds) *Encyclopedia of Gerontology and Population Aging*. Springer, Cham. https://doi.org/10.1007/978-3-030-22009-9_586
- Taggart, F., Friede, T., Weich, S. *et al.* Cross cultural evaluation of the Warwick-Edinburgh mental well-being scale (WEMWBS) -a mixed methods study. *Health Qual Life Outcomes* **11**, 27 (2013). <https://doi.org/10.1186/1477-7525-11-27>
- Vogt Yuan, A. (2007). Perceived Age Discrimination and Mental Health, *Social Forces*, Volume 86, Issue 1, Pages 291–311. <https://doi.org/10.1353/sof.2007.0113>
- Werner P, AboJabel H, Tur-Sinai A. Ageism towards older and younger people in the wake of the COVID-19 outbreak. *Maturitas*. 2022 Mar;157:1-6.
doi:10.1016/j.maturitas.2021.11.002.

Volume 6

Article 4

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Type II Diabetes Assessment for College Students

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ABSTRACT:

Just over half a billion people are living with diabetes globally, 90-95% of which are type II diabetes (T2D). The onset of diabetes at a younger age is associated with longer exposure to the disease leading to increased complications such as diabetic retinopathy, the leading cause of vision loss in the world. Lifestyle modifications such as physical activity and improved nutrition have been shown to be the most effective proactive prevention as they can improve glycemic control and decrease insulin resistance. Although there have been many fad diets touted as a miracle cure, research has shown the Mediterranean diet is the most effective in lowering the risk of diabetes and improving overall Body Mass Index (BMI). Aerobic and weight resistance training for 150 minutes (2.5 hours) per week has been shown the most effective for preventing or reversing diabetes. College-aged students develop lifelong practices at this age, yet little is known about their knowledge of T2D and the complications associated with T2D. Anonymous survey respondents shared insights on their typical nutrition and physical activity that will be used to offer practical methods of diabetes prevention. Results demonstrated a high level of knowledge of diabetes. However, college students did not understand the correlation of diabetes with individual health habits. This research has implications for developing health promotion programs for college students because if healthy lifestyle patterns are established earlier, healthcare costs, obesity, and the risk of diseases such as T2D will drastically decrease globally.

BACKGROUND:

Diabetes, also known as diabetes mellitus, is a chronic health condition that affects how food is turned into energy. The body breaks down food mainly into glucose (sugar) and releases it into the bloodstream. This is called blood sugar, and when it goes up, the pancreas releases

insulin to bring it back down to a normal level. Insulin does this by signaling to the body's cells to let sugar inside to be converted to energy for that cell's function. Diabetes occurs when insulin is not used as it should be or when not enough is produced. Over time, it can lead to serious health problems like vision loss, kidney disease, and heart disease. Most people with type II diabetes (T2D) have at least one complication. Globally, the number of people with diabetes has quadrupled in the past three decades with just over half a billion people living with T2D worldwide, and it is the ninth major cause of death (Zheng, Y., et. al. 2018). A staggering number - an estimated 463 million people - have diabetes, 90–95% of which is T2D. The global diabetes prevalence in 20–79-year-olds in 2021 was estimated to be 10.5% (536.6 million people), and is expected to rise to 12.2% (783.2 million) in 2045 (Sun, H. et. al., 2022). Specifically in adolescents and young adults, the prevalence of T2D is rapidly increasing. Onset diabetes at a younger age is associated with longer exposure to the disease leading to increased complications and long-term chronic damage (Lascar, N. 2018). This is an alarming amount of the population and is cause for research on how to prevent diabetes.

There are three types of diabetes: type I, type II, and gestational diabetes. Type I diabetes is thought to be caused by an autoimmune reaction with the destruction of the beta cells resulting in the pancreas being unable to produce insulin (Marchetti P, et al. 2017). Type II diabetes is the most common form of diabetes. It is categorized by impaired insulin action (insulin resistance), which results in abnormally high blood sugar levels. Unlike type I diabetes, type II diabetes is developed over many years with some suggested genetic components. It can be actively prevented or delayed by lifestyle habits. Finally, gestational diabetes is diabetes when pregnant. The hormones produced during pregnancy can lead to insulin resistance causing a build-up of

glucose in the bloodstream. Generally, after delivery, the woman's blood sugar levels will go back to normal. However, gestational diabetes can lead to type II diabetes.

This research focuses on knowledge of T2D specifically in young adults for the prevention of this disease. Diabetic retinopathy is the most frequently occurring complication of diabetes mellitus and is the leading cause of vision loss globally. Control of hyperglycemia (high blood sugar) and hypertension (high blood pressure) has been shown to be highly effective in the management or prevention of diabetic complications and is also the most common prevention strategy for T2D in general. Thus, prevention of the disease is the best course of action.

OVERVIEW OF PREVENTION:

Prevention of T2D includes lifestyle modifications like physical activity, sleep patterns, nutritional factors, and stress. It has been shown that various medications like metformin, acarbose, and thiazolidinediones or metabolic surgeries can prevent or delay diabetes mellitus as well. However, it should be stated that fat loss with gaining higher muscle mass has shown the biggest effect on prediabetics. These tools are significantly underused. Kolb, H. and Martin, S. (2017) suggest a diabetes-protective lifestyle that counteracts the sedentary lifestyle, little physical activity, stress and depression, and an unbalanced diet that promotes a higher BMI and thus an increased risk of T2D. Major factors of this protective lifestyle involve nutrition patterns and physical activity levels which should be incorporated for all ages given the array of benefits of the diabetes-protective lifestyle. In addition, it should be stated that screening for prediabetes should be given earlier in life for ample time to prevent and cure diabetes before serious complications develop. T2D is an epidemic in Western countries that increases the vulnerability to other diseases, such as cardiovascular, blindness, and cancer (Martín-Peláez, S., et. al. 2020). Thus, it is imperative to proactively prevent this disease.

American, European, and Canadian Diabetes Associations recommend lifestyle programs for diabetes prevention in high-risk groups (American Diabetes Association, 2020). The Finnish Diabetes Prevention Study (DPS) and Diabetes Prevention Program (DPP) is a comprehensive structured program that targets dietary modification with a low-calorie, low-fat, low-saturated fat, high-fiber diet, and moderate-intensity physical activity. These intervention programs resulted in a 67.4% reduction in diabetes risk. However, these programs are often intensive, and few people choose to attend. If young adults implement nutritional and physical activities as a lifestyle, it would serve as proactive prevention of T2D.

NUTRITION AND PHYSICAL ACTIVITY:

Many studies suggest a variety of diets for the prevention or even reversal of T2D. While the best course of action is highly debated, there are commonalities between these diets for a full nutritional lifestyle. These commonalities include a high consumption of vegetables, fruit, nuts, cereals, whole grains, extra virgin olive oil, and a limited intake of sweets, red meat, and dairy products (Muscogiuri, G., et. al. 2022). This is the description of the Mediterranean diet, and it aligns very well with consumption recommendations for diabetics. The Mediterranean diet has a moderate consumption of fish and poultry, which is still debated as beneficial. However, it is one of the most well-researched diets and is highly associated with a reduced risk of diabetes and cardiovascular complications (Cosentino, F., et. al. 2019).

Pivari, F. (2019) found that curcumin (found in turmeric) had significant potential of counteracting and preventing diabetes. Turmeric is often found in the Mediterranean diet, which may be a reason for its efficiency in preventing diabetes. This diet is rich in polyunsaturated and monounsaturated fats and can improve glycemic control. Other diets need to be further tested such as intermittent fasting or low-energy diets as it could indicate stronger correlations than the

tested low-fat diet used in intervention programs (Guess N. D. 2018). A study comparing the keto diet with the Mediterranean diet, ruled in favor of the Mediterranean diet with their 12-week study due to keto being less sustainable, leading to elevated LDL (low-density lipoprotein) cholesterol, and lower nutrient intake (Gardner, C. D., et al. 2022).

Promoting the Mediterranean lifestyle is ample for sustained change as it has low environmental impacts, and multiple health benefits such as associations with less cognitive age disease (such as Alzheimer's), improved cardiovascular health, obesity, etc (Guasch-Ferré, M., & Willett, W. C. 2021). Overall, this lifestyle of nutrition is rich with vitamins, vegetables, whole grains, fruits, nuts, extra virgin olive oil, and a moderate amount of fish and poultry (white meat and/or eggs). There is little consumption of red meat, dairy, and sweets (candy, carbonated drinks, etc). Most research aligns with this little consumption of red meat, dairy, and sweets, and higher consumption of vegetables, fruits, whole grains, and nuts. The Mediterranean diet has been well established for many health benefits not limited to but including the prevention of T2D.

In addition to a healthy diet, physical activity is equally important. While the risk of developing T2D is associated with nutrition intake, it is 50-80% higher in individuals who are physically inactive compared to their active counterparts (Pelliccia A, et al. 2020), and a sedentary lifestyle is well-known as one of the major reasons for the rising epidemic of T2D (Amanat, S., et al. 2020). The benefits of physical activity for people with diabetes can be seen as an improvement in glycemic control, glycemic variability, and the reduction of insulin resistance (Schubert-Olesen, O. et al. 2022). Specifically, for younger generations physical activity improves metabolic profile, bone mineral density, cardiorespiratory fitness, and insulin sensitivity (Dimitri, P., et al. 2020). Another benefit of physical activity is weight loss. It has

been proven that obesity is directly related to multiple comorbidities such as the increased risk of T2D (Rubio-Almanza, M. et al. 2019).

Optimal intensity and duration combination has not been well established. However, multiple studies show aerobic and weight resistance training in combination as having the best effect on the body's wellness and diabetes prevention, improving insulin action, glycemic control, lipid levels, and blood pressure (Cosentino, F., 2019). Physical activity is defined as any bodily movement by any skeletal muscle that expedites energy, excluding sitting or laying down (Caspersen, C. J. 1985). Activities such as stretching, housework, and walking are beneficial (Monte, R. N., 2021). A study on people with T2D demonstrated that interval walking (short bursts of fast walking) showed positive effects on blood sugar levels, despite no change in body composition or physical fitness (Karstoft, K 2017). Moderate to vigorous movement for 150 minutes (2.5 hours) per week such as aerobic exercise and muscle strengthening is more recommended and well-established as preventative (Francesconi, C., et al. 2019). While moderate to vigorous activity yields great benefits, for those who are inactive any physical activity provides health benefits.

Physical exercise is completely dependent on the adherence and preference of the person on an individual basis. Most people who have T2D do not adhere to any physical activity even though it is the foundation for preventing and reversing the disease (Jarvie, J. L. et al. 2019). Francesconi, C. (2019) states that inactivity should be labeled a health hazard and prolonged episodes of sitting should be avoided. Multiple studies demonstrate how movement improves blood glucose control in T2D, reduces cardiovascular risk factors, and regulates body weight by reducing body fat percentage and enhancing lean mass. Physical activity for those without diabetes has a variety of benefits as well, likely preventing the disease altogether (Oppert, J. M,

et al. 2021). Because T2D is an epidemic in the U.S. with many associated comorbidities and lifestyle modification has consistently been shown to decrease the risk for T2D, it is important to understand college students' knowledge and health behaviors associated with T2D. Thus, this study aims to research college students' knowledge, associated complications, and prevention of diabetes. In addition, data was collected on their current lifestyle behaviors of nutritional and physical activities. This data could guide future researchers in developing health promotion programs for college students specifically aimed at decreasing the risk of preventing diabetes.

METHODS:

An online survey platform, Survey Monkey, was used to develop four sections composed of a total of 41 questions to assess 1) knowledge of diabetes or lack thereof, 2) their physical activity levels during school and in the summer, 3) their nutritional activity levels during school and in the summer, and 4) standard background information. The link to the online survey was distributed on social media as well as to 2000 students' emails. There were 210 respondents. College students were the target demographic because of the impact their current health behaviors have on the rest of their lives. Research shows that healthy lifestyles established during college are likely to continue throughout life (Eichorn, L., et al. 2018). This survey is aimed to determine college students' knowledge of T2D, complications associated with T2D such as diabetic retinopathy, and health behaviors associated with diabetes prevention. In addition, this study examined the nutritional and physical activity habits of college students. Collected data could guide researchers to the best methods for implementing health promotion programs for college students.

RESULTS:

Of the 210 respondents, 62% were between the ages of 18-20, and 34% were between the ages of 21-24, making up the mass of the survey. The remaining 4% were between the ages of 25-30. Although 87% do not identify as an athlete, 62% have an active hobby such as volleyball, running, and other recreational sports. The sample size was 77% female, and 79% were Caucasian.

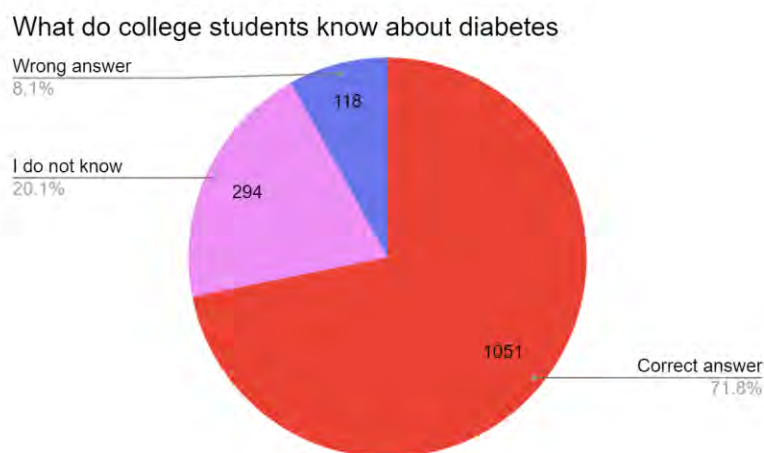


Figure 1. The sum of all respondents in the diabetes knowledge section

Figure 1 shows the sum of all respondents in the knowledge section of the survey. The answers were ranked as follows: the correct answer, the wrong answer, and “I do not know”. The respondents were presented with symptoms of T2D such as “Excessive thirst is a symptom of diabetes” and would answer true/false or “I do not know”. The majority of respondents, 71.8%, answered correctly. There were two questions that college students showed confusion on. In the first question, “Is T2D developed or hereditary” where the answers were “Developed”, “Hereditary” or “A combination of both developed/hereditary”. Forty-four percent stated the development of T2D was a combination of hereditary/development correctly. “Loss of appetite is a symptom of diabetes” was mixed as well with 39% stating “I do not know” and 37% stating

“True”. Remaining consistent with the sum of knowledge data, 78% stated that they have background/prior knowledge of diabetes and 45% of people reported a loved one being affected by diabetes. Most students had some awareness of diabetes with 59% answering “somewhat” and 34% answering “yes”. Except for the two questions that students showed confusion on, the majority of people answered correctly on the other symptoms listed.

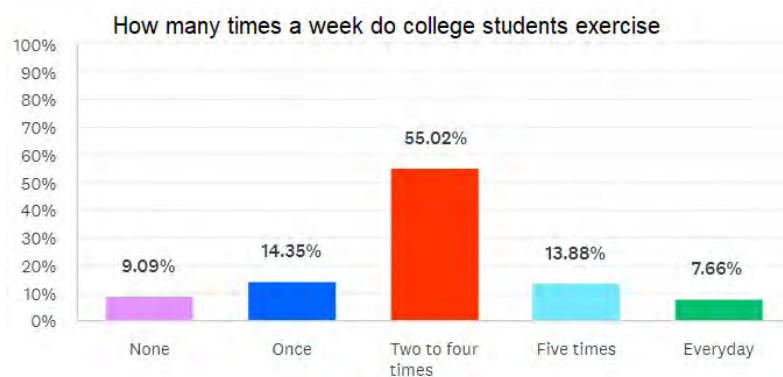


Figure 2a. How many times a week do college students exercise

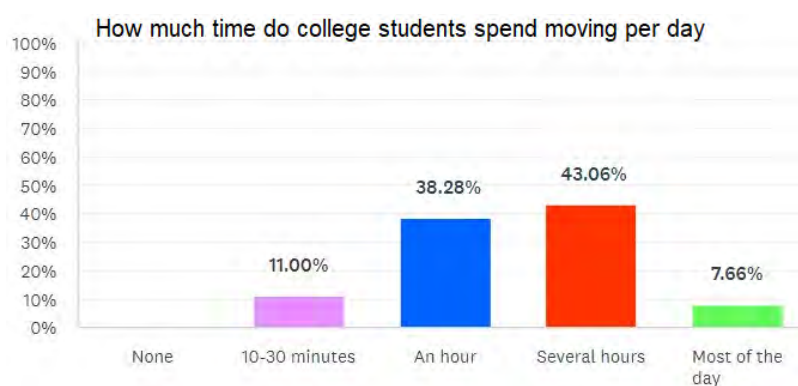


Figure 2b. How much time do college students spend moving per day

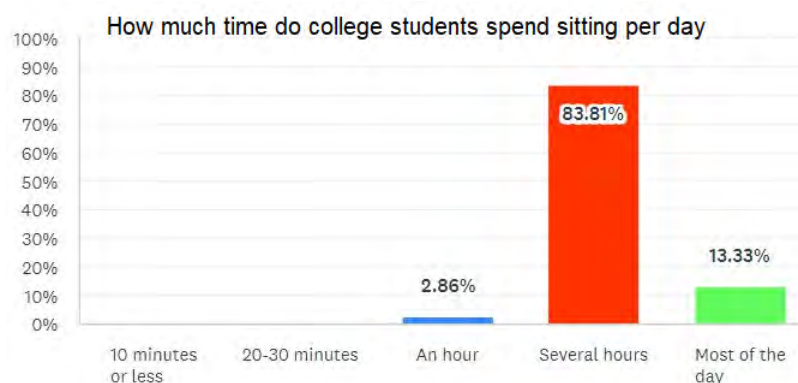


Figure 2c. How much time do college students spend sitting per day

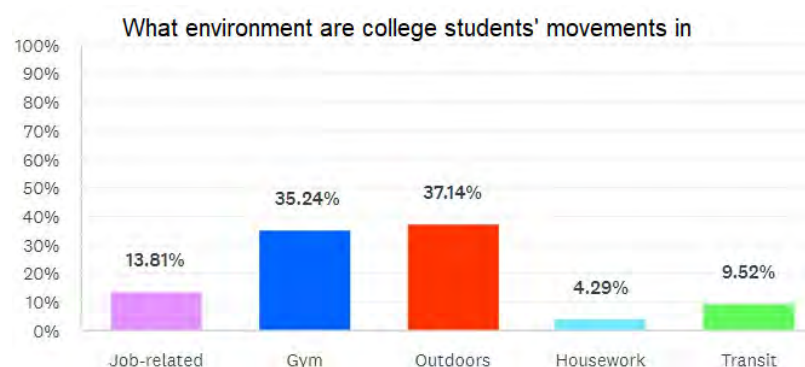


Figure 2d. What environment are college students' movements located in

Figure 2a shows how many times per week college students reportedly exercise. The majority (55%) stated 2-4 times per week. Figure 2b is the amount of time college students reportedly spend moving (such as walking and stretching) per day. The majority fell between an hour (38%) and several hours (43%). Figure 2c measures how much time college students sit per day. The majority (83.8%) stated they sit for several hours per day. Compared to Figure 2b, it can be estimated that college students sit and move about the same time per day or sit more often than move. Figure 2d displays what kind of environment students move in the most. The majority stated the gym or outdoors was where most movements were performed. In the survey, 42% of students stated they were currently more active (in the summer) than during the school year, while 34% stated they were about the same as during the school year. Most students indicated consistently participating in physical activity and stated it was a normal habit for them. They indicated participating in physical activity levels that were evenly distributed between low, moderate, and vigorous exercise.

Meat Consumption

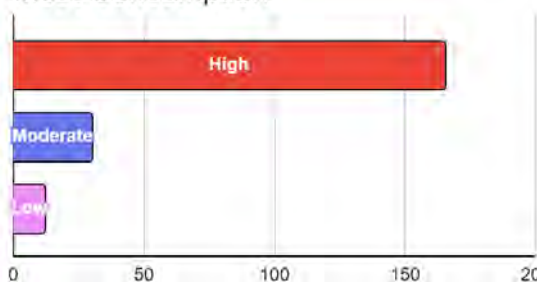


Figure 3a. Meat consumption.

High is indicated by 4-5 or 6-7 times eaten per week,
 moderate is indicated by 3 times eaten per week,
 and low is indicated by 1-2 or 0 times per week.

Dairy Consumption

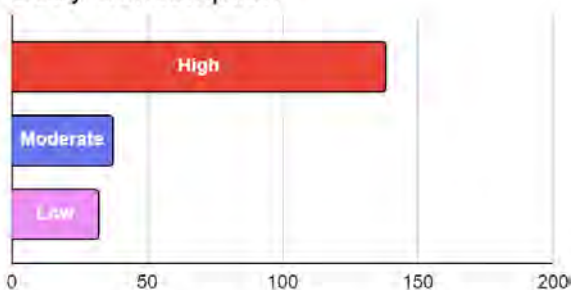


Figure 3b. Dairy consumption.

High is indicated by 4-5 or 6-7 times eaten per week,
 moderate is indicated by 3 times eaten per week,
 and low is indicated by 1-2 or 0 times per week.

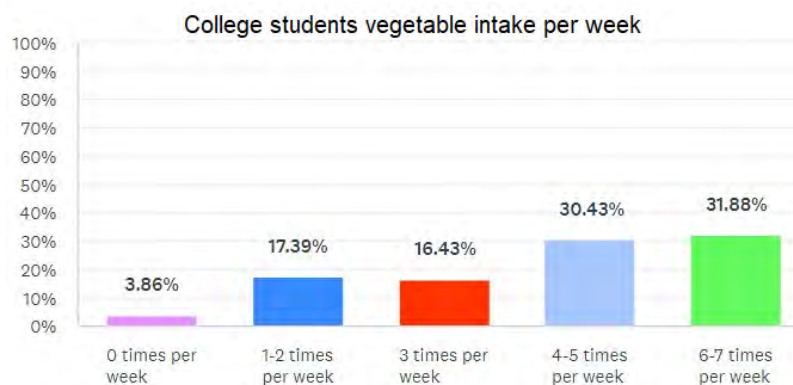


Figure 4. College students eat how many vegetables per week

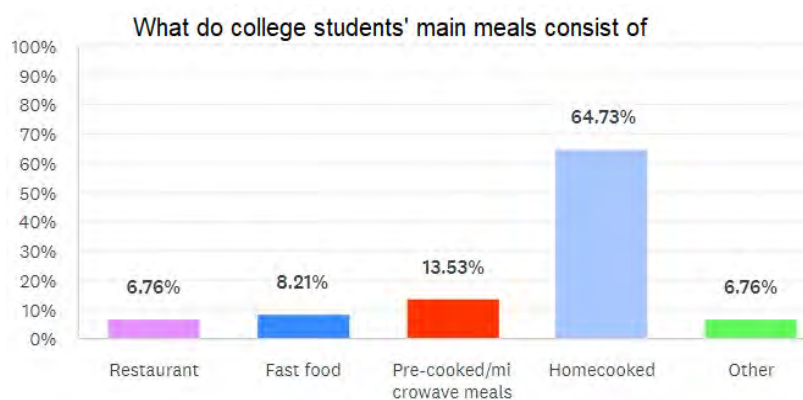


Figure 5. What do college students' main meals consist of

Figures 3a and 3b were meat consumption and dairy consumption levels based on a 3-point scale of high, moderate, and low consumption rates. High consumption was considered as 4-5 and 6-7, moderate consumption was considered 3, and low consumption was considered 0 and 1-2. Many students indicated high consumption rates of both meat and dairy. In Figure 4, students are seen to have a high amount of vegetable consumption at 4-5 or 6-7 times per week. Sweets and fruit consumption was evenly spread and had no pattern in the data between the majority. In addition, many students report an intake of 0 to 1-2 carbonated beverages per week. Finally, students' main meal of the day was dinner (65%), and in Figure 5, meals were overwhelmingly reported as home-cooked (65%).

DISCUSSION:

Many college students in the sample size seem to be aware of the symptoms of diabetes and are fairly health-conscious with high consumption of vegetables, low consumption of carbonated drinks, and a high to moderate active lifestyle. However, meat and dairy intake was considerably high and is recommended to be much lower. Given this high consumption, the Mediterranean diet, with lower amounts of dairy, sweets, and red meat should be encouraged. A moderate amount of fish, white meat, and nuts should be recommended for protein content, and more fruit can be recommended as a replacement for sweets.

These are all self-reported answers which may skew the results, and the survey was mainly advertised to Lee University students. Additionally, this survey was distributed throughout the summer, so this may have led to more movement outdoors due to fewer time constraints and warmer weather. During the school year, students have access to a free gym and the Cherokee National Forest which may explain the students that are equally active during the summer and the school year. Looking at students' majors, one-third of students were science-

based such as nursing, health science, and exercise science. This may have skewed the results to fit a more health-conscious college student, and a different sample size from other majors may show different results. Further, the nutrition section of the survey does not indicate the nutritional values of meals. Although “home-cooked” is considered healthier by some, it does not take into consideration how it is prepared or processed. Additionally, students may be eating home-cooked meals while living at home in the summer, but transition to cafeteria or fast foods during the school year. The two questions that college students showed confusion on illustrated they are not making the connection between their own health habits and the disease itself. Given that most of the survey respondents identified as Caucasian, race may have played a part in the awareness of T2D and health behaviors. Racial minority groups typically have higher diabetes rates, with T2D representing only 5.5% of cases of diabetes in non-Hispanic white youth, but 80% of diabetes in American Indian youth (Dabelea, D. et al., 2021). This is cause for further research with a more inclusive sample size of minorities.

The college-aged demographic is poorly understood in diabetic research. This study opens the door to more studies raising awareness of the symptoms of diabetes and practical health behaviors in this demographic to better prevent the disease for health promotion programs. Given that one-third of the American population is obese or overweight (Centers for Disease and Prevention 2022) and higher BMI is directly correlated to T2D risk, lifestyle changes need to be implemented as soon as possible. If improved health behaviors are developed in younger generations then healthcare costs, obesity, and risk of diseases such as T2D will drastically decrease.

REFERENCES:

- Amanat, S., Ghahri, S., Dianatinasab, A., Fararouei, M., & Dianatinasab, M. (2020). Exercise and Type 2 Diabetes. *Advances in experimental medicine and biology*, 1228, 91–105. https://doi.org/10.1007/978-981-15-1792-1_6
- American Diabetes Association (2020). 3. Prevention or Delay of Type 2 Diabetes: *Standards of Medical Care in Diabetes-2020*. *Diabetes care*, 43(Suppl 1), S32–S36. <https://doi.org/10.2337/dc20-S003>
- Braskamp, L. A., & Engberg, M. E. (2011). How Colleges Can Influence the. *Liberal Education*.
- Caspersen, C. J., Powell, K. E., & Christenson, G. M. (1985). Physical activity, exercise, and physical fitness: definitions and distinctions for health-related research. *Public health reports (Washington, D.C. : 1974)*, 100(2), 126–131.
- Centers for Disease Control and Prevention. (2023, April 24). *What is diabetes?* Centers for Disease Control and Prevention. <https://www.cdc.gov/diabetes/basics/diabetes.html>
- Centers for Disease Control and Prevention. (2022, September 27). *Overweight & obesity*. Centers for Disease Control and Prevention. <https://www.cdc.gov/obesity/index.html>
- Cosentino, F., Grant, P. J., Aboyans, V., Bailey, C. J., Ceriello, A., Delgado, V., Federici, M., Filippatos, G., Grobbee, D. E., Hansen, T. B., Huikuri, H. V., Johansson, I., Jüni, P., Lettino, M., Marx, N., Mellbin, L. G., Östgren, C. J., Rocca, B., Roffi, M., Sattar, N., ... ESC Scientific Document Group (2020). 2019 ESC Guidelines on diabetes, pre-diabetes, and cardiovascular diseases developed in collaboration with the EASD. *European heart journal*, 41(2), 255–323. <https://doi.org/10.1093/eurheartj/ehz486>
- Crandall, J. P., Knowler, W. C., Kahn, S. E., Marrero, D., Florez, J. C., Bray, G. A., Haffner, S. M., Hoskin, M., Nathan, D. M., & Diabetes Prevention Program Research Group (2008). The prevention of type 2 diabetes. *Nature clinical practice. Endocrinology & metabolism*, 4(7), 382–393. <https://doi.org/10.1038/ncpendmet0843>
- Dabelea, D., Hamman, R. F., & Knowler, W. C. (2021). Diabetes in youth.

- Diabetes Canada Clinical Practice Guidelines Expert Committee, Prebtani, A. P. H., Bajaj, H. S., Goldenberg, R., & Mullan, Y. (2018). Reducing the Risk of Developing Diabetes. *Canadian journal of diabetes*, 42 Suppl 1, S20–S26.
<https://doi.org/10.1016/j.jcjd.2017.10.033>
- Dimitri, P., Joshi, K., Jones, N., & Moving Medicine for Children Working Group (2020). Moving more: physical activity and its positive effects on long term conditions in children and young people. *Archives of disease in childhood*, 105(11), 1035–1040.
<https://doi.org/10.1136/archdischild-2019-318017>
- Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2009). *Student development in college: Theory, research, and practice*. John Wiley & Sons.
- Eichorn, L., Bruner, K., Short, T., & Abraham, S. P. (2018). Factors that affect exercise habits of college students. *Journal of Education and Development*, 2(1), 20.
<https://doi.org/10.20849/jed.v2i1.327>
- Fong, D. S., Aiello, L., Gardner, T. W., King, G. L., Blankenship, G., Cavallerano, J. D., ... & American Diabetes Association. (2003). Diabetic retinopathy. *Diabetes care*, 26(suppl_1), s99-s102.
- Fong, D. S., Aiello, L. P., Ferris III, F. L., & Klein, R. (2004). Diabetic retinopathy. *Diabetes care*, 27(10), 2540-2553
- Francesconi, C., Niebauer, J., Haber, P., Weitgasser, R., & Lackinger, C. (2019). Lebensstil: körperliche Aktivität und Training in der Prävention und Therapie des Typ 2 Diabetes mellitus (Update 2019) [Lifestyle: physical activity and training as prevention and therapy of type 2 diabetes mellitus (Update 2019)]. *Wiener klinische Wochenschrift*, 131(Suppl 1), 61–66. <https://doi.org/10.1007/s00508-019-1457-x>
- Gardner, C. D., Landry, M. J., Perelman, D., Petlura, C., Durand, L. R., Aronica, L., Crimarco, A., Cunanan, K. M., Chang, A., Dant, C. C., Robinson, J. L., & Kim, S. H. (2022). Effect of a ketogenic diet versus Mediterranean diet on glycated hemoglobin in individuals with prediabetes and type 2 diabetes mellitus: The interventional Keto-Med randomized

- crossover trial. *The American journal of clinical nutrition*, 116(3), 640–652.
<https://doi.org/10.1093/ajcn/nqac154>
- Guasch-Ferré, M., & Willett, W. C. (2021). The Mediterranean diet and health: a comprehensive overview. *Journal of internal medicine*, 290(3), 549–566.
<https://doi.org/10.1111/joim.13333>
- Guess N. D. (2018). Dietary Interventions for the Prevention of Type 2 Diabetes in High-Risk Groups: Current State of Evidence and Future Research Needs. *Nutrients*, 10(9), 1245.
<https://doi.org/10.3390/nu10091245>
- Health effects of overweight and obesity in 195 countries over 25 years. (n.d.).
<https://www.nejm.org/doi/10.1056/NEJMoa1614362>
- Hu, F. B., Van Dam, R. M., & Liu, S. (2001). Diet and risk of type II diabetes: the role of types of fat and carbohydrate. *Diabetologia*, 44, 805-817.
- Jacobson, A. M., Groot, M. D., & Samson, J. A. (1994). The evaluation of two measures of quality of life in patients with type I and type II diabetes. *Diabetes care*, 17(4), 267-274.
- Jarvie, J. L., Pandey, A., Ayers, C. R., McGavock, J. M., Sénéchal, M., Berry, J. D., Patel, K. V., & McGuire, D. K. (2019). Aerobic Fitness and Adherence to Guideline-Recommended Minimum Physical Activity Among Ambulatory Patients With Type 2 Diabetes Mellitus. *Diabetes care*, 42(7), 1333–1339. <https://doi.org/10.2337/dc18-2634>
- Jönsson, B. (2002). Revealing the cost of Type II diabetes in Europe. *Diabetologia*, 45, S5-S12.
- Kahn, C. R. (1994). Insulin action, diabetogenes, and the cause of type II diabetes. *Diabetes*, 43(8), 1066-1085.
- Karstoft, K., Clark, M. A., Jakobsen, I., Müller, I. A., Pedersen, B. K., Solomon, T. P., & Ried-Larsen, M. (2017). The effects of 2 weeks of interval vs continuous walking training on glycaemic control and whole-body oxidative stress in individuals with type 2 diabetes: a controlled, randomised, crossover trial. *Diabetologia*, 60(3), 508–517.
<https://doi.org/10.1007/s00125-016-4170-6>

Kolb, H., & Martin, S. (2017). Environmental/lifestyle factors in the pathogenesis and prevention of type 2 diabetes. *BMC medicine*, 15(1), 131. <https://doi.org/10.1186/s12916-017-0901-x>

Koopmanschap, M. (2002). Coping with Type II diabetes: the patient's perspective. *Diabetologia*, 45, S21-S22.

Lascar, N., Brown, J., Pattison, H., Barnett, A. H., Bailey, C. J., & Bellary, S. (2018). Type 2 diabetes in adolescents and young adults. *The lancet. Diabetes & endocrinology*, 6(1), 69–80. [https://doi.org/10.1016/S2213-8587\(17\)30186-9](https://doi.org/10.1016/S2213-8587(17)30186-9)

Marchetti P, Bugliani M, De Tata V, Suleiman M, Marselli L. Pancreatic Beta Cell Identity in Humans and the Role of Type 2 Diabetes. *Front Cell Dev Biol*. 2017 May 23;5:55. doi: 10.3389/fcell.2017.00055. PMID: 28589121; PMCID: PMC5440564.

Martín-Peláez, S., Fito, M., & Castaner, O. (2020). Mediterranean Diet Effects on Type 2 Diabetes Prevention, Disease Progression, and Related Mechanisms. A Review. *Nutrients*, 12(8), 2236. <https://doi.org/10.3390/nu12082236>

Mayo Foundation for Medical Education and Research. (n.d.). *Gestational diabetes*. Mayo Clinic. <https://www.mayoclinic.org/diseases-conditions/gestational-diabetes/symptoms-causes/syc-20355339>

Michael G. White, James A.M. Shaw, Roy Taylor; Type 2 Diabetes: The Pathologic Basis of Reversible β -Cell Dysfunction. *Diabetes Care* 1 November 2016; 39 (11): 2080–2088. <https://doi.org/10.2337/dc16-0619>

Milenkovic, T., Bozhinovska, N., Macut, D., Bjekic-Macut, J., Rahelic, D., Velija Asimi, Z., & Burekovic, A. (2021). Mediterranean Diet and Type 2 Diabetes Mellitus: A Perpetual Inspiration for the Scientific World. A Review. *Nutrients*, 13(4), 1307. <https://doi.org/10.3390/nu13041307>

Mirabelli, M., Chiefari, E., Arcidiacono, B., Corigliano, D. M., Brunetti, F. S., Maggisano, V., Russo, D., Foti, D. P., & Brunetti, A. (2020). Mediterranean Diet Nutrients to Turn the

- Tide against Insulin Resistance and Related Diseases. *Nutrients*, 12(4), 1066.
<https://doi.org/10.3390/nu12041066>
- Monte, R. N. (2021). Walking for Fitness: A Case Study on the Experiences, Challenges, and Perceived Benefits from Regular Walking Exercise of Young Adult. *International Journal of Social Science and Education Research Studies*, 1(3), 42-49
- Muscogiuri, G., Verde, L., Sulu, C., Katsiki, N., Hassapidou, M., Frias-Toral, E., Cucalón, G., Pazderska, A., Yumuk, V. D., Colao, A., & Barrea, L. (2022). Mediterranean Diet and Obesity-related Disorders: What is the Evidence?. *Current obesity reports*, 11(4), 287–304. <https://doi.org/10.1007/s13679-022-00481-1>
- National Diabetes Data Group (US), National Institute of Diabetes, Digestive, & Kidney Diseases (US). (1995). *Diabetes in America* (No. 95). National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases.
- Oppert, J. M., Bellicha, A., & Ciangura, C. (2021). Physical activity in management of persons with obesity. *European journal of internal medicine*, 93, 8–12.
<https://doi.org/10.1016/j.ejim.2021.04.028>
- Ota, A., & Ulrih, N. P. (2017, June 16). *An overview of herbal products and secondary metabolites used for management of type two diabetes*. Frontiers.
<https://www.frontiersin.org/articles/10.3389/fphar.2017.00436/full>
- Palacios, O. M., Kramer, M., & Maki, K. C. (2019). Diet and prevention of type 2 diabetes mellitus: beyond weight loss and exercise. *Expert review of endocrinology & metabolism*, 14(1), 1–12. <https://doi.org/10.1080/17446651.2019.1554430>
- Palermi, S., Iacono, O., Sirico, F., Modestino, M., Ruosi, C., Spera, R., & De Luca, M. (2021). The complex relationship between physical activity and diabetes: an overview. *Journal of basic and clinical physiology and pharmacology*, 33(5), 535–547.
<https://doi.org/10.1515/jbcpp-2021-0279>
- Pelliccia, A., Sharma, S., Gati, S., Bäck, M., Börjesson, M., Caselli, S., Collet, J. P., Corrado, D., Drezner, J. A., Halle, M., Hansen, D., Heidbuchel, H., Myers, J., Niebauer, J., Papadakis,

- M., Piepoli, M. F., Prescott, E., Roos-Hesselink, J. W., Graham Stuart, A., Taylor, R. S., ... ESC Scientific Document Group (2021). 2020 ESC Guidelines on sports cardiology and exercise in patients with cardiovascular disease. *European heart journal*, 42(1), 17–96. <https://doi.org/10.1093/eurheartj/ehaa605>
- Pivari, F., Mingione, A., Brasacchio, C., & Soldati, L. (2019). Curcumin and Type 2 Diabetes Mellitus: Prevention and Treatment. *Nutrients*, 11(8), 1837. <https://doi.org/10.3390/nu11081837>
- Rubio-Almanza, M., Cámara-Gómez, R., & Merino-Torres, J. F. (2019). Obesity and type 2 diabetes: Also linked in therapeutic options. *Obesidad y diabetes mellitus tipo 2: también unidas en opciones terapéuticas. Endocrinología, diabetes y nutrición*, 66(3), 140–149. <https://doi.org/10.1016/j.endinu.2018.08.003>
- Salama, A., & Esmail, N. (2018). Assessing nutritional awareness and dietary practices of college-aged students for developing an effective nutrition educational plan. *Canadian Journal of clinical nutrition*, 6(2).
- Sami, W., Ansari, T., Butt, N. S., & Ab Hamid, M. R. (2017). Effect of diet on type 2 diabetes mellitus: A review. *International journal of health sciences*, 11(2), 65.
- Sepah, S. C., Jiang, L., & Peters, A. L. (2014). Translating the Diabetes Prevention Program into an Online Social Network: Validation against CDC Standards. *The Diabetes educator*, 40(4), 435–443. <https://doi.org/10.1177/0145721714531339>
- Schubert-Olesen, O., Kröger, J., Siegmund, T., Thurm, U., & Halle, M. (2022). Continuous Glucose Monitoring and Physical Activity. *International journal of environmental research and public health*, 19(19), 12296. <https://doi.org/10.3390/ijerph191912296>
- Shubrook, J. H., Chen, W., & Lim, A. (2018). Evidence for the Prevention of Type 2 Diabetes Mellitus. *The Journal of the American Osteopathic Association*, 118(11), 730–737. <https://doi.org/10.7556/jaoa.2018.158>

- Stitt, A. W., Curtis, T. M., Chen, M., Medina, R. J., McKay, G. J., Jenkins, A., ... & Lois, N. (2016). The progress in understanding and treatment of diabetic retinopathy. *Progress in retinal and eye research*, 51, 156-186.
- Sun, H., Saeedi, P., Karuranga, S., Pinkepank, M., Ogurtsova, K., Duncan, B. B., ... & Magliano, D. J. (2022). IDF Diabetes Atlas: Global, regional and country-level diabetes prevalence estimates for 2021 and projections for 2045. *Diabetes research and clinical practice*, 183, 109119.
- Tinajero, M. G., & Malik, V. S. (2021). An Update on the Epidemiology of Type 2 Diabetes: A Global Perspective. *Endocrinology and metabolism clinics of North America*, 50(3), 337–355. <https://doi.org/10.1016/j.ecl.2021.05.013>
- Wang, W., & Lo, A. C. (2018). Diabetic retinopathy: pathophysiology and treatments. *International journal of molecular sciences*, 19(6), 1816
- Wareham N. J. (2022). Personalised prevention of type 2 diabetes. *Diabetologia*, 65(11), 1796–1803. <https://doi.org/10.1007/s00125-022-05774-7>
- Weber, M. B., Hassan, S., Quarells, R., & Shah, M. (2021). Prevention of Type 2 Diabetes. *Endocrinology and metabolism clinics of North America*, 50(3), 387–400. <https://doi.org/10.1016/j.ecl.2021.05.003>
- Whitmire, W., Al-Gayyar, M. M., Abdelsaid, M., Yousufzai, B. K., & El-Remessy, A. B. (2011). Alteration of growth factors and neuronal death in diabetic retinopathy: what we have learned so far. *Molecular Vision*, 17, 300.
- Zheng, Y., Ley, S. H., & Hu, F. B. (2018). Global aetiology and epidemiology of type 2 diabetes mellitus and its complications. *Nature reviews. Endocrinology*, 14(2), 88–98. <https://doi.org/10.1038/nrendo.2017.151>
- Zimmet, P. Z., Magliano, D. J., Herman, W. H., & Shaw, J. E. (2014). Diabetes: A 21st Century challenge. *The Lancet Diabetes & Endocrinology*, 2(1), 56–64. [https://doi.org/10.1016/s2213-8587\(13\)70112-8](https://doi.org/10.1016/s2213-8587(13)70112-8)

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Impact of Protective Gear on Dynamic Balance Mobility, and Motor Control in Firefighters Using the Y-Balance Test Between Year 2 and Year 1.

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ABSTRACT

Objective: The purpose of this study was to measure the change between year 2 and year 1 of the impact of personal protective ensembles/bunker gear (PPE) and self-contained breathing apparatus (SCBA) on firefighters' upper and lower body mobility dynamic balance and motor control using the Y-Balance Test (YBT). **Methods:** Dynamic balance was measured using the upper (UQ) and lower quarter (LQ) YBT. Seven firefighters had previously participated in the first year of the three-year study from the local municipal fire department. UQ and LQ composite reach scores (C) were measured on the right (RC) and left (LC) sides on two separate occasions, wearing workout gear (PT), and Bunker gear and SCBA (FULL). SPSS was used to identify statistical differences using paired sample t-tests, alpha set at 0.05 **Results:** There were statistically significant differences in the LQ posterior medial reach in the right (10.07 ± 5.84 cm, $p = 0.004$) and left (12.43 ± 8.24 cm, $p = 0.007$) sides in PT between Year 2 and Year 1. There were no statistically significant differences in the Y Balance Test score for the UQ between year 2 and year 1. **Conclusion:** Due to the limited sample size, data must be interpreted with caution. The differences could be attributed to the learning effect due to no injuries being reported. However, after further investigation the significant differences could be caused by extreme scores by individual subjects.

KEY WORDS: Y Balance Test, Lower quarter, Upper quarter, firefighters, PPE, SCBA

INTRODUCTION

The data presented was from year 2 of a 3-year study, investigating the impact of firefighter PPE and SCBA on Y balance test scores and the change between years.

The purpose of the Y-Balance Test (YBT) is to identify asymmetries between upper and lower body quarters by challenging reach in three directions while balanced on one leg or arm. This position challenges dynamic balance, strength, flexibility, core control and proprioception at the limit of an individual's stability. (Cook and Plisky, 2015). According to International Association of Fire Fighters (IAFF)'s Wellness-Fitness Initiative described the essential structural firefighting tasks can include hose line operations, extensive crawling, lifting and carrying heavy objects, ladder climbing, ventilating roofs or walls using power or hand tools for forcible entry while wearing approximately 22.6 kg or more

of personal protective ensembles/equipment (PPE) or bunker gear and self-contained breathing apparatus gear. (IAFF, 2018)

Campbell and Evarts conducted a survey for The National Fire Protection Association (NFPA) which reported an estimated 64,875 firefighter injuries occurred while on duty in 2020. The NFPA separated injuries into two broad categories, Fireground operations (22,450) and non-fireground (42,425) operations. Fire ground was defined as injuries that occurred at the fireground. While Non-Fireground included injuries that occurred while responding (4,975) to or returning from an incident, injuries incurred during training activities (7,550), during non-fire emergency incidents (13,650) or during other on-duty activities (16,250). The leading cause of fireground injuries was overexertion or strain at 31 percent, while 49 percent of all non-fireground injuries were categorized as strains, sprains, or muscular pain injuries. (Campbell and Evarts, 2021)

The purpose of this study was to investigate changes between year 2 and year 1 of the impact of PPE and SCBA on firefighters' upper and lower body dynamic balance and motor control using the YBT. We hypothesized that there would be no significant differences between year 2 and year 1 in PT or FULL lower and upper quarter composite scores or reach directions.

METHODS

Participants

Prior to testing IRB approval was received, in conjunction with support from the Fire Chief and the CFD (Cleveland Fire Department) command structure. As part of year two of this three-year study, all members were invited to participate for the second time. Testing took place over a period of three weeks. There was a two-hour window from 1400-1600 hours that volunteers could come in and be tested while on duty. An informed consent was read and signed by all participants in the first year and is valid over the life of the three-year study. Participants were given an injury survey which they read and signed before participating. Researchers evaluated the injury surveys for any reasons a participant should not be tested. None of the participants reported any injuries.

Subjects:

Seven male firefighters from the original study returned for year 2. Body mass was measured using a Detecto balance Physician scale (Brooklyn, NY). The scale was calibrated at the start of each testing day. Body mass was measured at the beginning of each testing session.

Testing Protocol

The testing sessions were performed in a counter-balanced order to mitigate the learning effect. The firefighters were randomly assigned to an A group or B group. The A group's testing order was PT then FULL. The B group's testing order was FULL then PT. Testing

dates were structured to allow at least one day apart. Testing dates were one week to 1.5 weeks apart due to their work schedule of 24 hours on duty and 48 hours off duty.

Upper Quarter Y-balance instructions:

To perform the UQ-YBT, volunteers were instructed to assume a pushup position perpendicular to the block they were positioned on. Feet should be shoulder width apart with the arm positioned so that the hand is parallel to the line on the block. After establishing themselves, the volunteers were to push the blocks in three different directions with the hand that was not on the block in the following order: medial, inferolateral, and superolateral. For the scores to count, participants had to show control by performing all three directions consecutively without fault. Faults were constituted as: falling or touching the ground with the reaching hand in between each movement, lifting a foot while reaching in any direction, shoving the push box, and failing to return to starting position under control (Cook and Plisky, 2015). During the first testing session, firefighters who had to wear PT or FULL were given the option to take up to 3 practice rounds, before recording their scores. The practice rounds were given to allow some familiarization with movements before scores were recorded.

Lower Quarter Y-balance instructions:

To perform the LQ-YBT participants were instructed to stand with one foot on the block, their toes just behind the red line. Arms were allowed to be placed on hips or in the air. The participants would then push the block in three directions. They would complete all three trials in each direction alternating feet, to prevent fatigue, before moving to the next direction. The three reach directions are as follows: anterior, posteromedial, and posterolateral. For the scores to count, participants had to show control performing each trial without fault. Faults were constituted as: failure to return to start position under control, kicking the push box, touching down during reach, and placing foot on top of stance box (Cook and Plisky, 2015). The firefighters did not have to use up all their practice rounds, however, they were required to do at least one practice before recording. Scores were recorded to the closest half centimeter.

Statistical Analysis

Data was analyzed using the Statistical Package for Social Sciences (IBM SPSS Statistics for Window, Version 25.0. Armonk, NY: IBM Corp). Alpha was set at $p < 0.05$ to determine statistical significance. Multiple paired-sample T-tests were used to identify statistical differences between Year 2 and Year 1 composite and reach scores for PT and FULL. The composite scores were calculated by adding all the best scores in each direction and dividing them by three times the right arm limb length.

RESULTS

Lower Quarter

There were no statistically significant differences in composite scores on the right and left sides between year 2 and year 1 in PT ($p=0.136$) or FULL ($p=0.225$) as seen in Table 1 and 2 below.

Table 1.

PAIRED SAMPLES TEST Composite Score Right Side							
Paired Differences							
				95% Confidence Interval of the Difference			
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	df	Sig. (2-tailed)
RCPTY2 - RCPTY1	2.65	4.07	1.54	-1.12	6.41	6	.136
RCFULLY2 - RCFULLY1	4.16	8.14	3.08	-3.37	11.69	6	.225

RC= Right composite score. PT = workout gear. FULL = Bunker gear and SCBA. Y2= year 2. Y1 = year 1.

Table 2.

PAIRED SAMPLES TEST Composite Score Left Side							
Paired Differences							
				95% Confidence Interval of the Difference			
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	df	Sig. (2-tailed)
LCPTY2 - LCPTY1	3.84	4.96	1.87	-0.75	8.43	6	.086
LCFULLY2 - LCFULLY1	3.09	8.64	3.27	-4.90	11.08	6	.381

LC= Left composite score. PT = workout gear. FULL = Bunker gear and SCBA. Y2= year 2. Y1 = year 1.

Right LQ Reach Directions

There was no statistical significance in right anterior reach or right posterior lateral reach in PT and FULL between Year 2 and Year 1.

There was a statistically significant difference in the right posterior medial reach in PT between Year 2 and Year 1. The right posterior medial reach had a mean of 10.07 ± 5.84 cm, and $p = 0.004$. Results can be seen in Table 3.

Table 3.

PAIRED SAMPLES TEST Right Reach Directions							
Paired Differences							
				95% Confidence Interval of the Difference			
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	df	Sig. (2-tailed)
RAPTY2 - RAPTY1	2.5	9.05	3.42	-5.87	10.87	6	.492
RPMPTY2 - RPMPTY1*	10.07	5.84	2.21	4.67	15.47	6	.004
RPLPTY2 - RPLPTY1	-5.36	8.42	3.18	-13.15	2.43	6	.143
RAFULLY2 - RAFULLY1	-1.29	2.94	1.11	-4.01	1.44	6	.292
RPMFULLY2 - RPMFULLY1	10.21	10.51	3.97	0.5	19.93	6	.042
RPLFULLY2 - RPLFULLY1	2.36	11.51	4.35	-8.29	13	6	.607

RA = right anterior reach direction. RPM = right posteromedial reach direction. RPL = right posterolateral reach direction. PT = workout gear. FULL = Bunker gear and SCBA. Y2= year 2. Y1 = year 1. *Indicates stat. sign. diff at $p < 0.05$.

Left LQ Reach Directions

There was no statistical significance in left anterior reach or left posterior lateral reach in PT and FULL.

There was a statistically significant difference in the left posterior medial reach in PT between Year 2 and Year 1. The left posterior medial reach had a mean of 12.43 ± 8.24 cm, and $p = 0.007$. Results can be seen below in Table 4.

Table 4.

PAIRED SAMPLES TEST Left Reach Directions							
Paired Differences							
				95% Confidence Interval of the Difference			
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	df	Sig. (2-tailed)
LAPTY2 - LAPTY1	1.36	6.53	2.47	-4.68	7.4	6	.602
LPMPTY2 - LPMPTY1*	12.43	8.24	3.11	4.81	20.05	6	.007
LPLPTY2 - LPLPTY1	-3	8.99	3.4	-11.31	5.31	6	.411
LAFULLY2 - LAFULLY1	-1.07	3.74	1.41	-4.53	2.38	6	.477
LPMFULLY2 - LPMFULLY1	9	10.75	4.06	-0.95	18.95	6	.069
LPLFULLY2 - LPLFULLY1	0.29	12.52	4.73	-11.29	11.86	6	.954

LA = left anterior reach direction. LPM = left posteromedial reach direction. LPL = left posterolateral reach direction. PT = workout gear. FULL = Bunker gear and SCBA. Y2= year 2. Y1 = year 1. *Indicates stat. sign. diff at $p < 0.05$.

There was no statistically significant difference in the left posterior medial reach in FULL between Year 2 and Year 1.

Upper Quarter

There were no statistically significant differences in composite scores between year 2 and year 1 in PT ($p = 0.104$) or FULL ($p = 0.159$).

Right and Left UQ Reach Directions

There were no statistically significant differences in any of the reach directions between year 2 and year 1 in PT or FULL.

DISCUSSION

The research hypothesis stated that there would be no statistical differences in PT and FULL YBT composite and directional reach scores between year 2 and year 1. The research hypothesis was correct for UQ and LQ composite scores and UQ directional reach scores. UQ composite and directional reach scores were not statistically different between year 2 and year 1.

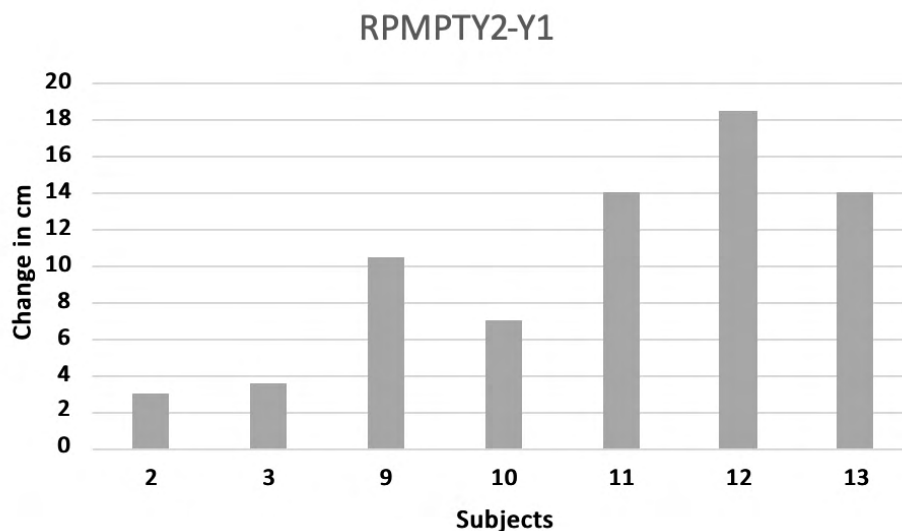
UQ

The upper quarter results presented no significant changes in composite score or reach directions. We hypothesized there would be no change in composite scores between Year 2 and year 1 in PT and Full. After analysis of the results, we accepted the null hypothesis as there were no statistically significant differences in lower or upper quarter composite scores in PT or FULL.

Lower Right Reach Directions

For lower quarter right reach directions we hypothesized there would be no change in PT or FULL between year 2 and year 1. There were extreme scores by individual subjects that created statistically significant differences in the right posteromedial reach direction in both PT and FULL. In PT, the individual score changes ranged from 3 cm to 18.5 cm. The average change was 10.07 cm. Average reach differences can be seen in Figure 1. Scores are presented by Subject number.

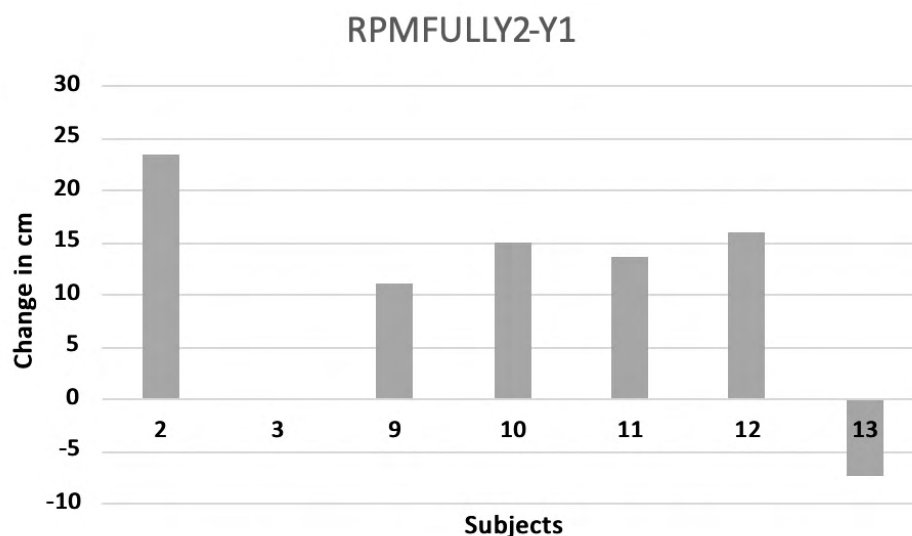
Figure 1 Differences in Reach Scores Right Posteromedial between Y2 and Y1 in PT Gear



RPMPTY2-Y1 = Right posteromedial reach score PT.

In FULL, the individual score differences ranged from -7.5 cm to 23.5 cm. The average change was 10.21 cm. Results shown in Figure 2 below.

Figure 2. Differences in Reach Scores Right Posteromedial between Y2 and Y1 in FULL Gear

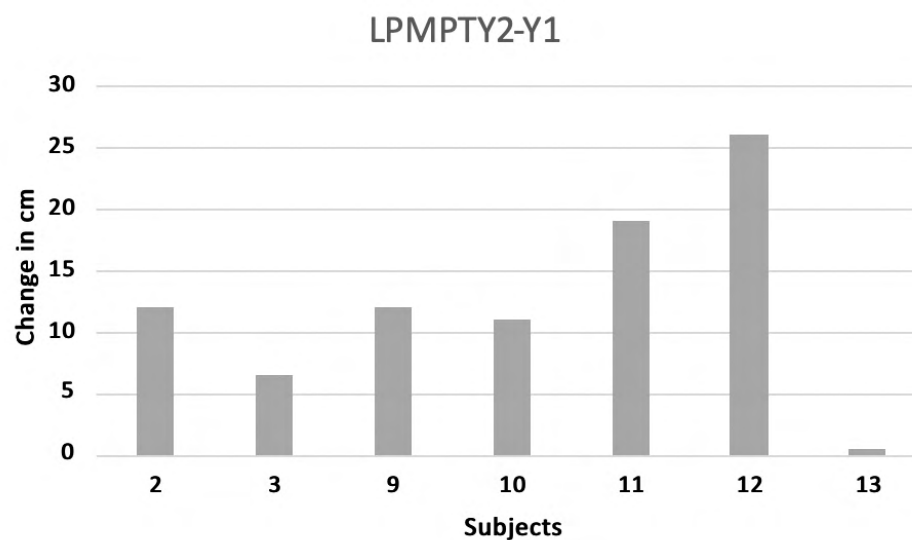


RPMFULLY2-Y1 = Right posteromedial reach score FULL year 2 – year 1.

Lower Left Reach Directions

The lower quarter left reach directions we rejected the null hypothesis of no change in all reach directions in PT in the left posteromedial reach direction. The individual score differences impacted the statistical significance. The individual differences range from 0.5 cm to 26 cm. The average change was 12.42 cm. Results shown below in Figure 3.

Figure 3. Differences in Reach Scores Left Posteromedial between Y2 and Y1 in PT Gear



LPMPY2-Y1 = Left posteromedial reach score PT year 2 – year 1.

CONCLUSION

The results must be interpreted with caution due to the low n size. With these results, we attribute the changes between year 2 and year 1 to the Learning Effect. Researchers expected to see changes in the same direction. There was improvement as seen in the results of LQ RPM reach in both PT and FULL, but this did not carry over into the LQ LPM. The improvement in LQ LPM in PT did not carry over into the LPM in FULL. Games conducted a study on the effects of PPE on dynamic balance in firefighters. In this study they found that PPE negatively impacts dynamic balance (Games, 2019). They saw this across all LQ reach directions. The year 1 study that was conducted found that there was a difference in PT to FULL for LQ composite scores, whereas year 2 resulted in no significant differences in the UQ and LQ composite scores (Bernedo, 2023). Researchers also hypothesized that body mass could explain the differences but there was no difference in body mass between Y2 and Y1.

This led researchers to conclude that the learning effect to be reason for the differences. The learning effect occurs when retesting happens over a period of time. In this case, our subjects had previously done the test and now had a basic knowledge of how to complete the task at hand. This knowledge paired with the required practice attempts before score recording could be considered a cause of improvement in YBT scores.

REFERENCES

1. Campbell, R., & Evarts, B. (2021). United States Firefighter Injuries in 2020. *National Fire Protection Association (NFPA)*.
2. Cook, G., & Plisky, P. (2015). *YBT Online Manual - Functional Movement Systems*.
3. Bernedo, J. R., Dohmeier, M., Janofsky, E., & Iosia, M. (2023). IMPACT OF PROTECTIVE GEAR ON DYNAMIC BALANCE AND MOBILITY IN FIREFIGHTERS USING THE Y-BALANCE SCALE. In *International Journal of Exercise Science: Conference Proceedings* (Vol. 16, No. 2, p. 327).
4. Games, K. E., Csiernik, A. J., Winkelmann, Z. K., True, J. R., & Eberman, L. E. (2019). Personal protective ensembles' effect on dynamic balance in firefighters. *Work*, 62(3), 507–514. <https://doi.org/10.3233/wor-192885>.
5. Meihui Tao, Diyu Yang, Weiwei Liu, Learning effect and its prediction for cognitive tests used in studies on indoor environmental quality, *Energy and Buildings*, Volume 197, 2019, Pages 87-98, ISSN 0378-7788, <https://doi.org/10.1016/j.enbuild.2019.05.044>.

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An Old Testament Prophetic Motif in The Speeches of Acts

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Introduction

“The speeches in Acts are more than a literary device, or a historiographic convention, or a theological vehicle—though they are all of these; they achieve the unification of the otherwise diverse and incoherent elements comprised by Acts.”¹ This comment by Marion Soards encapsulates well the importance and centrality of the speeches in Acts. Nevertheless, prevalent scholarly discourse has often sought to compartmentalize the speeches in the Book of Acts from the broader biblical narrative, interpreting them as subjective fragments. Conversely, the research I have conducted has led me to the distinct conclusion that these historic accounts from the Book of Acts seamlessly continue the unfolding of the *τῆ βουλή τοῦ θεοῦ* (“the plan of God”) seen throughout the entire Old Testament.

Importantly, it’s worth highlighting that the motif emerges not solely from the speeches’ content, but also from the Apostles themselves, as conveyed through their speeches. Luke records the Apostles’ self-definition as they refer to themselves as “witnesses” of the Gospel—a characteristic which seems to be in the vein of the prophets from the Old Testament. Indeed, even though one can acknowledge the differences between the Apostles and the prophets, the speeches in Acts appear to follow a format reminiscent of that found in the Old Testament. Moreover, the juxtaposition between the role of the Apostles and the prophets can be observed in the shared qualities within the content of their messages to their respective audiences. To elaborate, in both the OT prophetic speeches and the speeches of Acts, there can be found a similar indictment for disobedience, an exhortation to repentance, and as each speech comes to a close, a promise of salvation. For the NT audience this salvation is extended to those who receive

¹ Marion L. Soards, *The Speeches in Acts: Their Contents, Context, and Concerns* (Louisville, Kentucky: Westminster/John Knox Press, 1994), 12.

Jesus. In the Old Testament context, salvation would have been understood as the restoration of a Jewish person to their God, Yahweh.

In addition to the parallels previously noted, throughout this paper I will also address, where applicable, thoughts from prior scholarly theological discussions. A few of these ideas encompass Luke's authorship and the possibility of him creating the speeches out of whole cloth, along with the presence of Hellenistic influence within the speeches. Yet, my focus is to emphasize the Old Testament prophetic theme that is found in the speeches, the Apostles' function as "witnesses," and the parallels they share with the Old Testament prophets. Finally, I will examine the nature of the speeches and the prophetic motif found within them in a broader scriptural context. My research will build upon the work of Marion L. Soards, "The Speeches in Acts: Their Content, Context, and Concerns", and F.F. Bruce's article, "The Speeches in the Acts of the Apostles", as many of their thoughts have helped guide those within this discussion.

Prior to unraveling the underlying motif threaded throughout the speeches, allow me to first consider, in short, what many theologians have discussed in relation to the speeches in Acts: Luke's authorship.

I. Luke as The Author

Throughout my research I have come across a multitude of perspectives concerning the speeches in Acts, especially regarding Luke's authorship. Interestingly though, the majority of scholars and proposals seem to assume a position contrary to my own.² While each scholar holds

² Some of the theologians I have interacted with in my research are F.F. Bruce, Martin Dibelius of Heidelberg, Stanley E. Porter, H.N. Ridderbos, F.J. Foakes Jackson, and Simon J. Kistemaker among others.

a distinct belief regarding the speeches and Luke's authorship, they all seem to share the same concern; did Luke create the speeches out of whole cloth and what were his influences?

Martin Dibelius, who holds an extreme view, boldly asserts that "these speeches without a doubt, are as stands inventions of the author." This view is at odds with the conclusions that a majority of theologians believe. F.F. Bruce writes what I believe the majority of scholars would resonate with in a more succinct manner. He states: "When a student of the classics reads Luke's twofold work, he realizes that in several ways Luke has inherited the tradition of Greek historical writing, handed down from the time of Herodotus and Thucydides in the fifth century B.C."³ This perspective is one which scholars may find intellectually pleasing, as it assumes Luke's authorship while also acknowledging the influence of Greek historiography. However, upon closer examination, while it is likely Luke was influenced by some Greek writers, I do not believe these correlations outweigh the influence of the Hebrew Bible. Although, some may refute divine inspiration or even OT influence on the speeches because they believe these speeches to have been curated by Greek thought. I will address these inconsistencies later.

The Gospel of Luke, the first of his two-fold work, is often regarded as an accurate and faithful representation of the ministry of Jesus Christ of Nazareth. This belief is based upon Luke's statement in Luke 1:1-4, where he expresses his intention to provide an orderly and accurate account; "Inasmuch as many have undertaken to compile a narrative of the things that have been accomplished among us, just as those who from the beginning were eyewitnesses and ministers of the word have delivered them to us, it seemed good to me also, having followed all things closely for some time past, to write an orderly account for you, most excellent Theophilus, that you may have certainty concerning the things you have been taught" (ESV).

³ F.F. Bruce, "The Speeches in the Acts of the Apostles," Tyndale Press, Pbk. 27 (1942): 6.

This leads me to the ponder, if many have faith in Luke's representation of the Gospel of Jesus Christ, why then would they lack such faith in his recounting of the speeches in Acts? Furthermore, if we assume the faithfulness of Thucydides and other great historiographers within their own writings, why then can we not suppose the same of Luke, especially considering these may have been vital influences upon his account?⁴

Many scholars may conclude that Luke was inspired by the Greek writers, especially if one were to follow Bruce's comparison of Thucydides 1.22.1 and Luke 1:1-4.⁵ However, for scholars who know the Greek ways of recounting history, this sort of realization might raise questions concerning the certainty of Luke's authorship.

Thomas L. Brodie describes the practice of imitation, a commonly used practice by Greek writers, as seeking to "imitate and rival existing texts." Brodie makes note that "it was used by almost all types of writers, including biographers and historians."⁶ Bruce's observations regarding how Greek historiographers constructed speeches additionally support this idea of unreliable methods: "they composed speeches freely and put them into the mouths of their characters, not with any consideration of historical probability, but as dramatic rhetorical exercises in which they tried to show off their highest skill in careful literary composition."⁷ Bruce continues this when writing, "'Some think', says Dionysius of Halicarnassus, 'that it is in these that the summit of a writer's genius lies.' To these writers' history was an art, not a

⁴ Simon J. Kistemaker, "The Speeches in Acts," *Criswell Theological Review* 5.1, 31-41 (1990): 32. My train of thought was extracted from this page as were other quotes.

⁵ Bruce, "The Speeches in the Acts of the Apostles," 6-8

⁶ Thomas L. Brodie, "Towards Unraveling the Rhetorical Imitation of Sources in Acts: 2 Kgs 5 as One Component of Acts 8, 9-40," *Biblica* 67, no. 1 (1986): 44.

⁷ Bruce, "The Speeches in the Acts of the Apostles," 7.

science.”⁸ Therefore, based upon these explanations by Bruce and Brodie, Luke’s background as a Greek writer ought to bring forth concerns in regard to the credibility of the speeches in Acts.

Nevertheless, even in light of these scholars’ perspectives, my research has led me to the conclusion which Soards articulates well: “In content... the speeches of Acts are more like portions of the Septuagint than comparable to Greco-Roman historiographical addresses.”⁹ On the one hand, it is very plausible to think of Luke as capable of creating a work such as the speeches in Acts; especially given his excellent Greek throughout his two-fold work. Yet on the other hand, upon closer observation, the plausibility seems to become unrealistic based upon two observations: Luke’s awkward Greek throughout the speeches in particular and his non-Jewish background.

Beginning with Luke’s Greek, Bruce notes, “for an author who could write such idiomatic Greek as the Prologue to the third Gospel, the Greek of some of the speeches in Acts is surprisingly awkward.”¹⁰ This realization goes against the grain of the typical Greek historiographer. Bruce further expands on the Greek way of writing when making note that to compose history as an art was the “fashion of the time.”¹¹ However, upon examination of the speeches, especially in comparison to Luke’s Gospel, there is a striking difference in the Greek. When contrasted with Dionysius’ words, it would seem improbable and doubtful that Luke’s intention in creating these speeches was to impress his audience with his command of the Greek language. This idea of Luke creating these speeches out of whole cloth for the purpose of impressing not only appears improbable but also unattainable, given his non-Jewish background.

⁸ Ibid.

⁹ Soards, *The Speeches in Acts*, 160.

¹⁰ Bruce, “The Speeches in the Acts of the Apostles,” 8

¹¹ Ibid., 7.

In regard to Luke's background, it's important to note that he was a Roman citizen and a Gentile. This presents contextual challenges when considering the likelihood of Luke creating these speeches. While he would have had access to the Septuagint, and even had familiarization with the text, his mastery of the Jewish scriptures would no doubt not have equaled that of the Apostles. Also worth noting is that many scholars often reference the Gospel of Mark as inspiration for the writing of Luke. Several scholars might even agree that Matthew potentially served as an additional source for Luke, although this remains a subject of debate, not to mention the widely discussed putative "Q" source. It's worth emphasizing that both Mark and Matthew's background was Jewish, therefore indicating a significant impact on them from Jewish literature, primarily the Hebrew Bible. This significance extends to Luke's writings, as the impact of the Hebrew Bible on their Gospels likely paralleled its influence on Luke and his own writings.¹² This all becomes particularly relevant when considering the Old Testament prophetic motifs that run through the "DNA" of the speeches.

In traditional Jewish circles, children would typically begin attending synagogue schools by the age of six, and by the time they reached ten, they would have memorized the entire Torah.¹³ As previously mentioned, Luke would not have benefited from this type of education. However, Apostles such as Peter and Paul—two of the main speech givers we will examine—would have received this type of education due to their Jewish upbringing. This kind of memorization and commitment to the Scriptures would have led the Apostles to interpret everything through the lens of the Old Testament and even speak in a similar vernacular.

¹² For more information see: Thomas J. Mosbø, "The Writing of Luke," in *Luke the Composer: Exploring the Evangelist's Use of Matthew*, (Minneapolis: Fortress Press, 2017), 123-60.

¹³ Lisa, Schreiber. "Inscribing Scripture on Your Child's Heart," accessed September 12, 2023, <https://www.covenantchristian.net/blog/inscribing-scripture-on-your-childs-heart>.

Given this explanation, I would contend that Luke would not have been capable of composing the speeches, where the foundation of each seems to be rooted in Jewish literature, specifically the Hebrew text. However, while these speeches may not be whole-cloth creations of Luke's, they do exhibit traits of summarization. For example, in Acts 2:40a Luke states, — “with many other words he (Peter) warned them; and he pleaded with them.” Here Luke seems to allude to the condensing of the speeches when put into written form. Further, the speeches often seem too short for the occasions to which they are attributed.¹⁴ This sort of realization has led some scholars to believe that Luke had adopted the approach of Thucydides, however, based upon my research, I would beg to differ.

Thucydides wrote on his method of recording Greek speeches when saying, “it was in all cases difficult to carry them word for word in one's memory, so my habit has been to make the speakers say what was in my opinion demanded of them by the various occasions, of course adhering as closely as possible to the general sense of what they really said.”¹⁵ The difference between Luke and Thucydides historiographical works rests primarily in the fact that their situations were independent of each other. In Luke's recording of the speeches, he would not have had to recall the speeches completely by memorization like Thucydides with those from the Peloponnesian war. Instead, Luke would have been able to go about acquiring the speeches in a variety of forms. The first of these is noted by Simon J. Kistemaker: “Luke was personally present when Paul addressed the Ephesian elders, spoke in Jerusalem, defended himself before

¹⁴ George A. Kennedy, “The Speeches in Acts,” in *New Testament Interpretation Through Rhetorical Criticism*, (North Carolina: University of North Carolina Press, 1984), 115.

¹⁵ Bruce, *The Speeches in the Acts of the Apostle*, 6. Bruce acquires his quotation from R. Crawler's translation.

Felix, and delivered speeches before Festus and Agrippa.”¹⁶ His second method of collection would have come from eyewitnesses to the speeches such as Paul, James, Peter, and others. Lastly, Luke would have collected written documents helping him in the recounting of the speeches throughout Acts.¹⁷ Despite all of this, the question posed by Kistemaker is one that I believe many scholars might ponder in regard to Luke’s faithfulness; “If Luke collected his information from eyewitnesses, does he faithfully reproduce the speeches which they and others made?”¹⁸ Although some may be uncertain in regard to Luke’s faithfulness when recounting the speeches, I believe, given Luke’s past faithfulness to historical accuracy, that he remained faithful in the recounting of the speeches just as he did in the Gospel of Luke.

In summary, it is likely that throughout Luke’s time with the Apostles, he would have acquired some Jewish-Christian techniques. However, in order to construct speeches interwoven with Old Testament nuances, such as those in the speeches of Acts, there would have been a need for Luke to have been raised within the Jewish culture. It is possible that Luke had only been exposed to such cultural conditions in recent years prior to the writing and composition of the Book of Acts.

In this vein, F.J. Foakes Jackson rightly notes that “However produced, the speeches in Acts are masterpieces, and deserve the most careful attention.”¹⁹ Regardless of ones’ perspective, Jackson’s words echo a truth that should be recalled throughout the entirety of this discussion.

¹⁶ Kistemaker, *The Speeches in Acts*, 32. He goes on to describe very in depth the presence of Luke and his capability to write the speeches. He writes how he would have received the speeches from the Apostles before closing his statement with a question of whether or not Luke placed the words in the mouths of these speakers faithfully or if he created them.

¹⁷ There are some who hypothesize that some of the speeches may have been recorded in Aramaic, meaning Luke would have translated into Greek.

¹⁸ Kistemaker, *The Speeches in Acts*, 32.

¹⁹ F.J. Foakes Jackson, as cited in Bruce, “Speeches in the Acts of the Apostles,” 6.

The speeches in Acts are biblical masterpieces whose foundation clearly rest in the Hebrew scriptures. As we examine the characteristics of these speeches, we'll soon discover how they intertwine with the overarching prophetic motif that defines them.

With this foundation established, let us turn to the main topic of our discussion.

II. An Old Testament Prophetic Motif in The Speeches of Acts

The prophetic motif interwoven into the speeches of Acts involves the Apostles reinterpreting the Old Testament texts within their present context rather than treating them as isolated and archaic scriptures. The Apostles perform this in their speeches when boldly asserting that their actions are in cooperation with the “Plan of God” (*τῇ βουλῇ τοῦ Θεοῦ*) (Acts 2:32, 3:12, 7:51-53, 13:31-33, and more). This connection to the Old Testament motif is initiated in chapter one where Jesus delivers a speech that serves as a bridge between the Old and New Testaments. This pivotal moment lays the foundational groundwork for the prophetic nature that unfolds in the subsequent speeches throughout the Book of Acts.

Acts 1:8 serves as an example of that bridge and foundation to which I am referring. Here, Jesus can be seen delivering an exhortation to his disciples, promising that the Holy Spirit will descend upon his disciples, imbuing them with divine power that will enable them to “be (his) witnesses in Jerusalem and in all Judea and Samaria, and to the end of the Earth” (ESV). This pivotal moment marks a turning point in the narrative, where Jesus sets the stage for the prophetic events that will follow in the speeches throughout Acts. In the Greek text, Jesus’ statement is structured in the present imperative, further emphasizing the Old Testament texts’ promise of a new age which has now become a present reality.

Jesus' speech brings forth the prophecy found in Joel 2:28-29.²⁰ By referencing this prophecy, Jesus not only links his words to the prophecies of the Old Testament, but also positions his Apostles as participants in the fulfillment of these ancient promises. This prophetic motif originates here in Jesus' speech as he empowers them for the events that occur in and around the speeches.

As we progress throughout the speeches, the prophetic motif present in them emerges highlighting their interconnectedness as a continuous expression of God's Spirit from the Old Testament. In order to grasp a better understanding of this motif, it's essential to dissect these connections, seeing as they serve to illuminate the divine plan of God, which unfolds in the blueprint of the speeches. With this groundwork established, we can now explore a few specific connections between the Old Testament and the speeches in Acts that highlight the persistent prophetic motif of the Plan of God running through them.

A. The Plan of God

It seems right to begin with the *τῇ βουλῇ τοῦ Θεοῦ* ("the plan of God"), seeing as it is the foundation upon which the Apostles' construct their argument throughout the speeches. This foundation is seen in the Apostles' recollection of the OT scriptures, which reveals a strong OT and Jewish influence within the core of their speeches. While this motif shows up in some way throughout each speech, it can be seen most prominently displayed in Stephen's discourse in

²⁰ Joel 2:28-29 "And it shall come to pass afterward, that I will pour out my Spirit on all flesh; your sons and your daughters shall prophesy, your old men shall dream dreams, and your young men shall see visions. Even on the male and female servants in those days I will pour out my Spirit" (ESV).

Acts 7. Brian Peterson has done extensive work on this speech; therefore, I wish to begin by explaining his findings as they support the plan of God motif.²¹

In his analysis, Peterson classifies Stephen's speech as employing a 'contention formulary,' notably exemplified in Acts 7:44-53.²² Additionally, this formula can be observed in Paul's speech in Antioch Pisidia (Acts 13:16-41, 46b-47), as well as in various OT passages such as Deuteronomy 17:8, 19:17, 21:5, 2 Samuel 15:2, 2 Chronicles 19:8, and more. Peterson continues his explanation of Stephen's speech by positing that, "Luke's main rhetorical purpose was to offer, in prophetic style, a final stinging rebuke of the Jewish elite and populace before moving the focus of the Gospel from the Jews to the Gentiles."²³ Important to make note of is the fact that Stephen acts as a spokesperson for the message of God, and the message which he presents mirrors a covenant lawsuit, a motif deeply ingrained in the Old Testament prophetic corpus. The genre of the covenant lawsuit/formulary was used to rebuke and rebut the wayward thinking and actions of God's people during the classical prophetic era. Interestingly, one of the primary motifs that runs throughout the Apostle's speeches is a similar brand of rebuttal against the lives of those living apart from God, especially the Jews—again Stephen's speech served this very purpose.

Peterson raises a critical question, "why does Stephen's speech deviate from the normal rhetorical patterns of his day?"²⁴ In this specific case, Stephen uses OT language because he

²¹ Brian N. Peterson, STEPHEN'S SPEECH AS A MODIFIED PROPHETIC RÎB FORMULA, *Journal of Evangelical Theological Society*, 57, no. 2 (2014): 351-69.

²² *Ibid.*, 355.

²³ *Ibid.*

²⁴ *Ibid.*, 352.

perceives his actions as part of God's divine plan, leading him to adopt techniques more akin with the Old Testament rather than the Greco-Roman era.²⁵ I will delve deeper into the role of the Apostles as witnesses in a later section. For now, I wish to draw our attention elsewhere in order to continue exploring the plan of God motif found in the speeches, specifically in Peter's speeches in Acts 1 and 3.

Peter's speech in Acts 1 comes in the midst of the decision to induct Matthias as the twelfth disciple, replacing Judas Iscariot (Acts 1:16-22, 24b-25). My purpose and reasoning for mentioning this is because it is the first occurrence of the phrase "it is written" (γέγραπται), which we see occurs throughout the speeches approximately seven times. In this vein, Soards takes note of every instance where the phrase 'what is written,' indicating references to scripture, appears in the speeches (1:20; 7:42; 13:29, 33; 15:15; 23:5; 24:14).²⁶ This phrase is an indicator for the reader to return to the prophecies of old as the the Apostles would have believed the OT prophets were writing about the unfolding of their present situation. It is important because rather than continuing with eleven disciples and considering Judas' betrayal an unfortunate event, Peter recalls OT prophecy in order to interpret Judas' actions as a part of the orchestrated plan of God (Acts 1:20).

Continuing on this topic, in correlation to the earlier usage of "it is written," Luke uses the verb δεῖ ("it is necessary for") in multiple speeches which seems to be in reference to events that transpired by divine necessity.²⁷ This phrase is important as it further highlights the plan of

²⁵ Peterson has done extensive work on Stephen's speech; therefore, I wish to move forward from explaining this seeing as he has already done so. If you would like to read into his thoughts, all of which I agree with and believe support my claim in this article, I strongly encourage you to.

²⁶ Soards, *The Speeches in Acts*, 28.

²⁷ Ibid. "This verb occurs in a number of the speeches, sometimes clearly indicating "divine necessity" (1:16, 21; 3:21; 4:12; 5:29; 27:24."

God motif. In order to further understand this idea of divine necessity through the use of δεῖ (“it was necessary for”), let us look to Peter’s speech in the temple at Solomon’s portico (Acts 3:12-26).

In Acts 3:21, Luke records Peter’s words: “ὃν δεῖ οὐρανὸν μὲν δεξασθαι ἄχρι χρόνων ἀποκαταστάσεως πάντων ὧν ἐλάλησεν ὁ θεὸς διὰ στόματος τῶν ἁγίων ἀπ’ αἰῶνος αὐτοῦ προφητῶν” (“whom heaven must receive until the time for restoring all the things about which God spoke by the mouth of his holy prophets long ago.” ESV). While Peter’s statement does not directly say, “it is necessary for,” Luke records him using the verb δεῖ, indicating a necessity for the actions now occurring. Peter bolsters this point by describing the OT prophets’ role as mouthpieces for God’s divine proclamation.

Peter’s initial allusion to the prophets and their role as mouthpieces for God can be seen earlier in 3:18: “but what God foretold by the mouth of all the prophets that his Christ would suffer, he thus fulfilled” (ESV). In a matter of three verses, Peter invokes the prophets twice, pointing towards their foundational influence of what the Apostles are now proclaiming throughout their speeches. Furthermore, Peter not only references the prophets but also condemns the Jews in a manner reminiscent of the prophets themselves. For reference, verse 17 appears to be a condensed passage that shares parallels with that of Jeremiah 32:30-34. Like Jeremiah, Peter’s indictment unfolds in two forms: first, Peter begins by highlighting their ignorance in verse 17, which is followed in verse 19 by the exhortation to “repent therefore, and turn back, that your sins may be blotted out.”²⁸ Second, in 3:22-33 he cites Moses’ words from

²⁸ Another recurring theme found in both the speeches and Old Testament accounts is the presence of a noticeable patter. As the speech or proclamation nears its conclusion, the speaker initiates an invitation for the Listener to engage in a response.

Deuteronomy 18:15 and 18:19: “The Lord your God will raise up for you a prophet like me from among you... and whoever will not listen to my words that he shall speak in my name, I myself will require it of him.” Moses’ words from Deuteronomy resurface again later in Stephen’s speech in Acts 7:37, further solidifying the connections between the texts.

Regardless of one’s perspective on the existence of a God capable of orchestrating the events in the Book of Acts or the Bible as a whole, when examining these connections, it becomes evident that the words of the Old Testament prophets play a significant role in shaping the speeches found in the Book of Acts. To further explore this motif in the speeches, let’s go back to Acts 1 and see how the Apostles frequently referred to the Psalms.

In Acts 1:20, Peter quotes the Psalmist David. What’s noteworthy is that Peter isn’t the only Apostle who references the Psalms; throughout their speeches, the Apostles frequently quote from the Psalms (Acts 1:20; 2:25-28, 24-25; 7:42; 13:33, 35). However, in this particular instance, Peter quotes Psalm 69:25 and Psalm 109:8 in order to further solidify the choosing of Matthias as the twelfth disciple as part of the plan of God. The purpose for this quotation and others seems to lie in that the Jewish people—especially those of the disciples—would have read the Psalms messianically. Put differently, the words of David would have been interpreted as revelation inspired by God and/or a prophetic foreshadowing of what was to be fulfilled in the Messiah, Jesus Christ of Nazareth. Therefore, the Apostles would have read the Psalms as explanations of what was occurring presently rather than merely historical/archaic texts. Proof that may further this interpretation of the Psalms can be witnessed in Paul’s speech at Antioch of Pisidia (Acts 13:16-41, 46-47).

In Acts 13:36, Paul's words, as recorded by Luke, reference Psalm 16:10 as follows: "Δαυὶδ μὲν γὰρ ἰδίᾳ γενεᾷ ὑπηρετήσας τῇ τοῦ θεοῦ βουλῇ ἐκοιμήθη καὶ προσετέθη πρὸς τοὺς πατέρας αὐτοῦ καὶ εἶδεν διαφθοράν" ("For David, after he had served the purpose of God in his own generation, fell asleep and was laid with his fathers and saw corruption."). This leads into verse 37, where Paul concludes with the words, "ὃν δὲ ὁ θεὸς ἤγειρεν οὐκ εἶδεν διαφθοράν" (but he whom God raised up did not see corruption" ESV). Paul employs David's words in Psalm 16:10, "you will not let your Holy One see corruption," in reference to the Messiah—or otherwise noted as his "Holy One"—as an Old Testament statement foretelling of what was to be fulfilled in Jesus Christ.²⁹ Paul clearly makes the distinction between David and Jesus, interpreting David's words as pointing towards the coming of the Messiah rather than being self-descriptive. In light of this, occurrences such as the replacement of Matthias in Acts 1:20 and the resurrection could be, and most likely would have been by the disciples, perceived as fulfillments of David's prophetic utterances. When observed as a whole, Paul's rhetoric, similar to that of Peter's, presents the Apostles as bringing forth the past into the present in their speeches and ministry as a whole, presenting it as a current unfolding rather than a historical event.

This realization of the Apostles word usage and their tendency to recall the scriptures ought to prompt a reconsideration of the Old Testament scriptures and their underlying purpose. The speeches should no longer be seen as Greek constructions, but rather God's plan carried out in a NT setting with the inspiration of an OT context. Soards discerns this phenomenon, noting that the "activity of the members of the early church—apparently in bearing testimony to God's plan, especially at work in Jesus Christ—is part of the ongoing operation of God's plan."³⁰ God's

²⁹ As noted by Soards, *The Speeches in Acts*, 187.

³⁰ Soards, *The Speeches in Acts*, 187.

plan began in the Old Testament, but it can be seen continuing throughout each speech. Luke's narrative further displays God's plan in action throughout the Apostle's speeches, especially as we have seen in his careful choice of words. In light of the above discussion, word choice ought to be seen as a vital line of argumentation, especially seeing if one is to believe that the Scriptures are indeed inspired by the Spirit of God.

A final speech which I'd like to examine in this section is Gamaliel's speech in Acts 5. While it is not an Apostolic speech, it further bolsters the prophetic motif of the speeches by supporting God's divine hand being the orchestrator of the actions in the speeches. Gamaliel was a Pharisee, and as such was many times in complete opposition to the disciples; however, his statement once again confirms the plan of God motif being continued from the OT and accomplished within the speeches. As a Jew, Gamaliel would have possessed an in-depth knowledge of the OT scriptures, including the prophecies delivered by the prophets. Luke records Gamaliel statement: "but if it is of God, you will not be able to overthrow them. You might even be found opposing God. (Acts 5:39 ESV)" Despite whether or not he believed what was occurring in the Apostles' ministry aligned with OT prophecies, it is evident in his speech that the OT prophets' words were expected one day to occur. This reinforces the idea that the ancient prophecies weren't viewed as mere history but as indications of God's plan coming to fruition, a plan that, as Gamaliel suggested, couldn't be thwarted.

While not all may agree, the reality of the Apostles using Old Testament ideas to further build a foundation for their actions seems obvious. Throughout history it has been normal to quote past events and words in order to create a better understanding of what one is saying. However, the parallels within the speeches of Acts and the Old Testament texts go beyond quotation and become prophetic in nature. The examples put forth in this article ought to bring a

person to the realization that the speeches in the book of Acts are more than speeches in the timeline of history, but rather, are continuations of the *τῇ βουλῇ τοῦ Θεοῦ* (“the plan of God”) found throughout the corpus of the Bible.

Having discussed the strong connection between the speeches in Acts and the Old Testament, it’s evident that the Apostles, in their speeches, weren’t just quoting or referencing the Old Testament but actively embodying the prophetic spirit found in those texts. This prophetic motif runs through their speeches, shaping not only their words but their entire role as ‘witnesses’ to the events unfolding in their time. To delve deeper into this aspect and understand how the Apostles functioned as ‘witnesses’, we’ll explore specific instances in their speeches that exemplify this prophetic witness, shedding light on their pivotal role in God’s unfolding plan.

B. The Apostles as “Witnesses”

What is a Witness?

The designation of “witnesses” attributed to the Apostles derives its significance primarily from the recognition that the content of the speeches not only resonate with the prophetic motif, but the Apostles’ role in relation to that of the Old Testament prophets as well. Synonymous to that of the prophets, the Apostles stand as testimonies of God’s presence amongst His people. As mentioned earlier, the passage of the Old Testament text harmonizes with that of the speeches of Acts. One might even draw the comparison of the Apostles to musicians, joining into the melody of the Old Testament texts with their own “instruments.”

To better explain this metaphorical comparison between the Apostles and OT prophets, let us consider an individual learning to play the violin. Just as a young musician is not likely to compose original pieces upon first discovering the instrument, but instead begins by mastering

existing works, so, too, the Apostles would have become heavily acquainted with the Old Testament texts before conducting their speeches.³¹ Simply put, the earlier scriptures serve as the Apostles' inspiration, similar to that of musical pieces which spark inspiration for fledgling musicians. The echoes of this Old Testament prophetic harmony can be seen as early as the first speech in Acts.

In Acts 1:8 Jesus proclaims, "But you will receive power when the Holy Spirit has come upon you, and you will be my witnesses in Jerusalem and in all Judea and Samaria, and to the end of the Earth" (ESV). Notably, The Greek word employed here for witnesses, *μάρτυρα*, comes from the same root word as used in Acts 10:43 to describe the prophets of old.³² This occurrence marks the first of eleven instances where this word is used throughout the speeches in Acts, therefore highlighting the importance of this term.³³ Yet, it is crucial to make note of a key distinction between the two: the prophets bore witness to the people of Israel, whereas the Apostles' testimony extended to both Jews and Gentiles, serving to present Christ as savior to all. Despite this distinction, there is a clear similarity in function that exists between the two, not to mention the way the Apostles engaged the OT prophetic texts.

Considering these connections between the prophets and the Apostles, their shared responsibility as witnesses for God becomes evident. Moreover, Beverly Roberts Gaventa gives a working definition for the Apostles' ministry in the NT as witnesses: "what the witness does is to tell the truth to the world about God's action in Jesus Christ."³⁴ As well, Soards writes that "in

³¹ For instance, recall my earlier mention of the Jewish child who would have memorized the Torah by the age of 10.

³² The Greek word used here is *μαρτυροῦσιν* ("to bear witness").

³³ Soards (*The Speeches in Acts*, 199) Notes that those referred to as witnesses in the speeches are "the apostles or the twelve, the Holy Spirit, God, all the prophets, the Lord, Paul, and Stephen."

³⁴ Beverly Roberts Gaventa, "You Will Be My Witnesses": Aspects of Mission in the Acts of the Apostles, *Missiology* 10, no. 4 (1982): 417.

general the witnesses testify to God's plan moving toward realization."³⁵ Nevertheless, a counter argument may be that the prophets did not bear witness to Jesus Christ in the world. While this objection holds some truth, it is important to keep in mind that the prophets indeed told the truth bestowed upon them by God concerning Israel and forthcoming events. Remarkably, though, it was none other than the OT prophets who prophesied the coming of the Messiah.³⁶ Therefore, the role between both the Prophets and Apostles is still comparable due to their foundational function as mouthpieces through which God's message was transmitted to his desired audience.

To better understand this notion and bolster my point, let us examine portions of the Old Testament prophets Ezekiel and Jeremiah. To begin, we shall examine the prophet, Ezekiel. In Ezekiel 33:1-2 Ezekiel states, "The word of the LORD came to me: 'Son of man, speak to your people and say to them'" (ESV). Focusing our attention less upon what the context of this passage communicates and more upon the role of Ezekiel, one can see that he is a designated spokesperson through which God has chosen to communicate his message to the people of Israel. This is no less the case with God's plan for how He used the Apostles and prophets.

As well, the examination of Ezekiel ought to showcase a unique similarity within the operations of both the Prophets and the Apostles despite the differences in their messages. As we will see later, the Apostles' messages are continuations of the OT prophetic message, only now to a NT audience. We may conclude that both received a message from God and are tasked with communicating that message to their prescribed people groups. Hence, the plan of God inspired and formed the foundation of both the Prophets' and the Apostles' messages, despite the

³⁵ Soards, *The Speeches in Acts*, 200.

³⁶ Some notable passages are: Ezekiel 34; Isaiah 7:14; Deuteronomy 18:15; Psalm 22; and Isaiah 53.

different time periods they presented their messages. To further bolster this conclusion, let us look at the prophet Jeremiah and his commissioning as an OT witness to God's message.

To better understand this comparison, let us first return to Acts 1:8 once more: "but you will receive power when the Holy Spirit has come upon you, and you will be my witnesses in Jerusalem and in all Judaea and Samaria, and to the end of the Earth" (ESV). Notably, this verse draws a parallel with Jeremiah 1:10 where Jeremiah records God's words as, "behold, I have put my words in your mouth. See, I have set you this day over the nations and over the kingdoms" (Jer. 1:10 ESV). These two verses commission Jeremiah and the Apostles using remarkably similar language. While some scholars, such as Martin Dibelius, Ernst Haenchen, and F.J. Foakes Jackson, suggest the possibility of redactional insertions by Luke, there appears to be no reason for Luke to do such a thing. Instead, it's more likely, as we discussed earlier, that Jesus Christ intentionally draws a direct parallel between Jeremiah's role in the Old Testament prophetic text and that of his disciples. Jesus empowers his disciples with the Holy Spirit, akin to how God inspired Jeremiah and Ezekiel to write their respective scrolls.

In light of this parallel, it prompts us to ask: if Stephen and the Apostles serve as witnesses of God's reconciling nature, why would they deviate from what had already been done and modeled in the sacred Text? Within the Jewish faith, the belief in God's unchanging nature was deeply held. Therefore, considering this conviction, why would the message or the method of presenting this message change?³⁷ This should not at all be surprising if one believes in an inspired Text. The Scriptural corpus outlines God's plan as desiring to reveal himself in his Son from the very beginning. While the OT prophets may not have understood the complete picture

³⁷ Malachi 3:6 Mentions that the Lord does not change. Malachi was a prophetic book and would have been considered as something that affects the whole of a Jew's life.

God was communicating through them, the Apostles certainly understood *τῇ βουλή τοῦ Θεοῦ* (“The plan of God”), a plan clearly demonstrated and carried out within the speeches of Acts.

III. Conclusion

In conclusion, the Apostles’ speeches in Acts go beyond that of mere historical accounts; they serve as testimonies and as spokespersons for the timeless plan of God. My conclusion is that these speeches, recorded by the literary expertise of Luke, not only provide accurate representations of historical events but also underscore the Apostles’ profound role as divine witnesses. To be sure, their self-perception is intimately intertwined with the prophetic motif, emphasizing the unbroken continuity of God’s plan.

This motif, articulated through the use of Greek phrases such as “it was necessary” (*δεῖ*) and “it was written” (*γέγραπται*), highlights the divine inspiration that permeates the Apostles’ speeches. What God declared through the prophets of the Old Testament, the Apostles believed to be fulfilled in their present time—through their message. This revelation prompts us to read the speeches in Acts not as divorced from the rest of Scripture, but as integral threads tying together the whole of the biblical story.

While much more could be explored on this topic, this overview provides a solid foundation for further exploration and understanding of the topic. Therefore, just as Soards effectively framed our discussion in the introduction, his statement aptly concludes our dialogue: “one sees that *τῇ βουλή τοῦ Θεοῦ* (“the plan of God”) operating by divine necessity was not

merely completed in Jesus Christ. God's plan existed and was in operation both prior to Jesus and after his ascension.”³⁸

³⁸ Soards, *The Speeches in Acts*, 188.

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Human Trafficking Identification and Screening Tools in the Emergency Department: A Scoping Review

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Abstract

The purpose of this paper is to evaluate existing human trafficking screening tools that are available in the Emergency Department and perform a scoping review. These articles were independently reviewed and summarized to determine validity of identification and screening of human trafficking victims. Data extraction was performed using the JBI template. The results were analyzed and charted using a descriptive approach. In this review, there are three different screening tools being reviewed that have been developed specifically to identify human trafficking victims. Of the three, RAFT was proven to be the most beneficial due to it being in the early developmental stages and its adaptability.

Introduction

Human trafficking is a form of modern-day slavery that strips away a person's sense of self and dignity. Victims of human trafficking are forced into situations that involve prostitution, forced labor, and/or domestic servitude. Human trafficking affects millions worldwide. Due to the large number of those affected, it is not an accurate scope that can be applied to human trafficking to identify all victims (Eickhoff, 2023). Although it can be hypothesized that an area with a dense population will have more incidences of human trafficking, the lack of an accurate victim identification method makes it difficult to ascertain. (Marcinowski, 2019).

However, what can be asserted is that there is a significant amount of people being trafficked globally every day, and many victims residing within their own cities. With this knowledge, an important question arises: Why are these victims often overlooked? The answer may vary, but one primary reason is the absence of a validated screening tool available to healthcare providers for identifying victims (Eickhoff, 2023).

Recent data from the National Human Trafficking Hotline states that 87.8% of survivors reported accessing healthcare services during their trafficking situation. Of these, 68.3% were seen at an emergency department (National Human Trafficking Hotline, 2022). Unfortunately, In the emergency department trafficked people go unidentified continually. Therefore, the objective of this project is to conduct a comprehensive review of the current screening tools available for identifying victims of human trafficking in the emergency department.

PICOT Question:

In emergency department patients, are there adequate screening tools to identify victims of human trafficking during the period of their hospital visit.

Significance and Background

In recent years it has come to the world's attention that human trafficking is a global epidemic that does not discriminate when hunting its victims. The United States Department of State considers human trafficking as a form of modern slavery that forces or coerces a person to perform prostitution, acts of servitude, or forced labor (Bush- Armendariz, 2016). While this definition is vast, it has become evident that the prevalence rates of trafficked persons are steadily increasing. According to recent research "over 24 million individuals experience human trafficking worldwide" (Eickhoff, 2023). In Texas alone, there were 313,000 reported cases of sex and labor trafficking victims (Busch-Armendariz, 2016). In a more recent study conducted by Al-Tammemi (2023), it was stated that, "Reports revealed the presence of approximately 40.3 million victims worldwide. A clear distinction is seen between the data collected in 2016 and 2023. The number of trafficking victims has significantly increased, and most importantly, those are only the reported cases. This increase could be attributed to the following factors: The impunity and lack of documentation of traffickers, the lack of awareness among an increasing number of undocumented immigrants regarding their human rights, and the absence of a standardized and concrete method to protect victims.

In Texas, it has been documented that there were "79,000 minor and youth victims of sex trafficking" and "234,000 workers who were victims of labor trafficking." (Busch-Armendariz, 2016,). The trafficking industry has proven to be a billion-dollar industry. With the incentive of money, traffickers have learned how to fly under the radar and prey on those unaware of their human rights and easily impressionable.

When perusing these prevalence statistics, it is important to note that these reports represent only a fraction of the total number of individuals who have been trafficked. The

available data that has been collected is “Difficult to ascertain and the widely held belief among stakeholders involved in anti-trafficking efforts is that existing information focuses almost exclusively on identified victims, shedding light on only a fraction of the problem.” (Busch-Armendariz, 2016).

Many trafficked persons do not identify as victims because of the significant amount of physical abuse and psychological manipulation employed by traffickers. When researching the commonalities of victims, it was discovered that traffickers tend to gravitate toward youth who are: homeless, in the foster care system, illegal immigrants, or lesbian, gay, bisexual, transgender, queer, intersex, asexual (LGBTQIA) members who have little to no support (Busch-Armendariz, 2016). Furthermore, when looking at the gender of victims it was found that adolescent girls are the most trafficked, but young transgender and gay males are also highly vulnerable to trafficking (Busch-Armendariz, 2016).

Children who are exposed to sexual behavior and abuse have an increased risk of being trafficked (Busch-Armendariz, 2016). Adults who survived human trafficking were surveyed and it was found that 70-90% of them had experienced child sexual abuse which led to risky behaviors and low self-esteem, later leading to them being identified by traffickers as targets (Busch-Armendariz, 2016). Researchers also identified that “[M]any immigrant laborers are unaware of the law or their rights and believe that they should stay silent and hidden rather than risk any consequences” (Busch-Armendariz, 2016).

Identifying victims in the emergency department is imperative because so many victims seek medical attention and can go unidentified by providers. It has been reported that “in 2020, the American College of Emergency Physicians (ACEP) released a policy statement on HT (human trafficking), stating that ‘trafficking victims are treated for acute illnesses and injuries in

Emergency Departments (EDs) more often than in any other health care facility, and thus emergency physicians are in the best position to access, intervene, and refer for assistance.” (Marcinowski, 2021). Effective identification in the ED could be substantial in the fight against human trafficking. By reducing human trafficking, one would hope the prevalence of mental health disorders that arise from a life of slavery can also be lessened. According to adult survivors, “There is a continuous threat to life while engaged in commercial sex and that severe mental health problems such as depression, anxiety, flashbacks, avoidance, and the experience of numbness and detachment from feelings and interactions with others exist (Hossain, et al 2010).

While many victims are seen in the emergency department (ED), it is also clear that there is currently no standardized screening tool available that accurately identifies those who are trafficked (Marcinowski 2022). Many healthcare providers often lack adequate education regarding the prevalence of human trafficking in their local communities. In a study conducted by Ma (2020), it was reported that “Only 6% of providers in the ED self-identified as somewhat knowledgeable on HT and 81% requested this topic to be incorporated in residency training.” Another study found that 97.8% of participants had received minimal to no training on human trafficking, and their respective hospitals had no standardized method of identifying victims (Chisolm-Straker, 2020). There needs to be a standardized screening tool that is developed to identify those who are being trafficked as well as education about human trafficking.

Methods

This scoping review followed the methodology framework developed by Arksey and O'Malley (2005) and the Joanna Briggs Institute (2015) for conducting scoping reviews. Electronic databases were used to derive data and research articles for review (National Center for Biotechnology Information (NCBI), Cumulative Index to Nursing and Allied Health

Literature (CINAHL), Science Direct, and Wiley Online Library), and reference lists of relevant articles. Articles will be identified by searching keywords related to human trafficking, such as HT screening tools, HT training protocols, emergency department protocol for HT, healthcare workers and HT understanding, among others. These articles were independently reviewed and summarized to determine validity of identification and screening methods for human trafficking victims. The results were analyzed and charted using a descriptive approach.

The inclusion criteria for article selection encompassed peer-reviewed articles that referenced human trafficking in the past 10 years, all articles before 2013 were excluded.

All articles utilized were found within the years 2018-2023 except for one. In this search for evidence articles that included key words such as: human trafficking, sex trafficking, and labor trafficking. The Boolean phrases were applied for 4 concepts; the first concept was related to the “prevalence of human trafficking”. The next two were more specific, these phrases included “human trafficking in the ED,” “screening tools for human trafficking.”

Ethical Considerations

This literature review values academic integrity and proper attribution of ideas. Every effort has been made to accurately cite and reference the original authors and sources. Direct quotes have been indicated with appropriate citations, while paraphrased information is acknowledged through proper referencing.

Literature Review

Healthcare Providers Understanding of Human Trafficking

When it comes to healthcare providers, the training and curriculum offered to them regarding human trafficking is minimal to none (Marcinowski, et al 2021). A range of healthcare staff was asked if they had received formal training on human trafficking and the responses were

shocking, 97% of them stated that they had received no formal training on the subject and 95% had not been trained on the management of trafficking victims (Marcinkowski, et al 2021). A group of ED staff were a part of a study that asked health care workers about their knowledge of what to ask potential victims of human trafficking. In this group, 86.8% responded that they did not know what questions to ask victims (Ross, et al 2015).

Compounded with this lack of training is providers' lack of awareness of human trafficking in their local cities. In a study conducted in South Carolina, 18 ED managers were asked if they believed they had cared for a HT victim. Of these participants, 14 believed that they had never cared for a confirmed trafficking victim in the ED (Marcinkowski, et al 2021). Similarly, it was found by Dols et al that among 27 hospitals in South Texas that none of the participants reported using a standardized screening tool or screening method to identify victims (2019).

It is no secret that hospitals aim to be a reliable institution and aim for quality improvement, but when it comes to aiding victims of human trafficking the industry is severely lacking the tools to identify and rescue victims. Education and awareness can be extremely empowering to health care providers if they are simply trained and knowledgeable about the screening tools available to them and the protocols that can be put into place when working with victims of human trafficking. Without research on screening tools there won't be a validated tool that can be put into place to empower these healthcare workers and potentially save victims lives.

Health care providers need to be trained on how to implement these screening tools and to be confident in their abilities to navigate the conversation. In a study conducted by Donahue, 75 ED personnel members were asked about their confidence in their ability to identify and treat HT victims (Donahue 2019). The results were shockingly low, the average confidence level of

the staff was a 4/10 (2019). Another study conducted looked at medical students' baseline knowledge of human trafficking, it was reported, "Only 6% self-identified as somewhat knowledgeable on the subject of human trafficking, 16% were aware of red flags used to identify HT victims, only 6% had previously received education in this topic in residency and medical school, but 81% wanted this incorporated in residency training." (Ma, et al. 2020). The lack of screening tools available isn't because providers are unwilling to learn, they just do not know where to start.

It is imperative that a screening tool is utilized, and education is required for all healthcare workers. In Ma et al's study medical students recognized the need for awareness and education about human trafficking because it was lacking in their current program (Ma et al, 2020).

Screening Tools for Human Trafficking

There is no current validated screening tool that is in place to identify human trafficking victims, while there are hospitals attempting to establish protocols and screening tools research is extremely valuable to step towards a standardized protocol for identifying victims of human trafficking. A few that are available and will be evaluated in this paper are as follows: The Rapid Appraisal For Trafficking (RAFT), and the Trafficking Victim Identification Tool (TVIT) by the Vera Institute (validated, but not in the health care setting, and the Commercial Sexual Exploitation Identification Tool (CSE-IT).

Trafficking Victim Identification Tool

The TVIT was the first validated screening tool that was found to be reliable but is yet to be recognized by the healthcare system as a validated screening tool. In the guidelines of the TVIT manual it explains the importance of making the potential victim feel safe and creating a

space for open dialogue. The manual states, “Caution must be exercised in relying too heavily on the results of the screening tool alone, as negative responses to the questions do not definitively preclude the possibility of victimization. Respondents whose answers initially indicate a lack of victimization may instead be demonstrating reasonable fear or forgetfulness as a symptom of trauma. For the best outcomes, questions may have to be asked at a time when the potential victim trusts the interviewer and is ready to respond. The screening tool should be used to guide interviews with potential victims, not to eliminate or deny potential victims access to needed services and legal protections” (Vera Institute of Justice, 2014).

This screening tool is not used for any specific demographic, but there are specific instructions for those who fall under categories such as: Migration to the United States and Working/Living Conditions. In this screening tool there is not one gold standard question that must be answered to determine if someone is a victim, but it is the sum of all their answers that determines their status. This screening tool is beneficial because it allows the interviewee to lead the discussion and share their experience freely, but because it must be done once trust and relationship is established it may not be the best tool to implement in a fast-paced environment like the ED.

Rapid Appraisal for Trafficking

RAFT is an “ongoing, multisite study that aims to derive and validate a screening tool to allow the opportunity for identification of ED patients with a lifetime experience of labor and/or sex trafficking” (Chisolm Straker, et al. 2019). In this study to find a validated screening tool, RAFT used a random approach and asked willing participants various dichotomous questions that were from the TVIT screening tool. These questions examined the five domains of human trafficking of a person’s life experience: 1) Force, Fraud, Coercion; 2) Isolation; 3) Labor; 4)

Harm; and 5) Sexual Exploitation. The candidate RAFT questions are the five TVIT questions, regardless of domain, that had the highest odds ratio of predicting a labor and/or sex trafficking experience. All participants, regardless of trafficking determination, are offered the opportunity to speak with a hospital social worker (Chisolm Straker, et al. 2019).

The results from the RAFT study show, “It may be that RAFT is appropriate for screening of labor and/or sex trafficking experiences among specific adult ED populations. Throughout the validation of RAFT, we will examine the potential influence of age, gender, race, ethnicity, language of interview, and chief complaint as potential moderators of relationships between RAFT and criterion or external validation measures in regression models.” (Chisolm Straker, et al. 2019).

In this study, Chisolm-Starker found, “4,127 ED patients were enrolled. In the derivation group, the reference standard identified 36 (1.1%) as positive for a labor and/or sex trafficking experience. In the validation group, 12 (1.4%) were positive by the reference standard. Rapid Appraisal for Trafficking (RAFT) is a new 4-item trafficking screening tool: in the derivation group, RAFT was 89% sensitive and 74% specific (95% CI, 73%–76%) and in the external validation group, RAFT was 100% sensitive.” (2019) This data proves that the screening tool was able to accurately identify victims of human trafficking in the ER with 100% sensitivity.

While this data seems to show that RAFT has some success, there is a need for more research so that data may continue to be collected to prove RAFT is a successful identification tool. When perusing these statistics, it is important to note that less than 5,000 ED patients participated, and the study was only collected in one hospital (Chisolm-Straker, et al 2019).

The goal of this tool is to provide victims an opportunity to disclose their trafficking experience with healthcare providers, nurses, and/or social workers. This tool is not specific to

any gender, race, ethnicity, or sexual orientation etc. This tool, “aims to allow EDs to comprehensively, systematically screen for trafficking and offer clinically stable adult patients with a positive screen referral for expert assessment, services, and support.” (Chisolm Straker, et al. 2019).

The potential that this tool has is great. One main benefit that is granted to patients who participate is the opportunity to speak with a social worker if they would like to. This is beneficial to not only the patient but the nurse as well because it shoulders the weight of navigating a conversation that they have little training on. This tool is also open to new development and is ever changing, with time and study it’s development could be tailored to specifically identify or flag potential victims of HT in the ED.

The Commercial Sexual Exploitation-Identification Tool

The Commercial Sexual Exploitation-Identification Tool is a “research-based screening tool that helps improve early identification of commercially sexually exploited youth.” (West Coast Children’s Clinic, 2017).

This screening tool was developed by over 100 survivors of human trafficking and providers and is used primarily in the state of Texas. This questionnaire is a quick 5–7-minute information integration tool (West Coast Children’s Clinic, 2017). “The CSE-IT is built on the premise of universal screening and is recommended for use with all youth served ages 10 and older. The CSE-IT is not a diagnostic tool, and it cannot confirm victimization. Confirmation of victimization requires using educated, professional judgment in consideration of evidence and what is known about the youth and the circumstances. But the CSE-IT helps screeners identify the existence of and relative number of research-based indicators in a particular youth, assigning

a score that can help screeners effectively triage which youth have relatively high scores and need further assessment and services” (West Coast Children’s Clinic, 2017).

This tool focuses more on objective screening that allows the user to have a concrete outcome/score to identify the risk of human trafficking. The scale ranges from Not Concern/Not Enough Info to Clear Concern. Those who receive a Clear Concern are then reported to the local law enforcement and child protective services. In the pilot study of this screening tool, it was implemented in 45 agencies across the state of California. This pilot study lasted 15 months and included the screening of 5,537 youth (Basson, 2017). Since that time, the CSE-IT tool has been utilized by over 80 agencies across five states (Basson, 2017). The CSE-IT tool has shown promising results for the identification of both at-risk and currently victimized youth, with over 1500 trafficked youth identified with the tool in 2017 (Basson, 2017).

While this tool is helpful, it is more targeted to work with youth, whereas in the ED there is a need to identify people of all ages. Another area for improvement would be the scale that is used when identifying victims. If there is any potential of trafficking or abuse there should be further follow-up, and that may not fall into a scale of concern or no concern.

Results

These current screening tools each have proven to be somewhat successful in identifying victims in their own ways, but none have been validated by healthcare to be used across the board. This is partially due to the insufficient number of studies conducted on their effectiveness as well as the lack of education on the screening tools themselves.

Currently, RAFT is in the developmental stage and is inclusive of the current TVIT screening tool. More data that supports the validity of this screening tool is needed to assert that it can be an applicable screening tool, but it has great potential. RAFT is adaptable and flexible,

allowing changes to be made, if necessary, when conducting the screening. This is important because not all cases of human trafficking present in the same ways and not all patients can handle certain questions. Avoiding triggering victims and allowing them a safe space that allows them to share freely is most important (Chisolm-Straker, 2019).

Future Education of Healthcare Workers

While the need for the development of a standardized screening tool is a priority, it is important to focus on the educational aspect of how to implement them. There is a need for educational curriculum and training to make healthcare providers aware of their role in identifying potential victims. If providers are aware of their role, they can better begin to understand the true prevalence of this issue. There is a vast gap in awareness of human trafficking amongst providers in their local Emergency departments.

Additionally, there is lack of training and protocol implementation when potential instances of human trafficking are presented to them. Currently, there is a guide to help ED personnel when they are faced with these instances but knowledge of it and its availability is deficient.

The HEAL toolkit is available for these instances. This toolkit is a 44-page document developed by experts to guide providers in developing protocols for human trafficking that fit the needs of their facility. In this toolkit, “Emergency physicians are educated on how to identify victims and how to address their unique set of medical and social needs. We felt that having a protocol in place would be best to ensure that survivors and at-risk patients are treated appropriately and in a standardized manner regardless of the experience of the provider.” (HEAL Trafficking, 2020). HEAL is a network of more than 2,500 professionals and survivors around the globe who are combating trafficking from a public health approach (Stoklosa, 2020).

HEAL Trafficking states on their website, “The emergency department (ED) is a rare exception, with some studies estimating that over 60% of trafficked persons will present at some point during their exploitation to the ED. Unfortunately, less than 5% of emergency physicians report feeling confident in their ability to identify a trafficked person, citing confusion around patient characteristics and their role as a provider. By learning more about human trafficking, ED providers can better prepare themselves to identify and provide appropriate support to those who experience human trafficking.

There are systems and organizations that are working to educate and empower healthcare providers with the tools to potentially save victims, but there is still not a standardized system in place.

Discussion

The healthcare industry claims to thrive based on quality improvement, but in the realm of human trafficking implementation of human trafficking educational curricula as well as screening tools are deficient. There are available resources, but little research done to find a reliable tool that can be validated.

When examining current screening tools used in the ED, it has been observed that each patient must go through a depression screening. While depression is prevalent across the nation and a screening tool is beneficial, human trafficking is just as prevalent and can have equal or greater harmful effects. The difference in these two big problems is that there’s a validated and standardized screening tool to detect one. Depression screenings are immensely valuable and have no doubt saved lives over the years, but a standardized and validated HT screening tool could change millions of lives. As stated earlier, 60% of trafficked persons will present to an ED, but more than likely they will go undocumented and return to their life of captivity.

A quality improvement system should function to serve all who are in need and human trafficking victims are in greater need than ever. An example of a quality improvement institution is airlines. This institution seeks to improve its functions with evidence-based practices and better serve their customers. Although airlines have little person to person interaction, there is still a protocol in place for those who are suspected victims of HT. Why is it that a place of ongoing foot traffic that rarely has one to one interaction with its customers and is more, so a place of observation has systems in place to identify and aid victims? Whereas in the ED there is more time to accurately assess those who come to seek treatment and establish rapport, have no system in place to identify and aid potential victims. If airlines can successfully implement protocols and standards to aid victims of HT, without any medical training and/or insight to the persons physical well-being, the likelihood of a trained healthcare worker being able to identify and screen potential victims seems feasible.

There is a need for research that involves implementation of educational curriculum and screening tools that will help both providers and victims of human trafficking to bring this problem to the surface. This research could potentially save millions and healthcare needs to combats the issue of human trafficking with quality improvement studies and initiatives.

References

- Al-Tammemi AB, Nadeem A, Kutkut L, Ali M, Angawi K, Abdallah MH, Abutaima R, Shoumar R, Albakri R, Sallam M. Are we seeing the unseen of human trafficking? A retrospective analysis of the CTDC k-anonymized global victim of trafficking data pool in the period 2010-2020. PLoS One. 2023 Apr 20;18(4):e0284762. doi: 10.1371/journal.pone.0284762. PMID: 37079616; PMCID: PMC10118140.
- Basson D. Validation of the Commercial Sexual Exploitation-Identification Tool (CSE-IT): Technical Report. WestCoast Children's Clinic; 2017.
- Busch-Armendariz, N., Nale, N. L., Kammer-Kerwick, M., Kellison, J. B., Torres, M. I. M., Cook-Heffron, L., & Nehme, J. (2016, December 1). Human trafficking by the numbers: The initial benchmark of prevalence and economic impact for Texas. TexasScholarWorks. <https://repositories.lib.utexas.edu/handle/2152/44597>
- Chisolm-Straker, M. (2018), Measured Steps: Evidence-based Anti-Trafficking Efforts in the Emergency Department. Acad Emerg Med, 25: 1302-1305. <https://doi.org/10.1111/acem.13552>
- Dols JD, Beckmann-Mendez D, McDow J, Walker K, Moon MD. Human Trafficking Victim Identification, Assessment, and Intervention Strategies in South Texas Emergency Departments. J Emerg Nurs. 2019 Nov;45(6):622-633. doi: 10.1016/j.jen.2019.07.002.
- Donahue S, Schwien M, LaVallee D. Educating Emergency Department Staff on the Identification and Treatment of Human Trafficking Victims. J Emerg Nurs. 2019 Jan;45(1):16-23. doi: 10.1016/j.jen.2018.03.021. Epub 2018 May 17. PMID: 29779623.
- Eickhoff, L., Kelly, J., Zimmie, H., Crabo, E., Baptiste, D.-L., Maliszewski, B., & Goldstein, N. (2023). Slipping through the cracks-detection of sex trafficking in the adult

emergency department: An integrative review. *Journal of Clinical Nursing*, 00, 1– 11.

<https://doi.org/10.1111/jocn.16727>

Hossain M, Zimmerman C, Abas M, Light M, Watts C. The relationship of trauma to mental disorders among trafficked and sexually exploited girls and women. *Am J Public Health*. 2010 Dec;100(12):2442-9. doi: 10.2105/AJPH.2009.173229. Epub 2010 Oct 21. PMID: 20966379; PMCID: PMC2978168.

Marcinkowski, B, Caggiula, A, Tran, BN, Tran, QK, Pourmand, A. Sex trafficking screening and intervention in the emergency department: A scoping review. *JACEP Open*. 2022; 3:e12638. <https://doi.org/10.1002/emp2.12638>

Ma K, Ali J, Deutscher J, et al. Preparing Residents to deal with human trafficking. *Clin Teach*. 202;17(6):674-679 National Academies of Sciences, Engineering, and Medicine. 2019. Estimating the Prevalence of Human Trafficking in the United States: Considerations and Complexities: Proceedings of a Workshop—in Brief. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25550>.

Ross C, Dimitrova S, Howard LM, Dewey M, Zimmerman C, Oram S. Human trafficking and health: a cross-sectional survey of NHS professionals' contact with victims of human trafficking. *BMJ Open*. 2015 Aug 20;5(8):e008682. doi: 10.1136/bmjopen-2015-008682. PMID: 26293659; PMCID: PMC4550705.

Torres, M. I. M., Cook-Heffron, L., & Nehme, J. (2016, December 1). Human trafficking by the numbers: The initial benchmark of prevalence and economic impact for Texas. TexasScholarWorks. <https://repositories.lib.utexas.edu/handle/2152/44597>

Vera Institute Of Justice. (2002) Vera Institute of Justice. United States. [Web Archive] Retrieved from the Library of Congress, <https://www.loc.gov/item/lcwaN0009014/>

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State National Citizenship: A History

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The people of the United States do not trust their government. At least it has become significantly prominent in the years following the pandemic, and there is more than enough proof of this all over American mainstream media. People from every political party feel this distrust, and the people of America are conducting mass research on the history and inner workings of the American government. A specific group of people has found a new side of American history that has created the desire to be completely separated from the United States federal government. To do just that, these people have worked to become something relatively unheard of, State Nationals. State National citizenship is a different form of citizenship within the United States that is not connected to the Federal government. State National citizenship can be traced back through history to the formation of the United States, but in order to become a State National one must go through a strenuous process that incurs many negative side effects.

At the formation of the United States, the United States had no official form of citizenship that everyone in the country possessed. The United States Constitution did not even have a legal definition of the term citizen until 1868 when the Fourteenth Amendment was added. Until 1868, everyone who lived in the United States held presumed citizenship of the state they lived in.³⁹ For example, if a person lived in the state of New York, it was presumed they were a citizen of New York even though there was no official paperwork to be accounted for. The only time citizens were mentioned in the United States Constitution before the addition of the Fourteenth Amendment was in regard to elected representatives and senators

³⁹ United States v. Anthony, 24 Fed. Cas. 829 (No. 14, 459), 830 (1874).

of the states. It mentions that any person running for one of these positions must identify as a citizen with an allegiance to a state, usually the one they live in.⁴⁰ Additionally, most assume this mention of citizenship in the United States Constitution, pre-dating the Fourteenth Amendment, is the same citizenship status most people who live in the United States possess today when in reality it is the United States citizenship status of the Fourteenth Amendment that they possess.

The first time United States citizenship was defined in the United States Constitution was in the Fourteenth Amendment.⁴¹ The Fourteenth Amendment stated, "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."⁴² The amendment created a new type of citizenship as this started federally-based citizenship over the old state-based citizenship.⁴³ This claim can be confirmed by the Supreme Court case of *United States v. Anthony* of 1874 where the Supreme Court ruled there was no technical United States citizenship before the addition of the Fourteenth Amendment.⁴⁴ Everyone found a form of citizenship through their state until

⁴⁰ U.S. Constitution, art. 1, sec. 2-3.

⁴¹ U.S. Constitution, amend. 14.

⁴² *Ibid*, sec. 1.

⁴³ *United States v. Anthony*, 24 Fed. Cas. 829 (No. 14,459), 830 (1874).

⁴⁴ *Ibid*.

the Fourteenth Amendment made it a choice to be a Federal United States citizen.⁴⁵ According to this case, a person could choose between being a state citizen or a federal citizen.⁴⁶

Then, the Supreme Court case of *United States v. Cruikshank* of 1875 elaborated on how a person can be a United States citizen or a state citizen. The ruling claimed that each state has its own individual government with its own individual citizens.⁴⁷ According to the ruling, each state could have its own unique citizens that were not claimed or titled as United States Citizens.⁴⁸

Cross v. Board of Elections of 1966 is a more recent Supreme Court case that supports this notion. The Supreme Court ruled that it is not required to be a United States citizen before or after the addition of the Fourteenth Amendment; you can simply be a state citizen.⁴⁹ For instance, the transcript explicitly says, "It was pointed out that both before and after the Fourteenth Amendment to the federal Constitution, it has not been necessary for a person to be a citizen of the United States in order to be a citizen of his state."⁵⁰ At the conclusion of the case, "...the Court stated that it found nothing which requires that a citizen of a state must also be a citizen of the United States if no question of federal rights or jurisdiction is involved."⁵¹

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ U. S. v. Cruikshank, 92 U.S. 542 (1875).

⁴⁸ Ibid.

⁴⁹ Crosse v. Bd. of Elections, 221 A.2d. 431 (1966).

⁵⁰ Ibid.

⁵¹ Ibid.

Meaning any person in the United States can be a state citizen and not a Federal United States citizen as long as they do not try to lay claim to federal rights or jurisdiction. The claim of federal rights and jurisdiction will be further explained later in the paper, but it is important to notice that it is possible and protected by the Supreme Court to be a citizen of a state and not the federal government.

Furthermore, it should be noted that the federal government and Congress were confined to the ten square miles of the District of Columbia when the Constitution was written.⁵² The federal government's authority was confined to D.C. unless a state gave consent or an area was purchased to which the federal government's authority would take over.⁵³ This being said, the federal government did not have authority over the states because all the rules and regulations of the federal government were contained within D.C. or any other territories of the United States.⁵⁴ It was not until 1935 when the Social Security Act was instituted that the federal government's authority and area grew. The Social Security Act placed all states under the federal government by giving them one overall label of the "United States."⁵⁵ The title of the "United States" is defined as a federal corporation.⁵⁶ The Social Security Act gave the federal government authority to act within and over the states.

⁵² U.S. Constitution, art. 1, sec. 8, cl. 17.

⁵³ Ibid.

⁵⁴ U.S. Constitution, art. 4, sec. 3, cl. 2.

⁵⁵ U.S. Congress, *United States Code: Social Security Act*, 42 U.S.C. §§ 1101(a), cl. 2 (1935).

⁵⁶ 28 U.S. Code 3002, sec. 15(a).

After this switch of power, the federal government instituted the Public Salary Tax Act of 1939. This act allows the federal government to tax any federal employee or person who lives or works in a “federal area.”⁵⁷ For context, the term person is defined in the United States Code as, “‘Person’ includes a natural person (including an individual Indian), a corporation, a partnership, an unincorporated association, a trust, or an estate, or any other public or private entity, including a state or local government or an Indian tribe.”⁵⁸ Now, as the only “federal area” at this point was the District of Columbia there was a very limited number of taxpayers. The federal government cannot tax anyone not under the federal government, so in order to gain more taxpayers they had to create more “federal areas.” This was achieved through the creation of the Buck Act in 1940.⁵⁹

First, the Buck Act gave the federal government a way to make a state a possession of the corporate United States.⁶⁰ Now, this does not make the land of the state property of the federal government. This means the federal government has the opportunity to have possession of everything on top of the land. State Nationals commonly explain this as if looking at a two-layer system. The bottom layer is the real land, and the top layer holds all the fictional things the federal government can control.⁶¹ Based on this model, the people held the power in

⁵⁷ Lucien W. Shaw, “The Public Salary Tax Act of 1939,” *California Law Review* 27, no. 6 (1939): 705–11.

⁵⁸ 28 U.S. Code 3002, sec. 10.

⁵⁹ Richard McDonald, *Buck Act: The Jurisdiction of the Land*, Edited by Mitch Modeleski, 2012.

⁶⁰ U.S. Congress, *United States Code: Buck Act*, 4 U.S.C. §§ 110(d), (1940).

⁶¹ Richard McDonald, *Buck Act: The Jurisdiction of the Land*, Edited by Mitch Modeleski, 2012.

both layers before the Buck Act, but the federal government took the power of the second layer with the creation of the Buck Act.

In addition, the Buck Act of 1940 gave the federal government the power to create “federal areas.”⁶² The U.S. Codes define “federal areas” as “...any lands or premises held or acquired by or for the use of the United States or any department, establishment, or agency, of the United States; and any Federal area, or any part thereof, which is located within the exterior boundaries of any State, shall be deemed to be a Federal area located within such State.”⁶³ Notice the lands deemed “federal areas” are not owned by the federal government merely held, meaning the government is holding, keeping, or borrowing those lands. For instance, this section of the Buck Act makes “federal areas” out of Social Security areas designated by the Social Security Administration, public housing that is federally funded, homes with federal bank loans, federally funded roads, anything the federal government touches with aid, anyone with a social security number, and areas located within the exterior boundaries of any state possessed by the federal government.⁶⁴ The creation of these “federal areas” gave the federal government the opportunity to impose the Public Salary Tax Act discussed before and other taxes on more people.⁶⁵ The federal government is also given full jurisdiction of taxes and requires all persons to pay federal tax within “federal areas,” under the Buck Act.⁶⁶

⁶² U.S. Congress, *United States Code: Buck Act*, 4 U.S.C. §§ 110(e), (1940).

⁶³ *Ibid.*

⁶⁴ Richard McDonald, *Buck Act: The Jurisdiction of the Land*, Edited by Mitch Modeleski, 2012.

⁶⁵ U.S. Congress, *United States Code: Buck Act*, 4 U.S.C. §§ 111, (1940).

⁶⁶ *Ibid*, §§ 105(a).

Moreover, the federal government sealed its control over the American people through the implementation of Social Security Numbers. Part of the Social Security Act that was previously mentioned instated the creation of a Social Security Number for each United States citizen.⁶⁷ Then, with the creation of “federal areas” in the Buck Act, all aspects of the Social Security Administration became property.⁶⁸ This being said, all persons holding a Social Security Number are now tied to the federal government, and the federal government has full jurisdiction over them.⁶⁹

The creation of the “federal areas” within the boundaries of the states is seen as a betrayal of the sovereignty of the people and states by many State Nationals.⁷⁰ Under article four, section three, clause two of the United States Constitution it states “...nothing in this Constitution shall be so construed as to prejudice any claims of the United States, or of any particular state.”⁷¹ State Nationals believe the creation of “federal areas” breaks this promise as it brings prejudice to the states.⁷² The placement of “federal areas” inside the borders of the states gives the federal government room to impose federal territorial law upon the people in those areas and upon the people who are technically tied to the federal government through

⁶⁷ 7 C.F.R. 273, sec. 6.

⁶⁸ U.S. Congress, *United States Code: Buck Act*, 4 U.S.C. §§ 110(e), (1940).

⁶⁹ U.S. Congress, *United States Code: Buck Act*, 4 U.S.C. §§ 111, (1940).

⁷⁰ Richard McDonald, *Buck Act: The Jurisdiction of the Land*, Edited by Mitch Modeleski, 2012.

⁷¹ U.S. Constitution, art. 4, sec. 3, cl. 2.

⁷² Richard McDonald, *Buck Act: The Jurisdiction of the Land*, Edited by Mitch Modeleski, 2012.

their Social Security Number.⁷³ By doing this the federal government pushed its way up above the states and gave itself more power. State Nationals do not agree with this.⁷⁴

Since State Nationals believe this to be an overstep of power, they choose to not be a part of the federal government.⁷⁵ They do this by being a state citizen/national instead of a United States citizen. However, with the implementation of the Social Security Act, Public Salary Tax Act, and the Buck Act, it is no longer as simple as being a state citizen rather than a federal citizen. State Nationals must live on the land of the state and not in a “federal area.”⁷⁶ This means a State National cannot be involved in anything relating to the federal government. For example, a State National cannot have a valid Social Security Number, driver’s license, federally registered bank account, motor vehicle in their name, or any known contract that would tie them to the federal government.⁷⁷ If a State National were to have any of these things then they would still be tied to the federal court system which would ultimately make their State National citizenship pointless.⁷⁸

For instance, in the Supreme Court case *American Banana Co. v. United Fruit Co.* the court ruled in favor of the fact that if you live in the court’s jurisdiction you adhere to their

⁷³ U.S. Congress, *United States Code: Buck Act*, 4 U.S.C. §§ 112, (1940).

⁷⁴ Richard McDonald, *Buck Act: The Jurisdiction of the Land*, Edited by Mitch Modeleski, 2012.

⁷⁵ *Ibid.*

⁷⁶ *Ibid.*

⁷⁷ *Ibid.*

⁷⁸ *Ibid.*

laws.⁷⁹ Then, in the Supreme Court case of the *United States v. Spelar*, the court ruled that the legislation of Congress can only be applied to persons within the territorial jurisdiction of the United States.⁸⁰ Based on these two Supreme Court cases, as long as State Nationals stay out of the jurisdiction of the federal court system, it does not apply to them. Most regular United States citizens live within multiple levels of “federal area” and jurisdiction, so the federal court system applies to them.

Consequently, it is common to question if there can be a state within a state as has been previously touched upon. Most question if the federal state/area can live within the sovereign state. Supreme Court case *Howard v. Sinking Fund of Louisville* (1953) answers this question. The court ruled in favor of a state being able to live within another state as much as they coexist.⁸¹ Within the transcript of the ruling, it is stated that “The fiction of a state within a state can have no validity to prevent the state from exercising its power over the federal area within its boundaries, so long as there is no interference with the jurisdiction asserted by the Federal Government. The sovereign rights in this dual relationship are not antagonistic. Accommodation and cooperation are their aim. It is friction, not fiction, to which we must give heed.”⁸² In this context, the court describes the “federal area” within a state as the fiction of a state that shares power with the original state.

⁷⁹ *American Banana Co. v. United Fruit Co.*, 213 U.S. 347, 356-357 (1909).

⁸⁰ *United States v. Spelar*, 338 U.S. 217, 222, 94 L.Ed. 3, 70 S.Ct. 10 (1949).

⁸¹ *Howard v. Sinking Fund of Louisville*, 344 U.S. 624, 73 S.Ct. 465, 476, 97 L.Ed. 617 (1953).

⁸² *Ibid.*

Another Supreme Court case that ruled in a similar way was *Schwartz v. O'Hara TP. School District* in 1953. This court also ruled that there could be two separate government systems within one state.⁸³ This case in particular was more aimed toward school system benefits within the federal sector, but the ruling still supported two different governments.⁸⁴ Overall, the rulings of these Supreme Court cases Constitutionally support the idea of a state within a state or two governments coexisting within one state.

Furthermore, the process to become a State National and live outside of the federal government is a long one, and it will test anyone who decides to embark on this journey. After speaking with two Georgia State Nationals about their experiences in becoming State Nationals, the main thing they stressed is the fact that “this is a lonely and long process that should not be taken lightly.”⁸⁵ Of the two interviewed, one was female and one was male. They will be referenced henceforth as the female or male State National.

The female State National claimed all of the research leading up to the decision to start the process of becoming a State National was the hardest part. She spent over a year researching and re-learning American history and everything pertaining to State Nationals. Even today she feels like she does not know or at least has not found everything there is to know about the subject.⁸⁶ She stated that “the prep step took the longest because of how much one

⁸³ *Schwartz v. O'Hara TP. School Dist.*, 100 A. 2d. 621, 625, 375 Pa. 440 (1953).

⁸⁴ *Ibid.*

⁸⁵ Interview with a Female Georgia State National, August 6, 2023.

⁸⁶ *Ibid.*

has to learn before risking everything to become a State National.”⁸⁷ After extensive research has been completed, then the person can start the simple but extreme process of becoming a State National.

First, a person looking to become a State National must confirm that they qualify for the State National title before starting the actual process.⁸⁸ There are five different ways a person can qualify to start the process, and they just need to fit into one of the categories. The first category is simple. It is for those that are natural-born citizens of the United States which can be defined in the Immigration Nationality Act.⁸⁹ The second category is for people “...born in an outlying possession of the United States on or after the date of formal acquisition of such possession...”⁹⁰ The third category is for people “...born outside the United States and its outlying possessions of parents both of whom are nationals, but not citizens, of the United States, and have had a residence in the United States, or one of its outlying possessions prior to the birth of such person...”⁹¹ The fourth category is for “a person of unknown parentage found in an outlying possession of the United States while under the age of five years, until shown, prior to his attaining the age of twenty-one years, not to have been born in such outlying possession...”⁹² The final category is for a person born outside of the United States to one alien

⁸⁷ Ibid.

⁸⁸ U.S. Congress, *United States Code: Immigration Nationality Act*, 8 U.S.C. §§ 1408, (1952).

⁸⁹ Ibid, §§ 1401, (1952).

⁹⁰ Ibid, §§ 1408, cl. 1, (1952).

⁹¹ Ibid, cl. 2, (1952).

⁹² Ibid, cl. 3, (1952).

parent and one State National parent. The State National parent must have had at least seven years of continuous residence in the United States territories with at least five of those years after the age of fourteen.⁹³ For context, all outlying possessions and territories of the United States are defined in the Immigration Nationality Act.⁹⁴ A person must fit into one of these five categories before they ever officially start the State National process.

Now, if a person ignores or does not know about these qualifications and still starts the process of becoming a State National, they will not be granted the State National citizenship status. However, this is not the worst part. If the person files for State National citizenship while not meeting these requirements they would be making a fraudulent immigration claim to the federal government.⁹⁵ Any claim made concerning the changing of citizenship would be linked to the immigration office, and if there is even a little mistake then it can be considered fraudulent.⁹⁶ This type of fraudulent claim can lead to civil and criminal penalties. These qualifications need to be taken very seriously when starting this process of citizenship change.

After a person qualifies within one of the five categories, they can officially start the process of becoming a State National. The first step is to formally renounce or repudiate their United States citizenship. To do this the person will have to send an official written letter or affidavit to a diplomatic officer claiming that they willfully renounce their United States

⁹³ Ibid, cl. 4, (1952).

⁹⁴ Ibid, §§ 1101, (1952).

⁹⁵ Ryan A. Wilck, "Choices Have Consequences: Fraud, Misrepresentation, and Full Candor with USCIS and Dept. of State," Reddy & Neumann, P.C., June, 2023.

⁹⁶ Ibid.

citizenship.⁹⁷ Now, the only way to get rid of their citizenship status is to do so voluntarily, and this is not hard to do as the letter/affidavit will be assumed to be written willfully.⁹⁸ This affidavit is commonly sent to the Secretary of State since that position is associated with other aspects of State Nationals.⁹⁹ For example, the two State Nationals interviewed sent their affidavits to the Secretary of State for both the United States and the state of Georgia, and they sent it to the President of the United States.¹⁰⁰ In addition, this letter/affidavit must also be mailed, for there is no way for it to be turned in online.

Secondly, the person will need to apply for their State National citizenship through an application.¹⁰¹ This is not a traditional application; it is more like the previous step. This step and the previous step are traditionally done in tandem, so it is hard to separate the two steps when looking at the timeline of the process. For instance, when a person writes their letter/affidavit they must renounce their citizenship and claim the State National citizenship status at the same time.¹⁰² They must provide proof and reason for everything they are choosing to leave behind and choose to take on. Now, it is the United States Secretary of State who decides whether to accept this affidavit as truth and pass the person on to becoming a

⁹⁷ U.S. Congress, *United States Code: Immigration Nationality Act*, 8 U.S.C. §§ 1481(a), cl. 5, (1952).

⁹⁸ *Ibid*, §§ 1481(b), (1952).

⁹⁹ *Ibid*, §§ 1452(b), (1952).

¹⁰⁰ Interview with a Male Georgia State National, August 4, 2023.

¹⁰¹ U.S. Congress, *United States Code: Immigration Nationality Act*, 8 U.S.C. §§ 1452(b), (1952).

¹⁰² Interview with a Male Georgia State National, August 4, 2023.

State National.¹⁰³ Hence, the reason for always sending both the renouncement and the application to the Secretary of State.

In the event that a person is not accepted by the Secretary of State as a State National, the person in question would no longer be a United States Citizen or a State National. The renouncement of citizenship can be done without the acceptance of an official, but the State National application is the opposite. So, if this were to happen the person would be a non-citizen alien of the United States. They would not be allowed to vote, work, own property, own a driver's license, own a passport, or be present in the United States without a visa.¹⁰⁴ It takes a great leap of faith to submit those two steps because who knows if a State National citizenship or non-citizen alien will be at the end of the process. Both of the State Nationals that were interviewed discussed how terrifying and lonely the process was.¹⁰⁵ They were going down this path together, but they had no one else. Everyone questioned what they were doing while they risked everything to become State Nationals. According to them, "The only things that can keep someone moving through this process is faith in God and belief in the truth."¹⁰⁶

In order to become a State National you have to be accepted by the Secretary of State.¹⁰⁷ Based on the two State Nationals' testimonies, there is no official letter that comes

¹⁰³ U.S. Congress, *United States Code: Immigration Nationality Act*, 8 U.S.C. §§ 1452(b), (1952).

¹⁰⁴ "Renounce or Lose Your Citizenship," USA Gov, updated June, 2023.

¹⁰⁵ Interview with a Male Georgia State National, August 4, 2023.

¹⁰⁶ Interview with a Female Georgia State National, August 6, 2023.

¹⁰⁷ U.S. Congress, *United States Code: Immigration Nationality Act*, 8 U.S.C. §§ 1452(b), (1952).

into the mail.¹⁰⁸ It is more of a waiting game. As long as the Secretary of State does not submit a rebuttal of the affidavit within a month, then the person is free to finish their State National paperwork.¹⁰⁹ It is very unlikely the Secretary of State will issue a rebuttal if the person fits into one of the five categories discussed previously. The male State National also recommended that “after a month of no rebuttal, the person should publicly file their affidavit within the court system. This gives the new State National a level of protection and a paper trail.”¹¹⁰

Finally, once there is no rebuttal and the affidavit has been publicly filed, the person should get a new passport. A new passport is needed because there is no form of identification specific to State Nationals, and the old passport is tied to their old citizenship.¹¹¹ To do this, the person will simply print out the DS-11 form and fill it out just like anyone else would. However, instead of mailing it off, they would go in person to file it at the passport agency to avoid complications.¹¹² They will also need a copy of their original affidavit as proof of State National citizenship.¹¹³ This passport will be their new form of identification as all their other forms of identification would have been voided due to the renouncement of their citizenship. The person should get their passport that day since they went in person, but it will not look any

¹⁰⁸ Interview with a Male Georgia State National, August 4, 2023.

¹⁰⁹ Ibid.

¹¹⁰ Ibid.

¹¹¹ “Certificates of Non Citizen Nationality,” U.S. Department of State-Bureau of Consular Affairs.

¹¹² Interview with a Male Georgia State National, August 4, 2023.

¹¹³ “Certificates of Non Citizen Nationality,” U.S. Department of State-Bureau of Consular Affairs.

different than any other United States passport.¹¹⁴ This is because all passports say “United States Citizen or non-citizen National.” The only difference is that it will not scan the same as a traditional United States passport. Though, there is a stamp available that can be used in passports that signifies their State National citizenship.¹¹⁵ It must also be noted that this process only grants the title of State National and nothing else.

Furthermore, the title of State National does not come with any reliable positive benefits only negative ones. Some of the benefits State Nationals believe to be true are the inability to receive parking or speeding tickets, their cars or houses are not allowed to be taken, and the federal court system does not apply to them.¹¹⁶ All of these “benefits” have the possibility to be true, but there is no reliable evidence to prove this. There are no official documents, laws, codes, or policies that provide solid evidence that these could be true. The only sources that discuss these topics are unreliable. However, there could be official documentation of these benefits, and it was just not found. If this was true, these benefits would still be unreliable because in order for these laws or acts to not apply to State Nationals they would have to be completely removed from the federal government. These State Nationals would have to have absolutely no contact or contract connecting them to the federal government or else they would still be under the jurisdiction of the federal government.¹¹⁷ So, in order for a State National to receive any kind of benefit from being a State National, they

¹¹⁴ Interview with a Male Georgia State National, August 4, 2023.

¹¹⁵ Ibid.

¹¹⁶ *Meet Your Strawman And Whatever You Want to Know*, Columbia, SC, 2021.

¹¹⁷ *American Banana Co. v. United Fruit Co.*, 213 U.S. 347, 356-357 (1909).

would have to be completely removed from the federal government to even start thinking as if the federal laws do not apply to them.

There are no real benefits to gaining the title of State National. There is no immediate benefit. For example, the male State National said, “So far, there have not been many benefits due to not being done with the process, but the knowledge is a positive.” Both of the State Nationals interviewed are working on higher qualifications, so there may be some benefits in their future. However, they have not experienced any outright benefits by only having the title of State National.

Moreover, there are increasingly more negatives than positives associated with being a State National. The biggest is State Nationals lose all federal benefits. For example, they can no longer have access to unemployment assistance, disability assistance, federal loans, federal grants, Medicare, Medicaid, federal bank accounts, social security, federal jobs, free public schooling, and many other federal programs.¹¹⁸ They also no longer have a valid social security number, driver’s license, or birth certificate. Now, none of these forms of identification are necessary to live in America or to be a State National, but it does make life more difficult to not have them. Then, one of the biggest losses of becoming a State National is the fact that they cannot vote. State Nationals cannot be a part of anything involving the federal government, and voting would be considered one of those things.¹¹⁹ Though, it can be argued that federal elections really do not affect State Nationals, so voting is pointless. However, even though the

¹¹⁸ Richard McDonald, *Buck Act: The Jurisdiction of the Land*, Edited by Mitch Modeleski, 2012.

¹¹⁹ Ibid.

election would not directly affect them if they stayed completely out of touch with the federal government, they would still feel its effects surrounding them.

In addition, State Nationals are portrayed negatively throughout the media. State Nationals are viewed as an extremist anti-government movement. For example, BBC News reported that “The FBI has described the movement, which lacks any organisational structure, as ‘domestic terrorism’ in the US and calls followers ‘anti-government extremists who believe that even though they physically reside in this country, they are separate or ‘sovereign’ from the United States.’”¹²⁰ The media has put a bad narrative onto all State Nationals because of a few that act out. The media has even given State Nationals the nickname “Sovereign Citizens.”¹²¹ The name is used by those who do not have a thorough knowledge of State Nationals, and they group them all into this one label. What is interesting about this nickname is that it actually does not make any sense. The two words do not cohesively mix. For instance, as per *Black’s Law Dictionary*, a sovereign is defined as “a chief ruler with supreme power...”¹²² Then, a citizen is defined as “A member of a free city or jural society, possessing all rights and privileges which can be enjoyed by any person under its constitution and government, and subject to the corresponding duties.”¹²³ The two words are complete opposites. One has all the power, and one is subject to the government. To be technical, a person can use these terms

¹²⁰ Max Matza, “What is the ‘Sovereign Citizen’ Movement?” BBC News, Washington, August 5, 2020.

¹²¹ Ibid.

¹²² Henry Campbell Black, *Black’s Law Dictionary*, s.v. “sovereign,” West Publishing Co., 1891.

¹²³ Henry Campbell Black, *Black’s Law Dictionary*, s.v. “citizen,” West Publishing Co., 1891.

separately, but to use them together is inconsistent. So, State Nationals are not technically “Sovereign Citizens,” but that is the negative label they were given by the media. All to say, another negative about being a State National is how negatively they are viewed by the media.

What’s more, the State Nationals that were interviewed also discussed the tremendous amount of hardships and fear they went through in becoming State Nationals. It was a common topic between the two of them about how difficult the research was and making sure everything they found was true. The female State National said, it was a “Lonely road, and everyone thinks you are insane.”¹²⁴ They both felt this way because most people did not and still do not believe them. Then, while going through the process they experienced a great amount of fear by putting themselves on the line as they did. For example, the male State National said, “It was hard to overcome his fear of doing the wrong thing and the risk of incarceration and deportation.”¹²⁵ All to say, this process challenged both of them and took a large mental toll on them as well.

In conclusion, State National citizenship is another form of citizenship within the United States that is not connected with the federal government. The history of State Nationals can be traced all the way back to the beginning of the United States which is before the creation of the common United States citizenship status. Both of these citizenship statuses have coexisted in the United States for well over a hundred years without the general population even knowing one of them existed. However, it seems as if as the title of State National grows in prominence,

¹²⁴ Interview with a Female Georgia State National, August 6, 2023.

¹²⁵ Interview with a Male Georgia State National, August 4, 2023.

the possibility for a greater divide between the people of the United States also grows. Even though the two types of citizenship do not technically affect one another, they may create a negative impact on the already unstable American culture. These two forms of citizenship may lead to another divide between the people like that of the political party divide. All this being said, there is a lot to lose by becoming a State National and not much to gain as it involves giving up all access and ties to the federal government. Plus, State Nationals are not viewed in a positive light in the United States. On the whole, State Nationals have been around longer than regular United States citizens, but there is no real gain in becoming a State National. The title of State National only seems to bring hardships to those who seek it and the possibility of further dividing an already unstable America.

Bibliography

American Banana Co. v. United Fruit Co., 213 U.S. 347, 356-357 (1909).

Black, Henry Campbell. *Black's Law Dictionary*. West Publishing Co., 1891.

"Certificates of Non Citizen Nationality," U.S. Department of State-Bureau of Consular Affairs.

<https://travel.state.gov/content/travel/en/legal/travel-legal-considerations/us-citizenship/Certificates-Non-Citizen-Nationality.html>.

Crosse v. Bd. of Elections, 221 A.2d. 431 (1966).

Howard v. Sinking Fund of Louisville, 344 U.S. 624, 73 S.Ct. 465, 476, 97 L.Ed. 617 (1953).

<https://www.law.cornell.edu/supremecourt/text/344/624>.

Interview with a Female Georgia State National. August 6, 2023.

Interview with a Male Georgia State National. August 4, 2023.

Matza, Max. "What is the 'Sovereign Citizen' Movement?" BBC News, Washington. August 5, 2020. <https://www.bbc.com/news/world-us-canada-53654318>.

McDonald, Richard. *Buck Act: The Jurisdiction of the Land*. Edited by Mitch Modeleski, 2012.

Meet Your Strawman And Whatever You Want to Know, Columbia, SC, 2021,
www.NationalLibertyAlliance.org.

"Renounce or Lose Your Citizenship." USA Gov. updated June, 2023.
<https://www.usa.gov/renounce-lose-citizenship>.

Schwartz v. O'Hara TP. School Dist., 100 A. 2d. 621, 625, 375 Pa. 440 (1953).

Shaw, Lucien W. "The Public Salary Tax Act of 1939." *California Law Review* 27, no. 6 (1939):
705–11. <https://doi.org/10.2307/3476042>.

U.S. Congress. *United States Code: Buck Act*, 4 U.S.C. §§ 101 - 126 (1940).
<https://www.law.cornell.edu/uscode/text/4/chapter-4>.

U.S. Congress. *United States Code: Immigration Nationality Act*, 8 U.S.C. §§ 1101 - 1537 (1952).

<https://www.law.cornell.edu/uscode/text/8/chapter-12>.

U.S. Congress. *United States Code: Social Security Act*, 42 U.S.C. §§ 301 - 1305 (1935).

<https://www.loc.gov/item/uscode1934-005042007/>.

United States Constitution. (1787). <https://www.archives.gov/founding-docs/constitution-transcript>.

United States v. Anthony, 24 Fed. Cas. 829 (No. 14,459), 830 (1874).

United States v. Cruikshank, 92 U.S. 542 (1875).

United States v. Spelar, 338 U.S. 217, 222, 94 L.Ed. 3, 70 S.Ct. 10 (1949).

Wilck, Ryan A. "Choices Have Consequences: Fraud, Misrepresentation, and Full Candor with USCIS and Dept. of State," Reddy & Neumann, P.C., June, 2023.

<https://www.rnlawgroup.com/choices-have-consequences-fraud-misrepresentation-and-full-candor-with-uscis-and-dept-of->

state/#:~:text=Criminal%20Penalties%3A%20Committing%20immigration%20fraud,of%
20the%20fraud%20or%20misrepresentation.

7 C.F.R. 273, sec. 6.

28 U.S. Code 3002.

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Analysis of School Shootings: Can common elements reveal solutions?

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Abstract

There have been significant concerns about student safety in schools within the United States because of the rise in school shootings. In response to school shootings, states have tried to implement various laws and protocols in case of an active shooter by imposing restrictions and regulations on firearms. This research project aims to provide a thorough examination of school-based mass shootings and the firearm laws that are in place. This study informs readers of the potential causes and impacts of school-based mass shooting laws that are currently being executed. Data was collected from published media sources, news articles, firearm laws, and pieces of literature based on school-based mass shootings. By figuring out the main cause of school shootings and implementing laws that work, schools can better prepare for potential incidents and help keep their students safe.

Keywords: shooting, guns, laws, school, mass shootings

INTRODUCTION

Over the past decade, concern has grown in the United States regarding school safety due to the rise in school shootings. Senior staff writer for *Education Week*, Evie Blad (2023), defines a school shooting as an attack on an educational premise, such as a primary school, secondary school, high school, or a college/university by an armed person. Michal Ray and Kenny Chmielewski (2023), publishers for Britannica, designate a “mass shooting” as three or more killings in one single incident. Well-known, highly publicized school shootings generally involve multiple deaths; however, the majority of school shootings have resulted in zero fatalities leaving students wounded rather than slain (Chiu, Chong, Cox, Horton, Rich, Thacker, Trevor, 2023). According to Grabow and Rose (2018), the US has had 57 times as many school shootings as other major industrialized nations combined, amounting to hundreds of more school shootings than any other country (Figure 1.0). Chiu et al. (2023) studied the number of students that have experienced gun violence since the Columbine mass school shooting in 1999. Their ongoing study reveals that as of June 2023, the United States has had 386 school shootings, leaving more than 356,000 students impacted by gun violence (Chiu et al., 2023). Why is the number of school shootings on the rise? Is it due to psychological reasons of the attacker or are the laws that govern the United States failing the safety of all students?

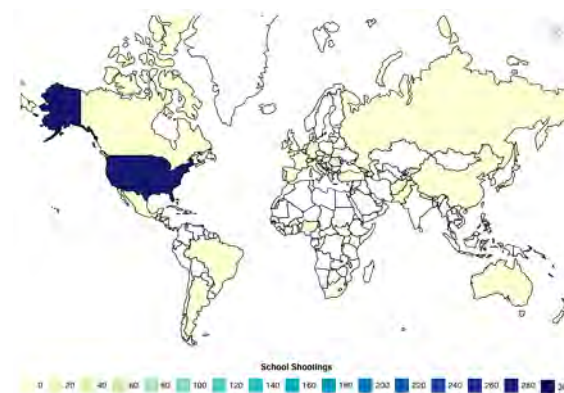


Figure 1.0: School Shootings by Country

Over the last decade, hundreds of media sources have covered some of the deadliest school shootings. The following in-depth descriptions provide an overview of U.S. school shootings resulting in nine or more deaths.

DEADLIEST U.S. SCHOOL SHOOTINGS (1999-2023)

The deadliest school shooting in the United States occurred at Virginia Tech on April 16, 2007, in Blacksburg Virginia (Tikkanen, 2023). Seung-Hui Cho, a 23-year-old, male, student killed a total of 32 people and injured 23 in two different attacks (Tikkanen, 2023). STAT Newsletter wrote that the perpetrator used a Walther P22 semi-automatic pistol, a .22 caliber, a Glock Model 19 semi-automatic pistol, and a 9 mm caliber during both attacks occurring just hours apart (Busch, 2007). Cho's first attack happened at 7:15 a.m. inside a dorm where he shot and killed two victims (CNN, 2023). After Cho's first shooting, he left the school premises and went to the local post office to deliver a package to NBC News containing videos, photos, and writings (CNN, 2023). The documents contained Cho's ranting about "wealthy brats" (Mullen et al., 2009). At around 9:40 a.m., Cho returned to campus, armed with a 9-millimeter handgun, a 22-caliber handgun, and hundreds of rounds of ammunition, entered a classroom building, chained, and locked several main doors, and went from room to room shooting people (Mullen et al., 2009). Approximately 10 minutes after the second rampage began, Cho died from a self-inflicted gunshot wound (Mullen, et al., 2009). Cho's mental health may have played a role as noted by Osterweil, a senior associate editor for *MedPage Today*. Osterweil (2007) wrote that in 1999, when he [Cho] was in eighth grade, a psychiatrist diagnosed Cho with selective mutism and a single episode of major depression. Selective mutism falls under the broad ICD-9 diagnostic category of disturbances of emotions specific to childhood and adolescence (Osterweil, 2007). Many students reported that he seemed to be in a depressive state and was

always a quiet student that “never answered questions even when called on” and “never made eye contact” (Osterweil, 2007).

On December 14, 2012, in Newtown Connecticut, 20-year-old, Adam Lanza, killed 20 students and six adults before taking his own life with a bushmaster semi-automatic rifle and a .22 caliber (Ray, 2023). Cowan (2014), a publisher for the *New York Times*, stated that in ninth grade, Lanza's mother, Nancy Lanza, insisted that Lanza be put on medication for his mental illnesses. However, Nancy Lanza reversed her decision and sought to accommodate Lanza's disabilities rather than treat them (Young, 2019). In the article, *Adam Lanza's Mental Problems 'Completely Untreated' Before Newtown Shootings*, Cowan (2014) describes that Lanza was completely untreated in the years before the shooting for psychiatric and physical ailments like anxiety and obsessive-compulsive disorder and was also deprived of recommended services and drugs. The author states that his “undiagnosed anorexia could have affected his mental state,” as well (Cowan, 2014). The attack began with an assault on his own mother, Nancy Lanza, first (Ray, 2012). Adam Lanza shot his mother 4 times with a .22 caliber rifle and AR-15, all of which she had purchased years before (Ray, 2012). Lanza stole these weapons and several other firearms that he used later that day to kill 20 first-grade students and six adults including the school principal and the school psychologist before taking his own life (Ray, 2012). Approximately 700 students were present at school on the day of the mass shooting at Sandy Hook Elementary (CNN, 2013).

The most recent U.S. school shooting tragedy occurred on May 24, 2022, in Uvalde Texas. 18-year-old Salvador Ramos shot and killed 21 people and injured 17 others at Robb Elementary School with an assault rifle (Mendez, 2023). A reporter for ABC News stated that Ramos was bullied growing up (Schemmel, 2022). Students reported that Ramos experienced

“bullying for his lisp and sometimes for wearing makeup” (Schemmel, 2022). According to an article from ABC News, his best friend from middle school, Stephen Garcia, stated “I think he needed mental help. And more closure with his family. And love” (Schemmel, 2022). Before driving to Robb Elementary School in Uvalde, Texas, Ramos shot his grandmother, Celia Gonzalez, in the face with an AR-15-style rifle she was able to recover from her injuries (Fitz-Gibbon, 2022). Laura Benshoff (2022), author of *The Story About What Happened the Day of the Uvalde Shooting Keeps Changing*, writes the following:

A teacher was right outside of the school building the morning of the shooting and witnessed Ramos hop the fence of the schoolyard with a backpack and an AR-15 over his shoulder. She then noticed Ramos running toward the school, so she ran into the school building and slammed the door shut behind her. The school door was supposed to lock automatically but failed to lock behind her that morning. This malfunction allowed Ramos to freely enter the school building through the unlocked door. When Ramos entered the school, he went into the first classroom where he shot 19 children and two adults.

Ramos remained in that classroom for an hour while cops, who were on the scene moments after the shooting began, waited outside for Border Patrol agents to arrive (Sandoval, 2023). Once Border Patrol agents arrived, they shot and killed Ramos (Sandoval, 2023).

Marjory Stoneman Douglas High School in Parkland Florida experienced their tragic shooting on February 14, 2018 (Chapman et al., 2022). Seventeen people lost their lives, and another 17 people were injured by the attack planned and executed by former student, 19-year-old Nikolas Cruz (Chapman, et al. 2022). Chapman et al. (2022) described the mental health issues of Cruz and divulged that the abuse of drugs and alcohol by his mother had affected him

since he was in the womb. Chapman, et al. (2022) stated, “Cruz showed signs from a young age of fetal alcohol spectrum disorder and antisocial personality disorder” ultimately placing the blame on his mother's actions while she was pregnant. Cruz attacked the school with a semi-automatic rifle. Price and McCarthy (2018), editors for *Florida Today News*, stated that during the shooting, Cruz was able to blend in with the crowd and later was arrested while walking through the nearby neighborhood of Coral Springs. He was sentenced to life in prison after pleading guilty to murder and attempting murder (Evans, 2022). After getting arrested he told a physiologist that he chose Valentine's Day because “no one loved him. He wanted to ruin the holiday for everyone” (Spencer, 2022).

The first school shooting that shocked the nation and seemingly set off a chain reaction of shootings occurred on April 20, 1999, when Dylan Klebold, 17, and Eric Harris, 18, attacked Columbine High School in Littleton, Colorado (Mullen et al., 2023). Harris and Klebold killed 13 students, and one teacher, and left 24 others injured (Mullen, et al., 2023). The two attackers entered with an arsenal including semi-automatic rifles, pistols, and several explosives (Parul, 2011). These weapons included a TEC-DC9 assault pistol, a Hi-Point 9mm Carbine, a Savage 67H, a pump-action shotgun, and a Savage 311-D 12-gauge shotgun (Parul, 2011). According to the Jefferson County Sheriff's Department timeline of events, Harris and Klebold entered Columbine High School at 11:10 a.m. where they went inside and placed two duffel bags in the cafeteria containing bombs that were set to go off at 11:17 a.m. Harris and Klebold then exited the building and went back to their cars to wait for the explosion. When the explosion did not occur, they entered the building and began their massacre (Jefferson County Sheriff's Department, n.d). By 11:35 that morning the two teens had killed 12 people, and by noon the attack ended with both turning a gun toward themselves and taking their lives (Jefferson County

Sheriff's Department, n.d). If the propane bomb explosion had gone off the death toll would have been much higher. This shooting directly impacted 1,920 students at school that day (Encyclopedia Staff, 2013). Neither Klebold nor Harris had a mental illness diagnosis prior to the shooting (Cahill, 2020). However, according to Cahill (2020), "With investigations into the many warning signs of Klebold's and Harris's behavior, psychologists labeled Harris a psychopath and diagnosed Klebold with severe depression disorder. Psychologists also speculated that Klebold showed signs of schizotypal personality disorder".

Santa Fe High School in Santa Fe, Texas became a place of unwelcome violence on May 18, 2018. Dimitrios Pagoutzis, a 17-year-old student at Santa Fe High School in Santa Fe, Texas, shot and killed eight students, and two teachers, and wounded 13 others (Zuwanich, 2023). According to a CNN article, Pagoutzis used a 12-gauge Remington 870 shotgun and a Rossi .38 Caliber snub-nosed revolver that was legally owned by his father (Allen et al., 2018). Authorities and officers later found explosive devices consisting of pipe bombs and pressure cookers planted at and around the school (Allen et al., 2018) in addition to the lethal weapons brought inside the building. Annie Gimbel (2023), a reporter for CBS News Texas, stated "The gunman, who was a student at the school, bought ammunition online with a prepaid debit card before the shooting." Dimitrios Patrick Reilly, a publisher for the *New York Post*, stated that Pagoutzis was taken into state custody where he was deemed, "still not mentally fit for trial" in 2022. Pagoutzis currently remains at a mental health facility where he was ordered to stay by a judge (Reilly, 2022).

On October 1, 2015, a 26-year-old student, Christopher Harper-Mercer, opened fire in a hall on the Umpqua Community College Campus in Roseburg, Oregon (Vanderhart, 2015). In a published news article, *Umpqua Community College shooting: Killer's manifesto reveals racist,*

satanic views, Theen (2017) states that Mercer was heavily armed with a Glock 19 and a PT 24/7. Rebecca Woolington (2017), a reporter that covers crime in Washington County for *The OregonLive*, wrote that Mercer carried six guns onto campus. He only used two of them during the killings in Snyder Hall: a 9 mm Glock pistol, model 19, and a .40 caliber Taurus pistol, model T24 (Woolington, 2017). Authorities later found out that all the guns used in the shooting were purchased legally by Mercer years prior to the attack (Woolington, 2017).

The OregonLive revealed that police officials also found more weapons at Mercer's apartment that he shared with his mother (Theen, 2017). Prior to Mercer taking his own life, he killed nine people inside Snyder Hall and injured nine others (Vanderhart, 2015). Investigations surrounding the shooting determined Mercer specifically singled out religious people and shot them (Theen, 2017). Julie Turkewitz (2015), the author of "Oregon Gunman Smiled, Then Fired, Student Says" in *The New York Times* states that, "He [Mercer] had asked two people if they were Christians; she (Heu, the student being interviewed) thought they said "yes" and that he killed them." Before Mercer began his attack at Umpqua Community College, he wrote a 6-page manifesto, depicting himself as a "lonely, dejected 26-year-old," (Theen, 2017).

The attack on Red Lake High School started at the nearby Red Lake Indian Reservation on March 21, 2005 (Gardner, 2005). Sixteen-year-old Jeff Weise killed nine people and injured seven others before turning the gun on himself. *MPR News* (2015) reported that his motives were unknown. Weise first killed his grandfather, Daryl "Dash" Lussier, and his grandfather's companion, Michelle Sigana, on the Red Lake Indian Reservation where they were living (Enger, 2015). After killing Lussier and Sigana, Weise took his grandfather's police weapons which included a Winchester 1300 Defender shotgun, 12 gauge, a Ruger P944 Semi-automatic pistol, and a .40 caliber (Enger, 2015). He then took a bulletproof vest and squad car belonging

to his grandfather, making the short drive to Red Lake High School in Red Lake Minnesota (Holman, 2005). He was met at the door by an unarmed security guard whom he killed before making his way to a classroom where he shot two teachers and five students (Holman, 2005). Weise hid in a classroom where he shot himself and died (Holman, 2005). Davey and Harris (2005), reporters for the *New York Times Post*, state that Weise was prescribed antidepressants growing up and appears to have had genetic despondency from his father, who committed suicide in 1997.

To determine if common elements of school-based mass shootings can reveal solutions this timeline will focus on all school shootings that exceed five injuries and/or five deaths. Below will be an analysis of laws that states, that have had a school shooting exceeding 5 fatalities or injuries, have implemented around firearm regulations. A thorough examination of firearm laws and regulations is critical in discovering solutions to preventing school-based mass shootings from happening.

School Shooting Fatalities Timeline April 1999 - March 2023 (security.org, 2023)

- April 20, 1999, Columbine High School in Littleton, Colorado. 13 killed, 21 injured
- May 20, 1999, Heritage High School in Conyers, Georgia. 0 killed, 6 injured
- December 6, 1999, Fort Gibson Middle School in Fort Gibson, Oklahoma. 0 killed, 5 injured
- March 5, 2001, at Santana High School in Santee, California. 2 killed, 13 injured
- March 22, 2001, Granite Hills High School in El Cajon, California. 0 killed, 5 injured
- March 21, 2005, at Red Lake High School in Red Lake, Minnesota. 10 killed, 7 injured
- October 2, 2006, West Nickel Mines Amish School in Nickel Mines, Pennsylvania. 5 killed, 5 injured
- April 10, 2007, Springwater Trail High School in Gresham, Oregon. 0 killed, 10 injured
- April 16, 2007, Virginia Tech College in Blacksburg Virginia. 32 killed, 23 injured
- December 14, 2012, at Sandy Hook Elementary School in Newtown, Conn. 26 killed, 2 injured
- October 1, 2015, Umpqua Community College in Roseburg, Oregon. 9 killed, 8 injured
- January 23, 2018, at Marshall County High School in Benton, Kentucky. 2 killed, 14 injured
- February 1, 2018, Salvador B. Castro Middle School in Los Angeles, California. 0 killed, 5 injured
- February 14, 2018, Marjory Stoneman Douglas High School in Parkland, Florida. 17 killed, 17 injured
- May 18, 2018, at Santa Fe High School in Santa Fe, Texas. 10 killed, 13 injured
- May 7, 2019, STEM School Highlands Ranch in Highlands Ranch, Colorado. 1 killed, 8 injured
- November 30, 2021, at Oxford High School in Oxford, Michigan. 4 killed, 7 injured

- May 24, 2022, at Robb Elementary School in Uvalde, Texas. 21 were killed, 12 injured
- September 28, 2022, at Rudsdale High School in Oakland, California. 0 killed, 6 injured
- October 24, 2022, at Central Visual & Performing Arts High School in St. Louis, Missouri. 2 killed, 7 injured
- March 27, 2023, at The Covenant School in Nashville, Tennessee. 6 killed, 0 injured

* Highlighted items include shootings resulting in 10 > fatalities

FEDERAL GUN LAWS

Six laws passed on gun legislation complete the federal framework for gun law. These laws are as follows: Gun Control Act of 1968 (GCA), Firearms Owners Protection Act of 1986, Brady Handgun Violence Prevention Act of 1993, Assault Weapons Ban of 1994, Protection of Lawful Commerce in Arms Act, and Child Safety Lock Act of 2005, and the National Instant Background Check System Improvements Amendment Act of 2007. The Gun Control Act of 1968 and the Assault Weapons Ban of 1994 target firearms to implement restrictions and regulations related to guns. The other four laws: The Firearms Weapons Ban of 1994, The Protection of Lawful Commerce in Arms Act, The Child Safety Lock Act of 2005, and The National Instant Background Check System Improvements Amendments consist of laws that target categories of individuals such as limiting their ownership of firearms.

Gun Control Act of 1968

The Gun Control Act of 1968 was an ongoing discussion for several years before finally reaching passage in 1968 (Magaddino & Medoff, 1982). The discussion of The Gun Control Act of 1968 began after the assassination of John F. Kennedy (November 1963). Dolak, the author of *Gun Debate Spurred by Kennedy Assassination Rages on Today*, writes that the rifle that Lee Harvey Oswald used to kill John F. Kennedy was a mail-order purchase from an advertisement in a magazine (Dolak, 2013). Congress held hearings related to this fact, but according to *Time Magazine*, “It didn’t really go anywhere,” (Waxman, 2018). Following the assassination of JFK in 1968, the country began to face rising urban rioting and crimes began to increase (Dolak,

2013). In April 1968, Dr. Martin Luther King, Jr. was assassinated, followed shortly by the assassination of Robert F. Kennedy in June 1968 (Dolak, 2013). Jason Sokol, editor of *The New York Times*, stated that after the assassination of Robert F. Kennedy and Dr. Martin Luther King, Jr., Congress passed legislation banning the mail-order sale of shotguns and rifles (2018). The Gun Control Act of 1968 required that all firearms, whether domestic or imported, have an affixed serial number (Magaddino & Medoff, 1982). The act imposed a minimum age restriction on purchasing firearms and expanded the categories of individuals who were prohibited from purchasing firearms (Magaddino & Medoff, 1982). This act also prohibited most felons and drug users from gun ownership, and, according to the U.S. Department of Justice, prohibited the transfer of licenses to certain groups classified as irresponsible or potentially dangerous (Magaddino & Medoff, 1982).

Firearms Owners Protection Act of 1986

Eighteen years after the Gun Control Act of 1968 was passed, the Firearms Owners' Protection Act of 1986 (FOPA) revised many of the provisions of the Gun Control Act of 1968 (Hardy, n.d.). According to Congressman Norman (2020), a 5th district representative from South Carolina, the FOPA bill, "protects those who are transporting firearms for lawful purposes from local restrictions which would otherwise prohibit passage." This bill essentially stated that as long as you're legal to carry and own a firearm at your origin and destination, then you are legal along the way to your destination even if you pass through a local town where local laws prohibit any such transport of a firearm (Norman, 2020).

Brady Handgun Violence Prevention Act of 1993

*"The real measure of our progress, of course, is more than the decline in crime. It is whether families feel secure in their homes and their neighborhoods; **whether a child feels safe in the classroom and the***

schoolyard, whether the American people, in big cities or small towns, feel the full measure of their freedom. That, at heart, is what the Brady Law has helped accomplish, and that is the vision to which we must all remain true if we are to build a safer, stronger America for the 21st century.”

President Bill Clinton

August 6, 1998

President Clinton’s campaign in 1993, sought to “keep guns out of the hands of criminals.” The Brady Bill spent 12 years weaving its way through the legislative process in Washington D.C. (“Timeline of the Brady Bill,” n.d.). President Clinton signed the Brady Handgun Violence Prevention Act (The Brady Act) into law on November 30, 1993 (Yale Law School, 2008). This act prevented a person who has a criminal background from purchasing a firearm. Robert Longley (2022), the author of *The Brady Bill and Background Checks for Gun Buyers*, states that the Brady Act was the first law passed that mandated federal background checks on every firearm purchaser in the United States.

The Brady Bill constituted another set of amendments to the Gun Control Act of 1968 (Longley, 2022). These amendments were put into place in an effort to reduce gun violence by limiting access to guns (Longley, 2022). The amendments instituted a 5-day waiting period for individuals purchasing a handgun (Longley, 2022). Crane (2019), an editor for *PBS News*, stated that the 5-day waiting period allowed time for the FBI to ensure the purchaser did not fall into a prohibited category before a purchase could be processed. This process remained in place until the National Instant Criminal Background Check System (NICS), a database of records that are maintained by the FBI, was instituted in 1998 (Crane, 2019). The National Rifle Association (NRA) opposed the Brady Bill’s passage in Congress and lobbied for replacing the original 5-day waiting period with electronic background checks on the same day of purchase through the

National Instant Criminal Background Check System (Crane, 2019). According to the FBI and the NICS if someone is convicted of a crime with a sentence of more than one year; is under indictment for a crime with a sentence of more than a year; is a fugitive; uses controlled substances illegally; is determined by the law to be mentally incompetent; is illegally in the United States; has been dishonorably discharged from the military; or has been convicted of domestic violence, they will be flagged by NICS (Crane, 2019). A seller calls to see if the purchaser falls into any of the prohibited categories. If someone is flagged through the NICS, a three-day waiting period is instituted to determine if the buyer is eligible to purchase a firearm (Crane, 2019). If the results of the background check do not come back in three days to clear the purchaser, they are automatically cleared to purchase. The publisher of *Enforcement of the Brady Act* states that in 2016, the FBI found 4,000 firearm buyers should have been denied but their background checks did not come back within the mandatory three-day waiting period, so they were approved to purchase firearms. This has become known as the “delayed denial” loophole (Frandsen, 2010). Seung-Hui Cho killed thirty-two people on the campus of Virginia Tech in Blacksburg, Virginia, and was found to be a danger to himself by a judge prior to the massacre (Osterweil, 2007). Under the Brady Handgun Violence Prevention Act (2010), Cho should not have been allowed to buy any weapons, but the information from the judge was never reported to the NCIS. To enforce and encourage states to report disqualifying information, the NCIS Amendment Act offered financial incentives in hopes that people who do not qualify to buy a weapon cannot (Rose, 2010).

After the Brady Handgun Violence Prevention Act of 1993 was passed, the NRA filed multiple lawsuits throughout many states including Arizona, Louisiana, Mississippi, Montana, Texas, and Wyoming seeking to have the Brady Act deemed unconstitutional (Longley, 2022).

The Supreme Court decision from *Prinz vs. The United States* ruled that Congress is not allowed to force state governments to uphold or enforce the firearm laws of the federal government (Longley, 2022). This case established that the Brady Handgun Violence Prevention Act violated the tenth amendment of the United States Constitution (Longley, 2022). The Tenth Amendment of the United States reads, “The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people” (National Constitution Center, 2023). The United States Supreme Court declared that the Brady Handgun Violence Prevention Act of 1993 was unconstitutional and violated federalism and unitary executive concepts embodied within the tenth amendment (Longley, 2022).

Although the Brady Handgun Violence Prevention Act of 1993 is not in effect anymore, Clinton’s intentions of the Brady Act are still being enforced today. Fuller (2014), an editor of the *Washington Post*, states that Clinton’s intentions for this act were to have background checks on all firearm purchasers so criminals did not have access to a weapon. As of today, background checks by the Federal Bureau of Investigation (FBI) are up to state and local law enforcement officials to conduct if they wish to do so (Fuller, 2014).

Assault Weapons Ban of 1994

The Public Safety and Recreational Firearms Protection Act of 1994, also known as the Assault Rifle Ban (ARB), prohibited the domestic manufacture of civilian use of certain types of semiautomatic weapons and large ammunition magazines (Roth & Koper, 1999). According to editors for the *National Institute of Justice*, this act did not prohibit all assault weapons (Roth & Koper, 1999). Prohibited weapons that were legally acquired or purchased before the date of this legislation were grandfathered in and still able to be possessed legally (Roth & Koper, 1999). According to an editor of *ABC News*, “The bill banned more than a dozen specific firearms and

certain features on guns, but because there are so many modifications that can be made on weapons and the fact that it did not outright ban all semi-automatic weapons, many such guns continue to be legally used” (Keneally, 2019). The effectiveness of the Assault Weapons Ban of 1994 is still debated today (Keneally, 2019).

Child Safety Lock Act of 2005

In 2005, the Child Safety Act of 2005 was proposed to amend the Brady Handgun Violence Prevention Act of 1993. Congress wanted to define a firearm as a weapon containing “locking device.” A member of the Federal Firearms License Experts, Maddox (2021), states that under the Child Safety Lock Act “when selling, delivering, or transferring a handgun to any person other than another licensee, any licensed importer, licensed manufacturer, or licensed dealer must provide a secure gun storage or safety device to that person for the handgun.” This law is enforced by the Consumer Products Safety Commission (Maddox, 2021). The purpose of this law was to protect children and unauthorized persons from gaining access to firearms (Maddox, 2021).

Gun Laws by State

The *Prinz vs The United States* case in 1997 resulted in the Supreme Court ruling that Congress is not allowed to compel the state governments to uphold or abide by the firearm laws established by the federal government (Pickerill, 2006). The author of *Printz v. United States: An Assault Upon the Brady Act or a Tenth Amendment Fortification* states that within the parameters of the 2nd amendment, states can add requirements to existing federal laws, but they are not allowed to negate them (Tyne, 1994). Therefore, every state is regulated by its own laws, this includes firearm and gun laws. Duva (2014), a publisher for CNBC states that gun laws may

include registrations that are needed for someone to purchase a gun, permits required for someone to have possession of a gun, and documents required to carry a gun. Since gun laws are regulated by each state, the federal government has no control over the gun laws that each state puts into place (Duva, 2014). Laws are enforced on a state-to-state basis with some states making it easier than others to be able to purchase or carry a firearm (Duva, 2014).

U.S. states that require permits, registrations, and background checks

The following figures examine state laws based on three categories: age restrictions, background check requirements, and assault weapon bans.

The map in Figure 2.1 shows states which require a permit to purchase a firearm. Fourteen U.S. states require a permit to purchase a firearm and 36 U.S. states do not require a permit to purchase firearms (Handgun Law, 2023).

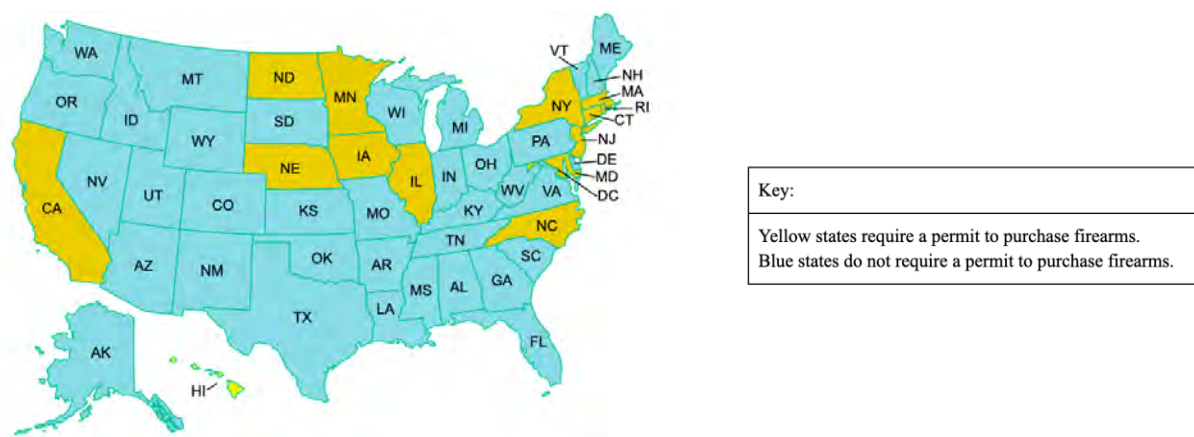


Figure 2.1: Permit to purchase

Figure 2.2 provides information on permit requirements by state. Currently, 37 U.S. states require a permit to carry a gun, while 13 states have no requirement (Handgun Law, 2023).

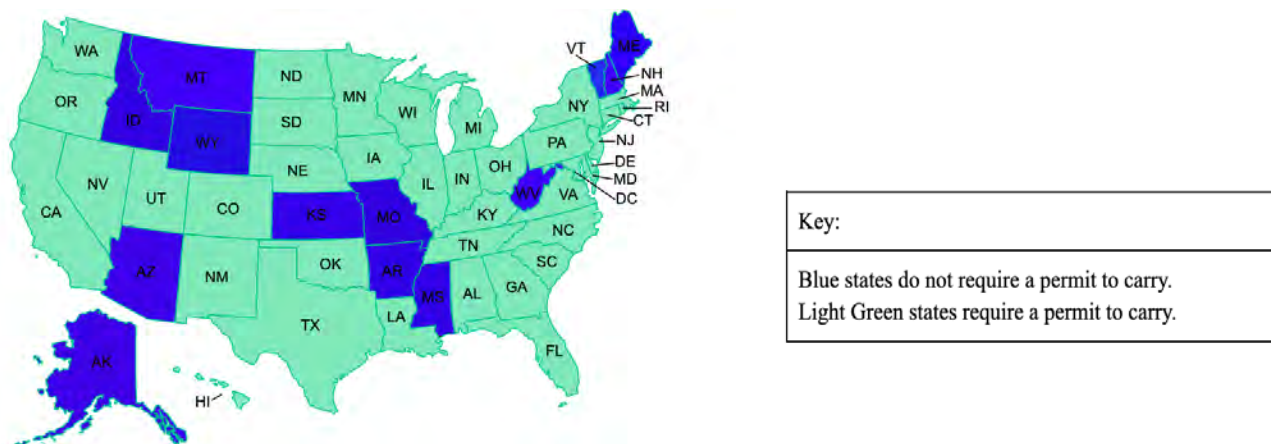


Figure 2.2: Permit to carry

Figure 2.3 provides a visual representation of states which require firearms registration. Eight U.S. states require a firearm registration when purchasing a weapon or firearm, the other 42 U.S. states have no requirements (Handgun Law, 2023).

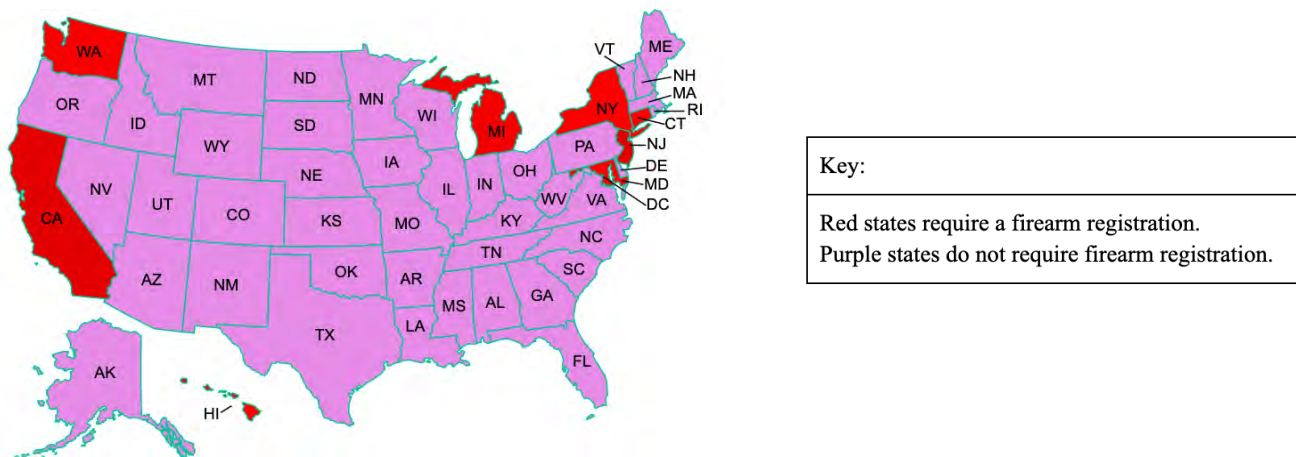


Figure 2.3: Firearm registration

Figure 2.4 shows state laws permitting open-carry options. Open carry allows for a firearm to be fully or partially visible to others. Only three U.S. states allow for guns to be carried openly with the other 47 requiring weapons to be concealed (Duva, 2014).

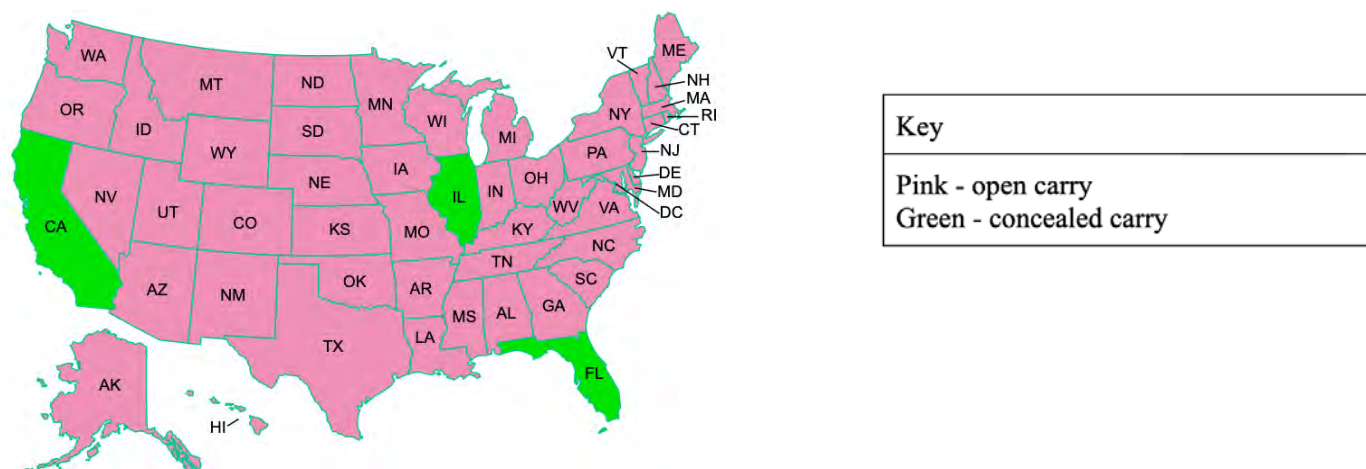


Figure 2.4: Open-carry laws

Age Requirements

Federal laws currently place no minimum age requirements regarding the possession of long guns which constitute firearms with a barrel length of at least 18 inches. Since states are allowed to create their own laws, many states have raised the minimum age for handguns to 21 years old and the minimum age for long guns to 18 years old (Statista Research Department, 2023). According to the Bureau of Alcohol, Tobacco, Firearms and Explosives (2022), all 50 U.S. states have implemented prohibitions against long gun purchases for anyone under 18 years old. Giffords Law Center (n.d.) states that forty-four states allow the possession of a long gun at eighteen years old (Figure 3.0). California, Florida, Hawaii, Illinois, New York, Vermont, and Washington all require buyers to be at least twenty-one years old to purchase a long gun (Giffords Law Center, n.d.). All fifty U.S. states prohibit the purchase of a handgun for anyone under the age of twenty-one years old (Giffords Law Center, n.d.).

publisher for *Herald Mail Media*, Colorado magazine bans prohibit residents from owning or having possession of a firearm that can hold 15 rounds of ammunition at a time unless they are in law enforcement or retired from law enforcement (Cardi, 2021). Legislation in Oregon bans the sale, transfer, or import of gun magazines with ammunition that holds 10 or more rounds (Associated Press, 2023). The only people allowed to own a weapon that carries 10 rounds, or more are military personnel or law enforcement (Associated Press, 2023). The state of Oregon does allow people to use weapons at firing ranges, hunting, and shooting competitions that carry 10 or more rounds, but the owners must prove that they legally possessed the firearm before the ban came into existence (Associated Press, 2023).

California's gun laws include the banning of military-style assault weapons and large-capacity magazines that can hold more than 10 rounds (Greve, 2023). According to Greve (2023), the author of *California Gun Laws Can't Stop Mass Shootings without Federal Support*, California is one of just two states, along with New Jersey, to receive an "A" rating from the gun safety group Giffords, based on the strength of its firearm regulations. Connecticut does not ban the owning of magazines with 10 or more rounds but does ban loading a firearm with a magazine with 10 or more rounds outside of the owner's home or outside of a shooting range (Giffords Law Center, 2023).

CONCLUSION

Twenty-one school-based mass shootings exceeding five fatalities have occurred between the April 20, 1999, incident at Columbine High School in Littleton, Colorado and the March 27, 2023, incident at The Covenant School in Nashville, Tennessee. These twenty-one different incidents have occurred in 15 different U.S. states: Virginia, Connecticut, Texas, Florida, Oregon, Minnesota, Georgia, California, Pennsylvania, Kentucky, Colorado, Michigan,

Missouri, Tennessee, and Oklahoma (Figure 4.0). Four of these states: Texas, Florida, Oregon, and California have had multiple school-based mass shooting incidents within this timeframe with at least five fatalities or injuries. Three major commonalities seemed to emerge from the information obtained in this research: access to high-capacity ammunition and weapons, gender and age, and neglected signs of mental illness.

High-capacity magazine bans were intended to limit the number of rounds of ammunition an individual can fire at one time before having to reload (“States with Magazine Restrictions,” n.d.). However, few states have chosen to implement such bans leading to increased levels of tragedy and massacres on school grounds. Out of all the states that exceeded at least five fatalities or 5 deaths, 73.3% of those states do not have any laws that restrict or ban high-capacity magazines. While a handful of states have created high-capacity magazine bans in an effort to reduce the amount of damage that can potentially be caused in a short amount of time, school-based mass shootings continue to happen. In 85.7% of school-based mass shootings, the perpetrator used a weapon or firearm that uses high-capacity magazines. 85.7 % of school perpetrators used a high-capacity magazine and 73.3% of the states that have had a school-based mass shooting killing or injuring at least 5 people do not have any bans on high-capacity magazines. One can conclude that 73.3% of those states have easier access to high-capacity magazines. This allows the perpetrator to cause more damage in a shorter amount of time by being able to shoot more rounds before having to reload. If this is the case, why would all states not have a ban on high-capacity magazines? If all states had a ban on high-capacity magazines it could save many lives and be a step closer to putting an end to school shootings.

Out of the hundreds of school shootings since 1999 resulting in multiple fatalities, male perpetrators have carried out 95% with 47.6% of them being between the ages of 18-20 years

old, there isn't a formal targeted profile for perpetrators, but the group is similar in gender, age, and mental illness backgrounds.

All the perpetrators involved in school shootings with 10 or more deaths or injuries were suspected of having some sort of mental illness issues. Many of these were untreated or went without being noticed. It is also essential to recognize that in 100% of school shootings, exceeding 10 fatalities or deaths, the perpetrator is suspected or showed signs of mental illness. Schools should consider a system where they are able to do more one-on-one check-ins with every student to check on their mental health state. Cowell writes, “It was not the mental illness that was contributing to the tragedy, it was the untreated mental illness that had an impact on their motives” (Cowell, 2023). Even if it takes a lot of time to check in with every student in the school it could be essential to put that time aside even if just one student's life gets saved”.

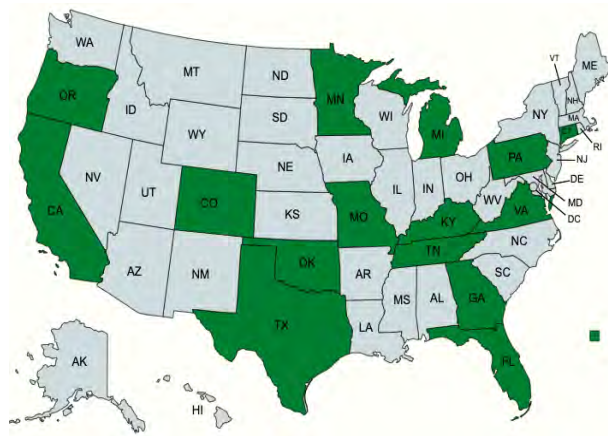


Figure 3.1: States exceeding at least 5 fatalities or injuries

Key:

Dark Green states have had a school shooting with an outcome of at least 5 fatalities or deaths.
Grey states have not had a school shooting with at least 5 fatalities or deaths

Work Cited

- Associated Press. (2023, July 16). "Federal judge upholds Oregon's tough gun control law approved by voters." *PBS NewsHour*. <https://www.pbs.org/newshour/politics/federal-judge-upholds-oregons-tough-gun-control-law-approved-by-voter>
- Allen, K., Andone, D., & Hanna, J. (2018, May 19). "Alleged shooter at Texas High School Spared people he liked, court document says." *CNN*.
<https://www.cnn.com/2018/05/18/us/texas-school-shooting/index.html>
- Benshoff, L. (2022, June 01). "The Story of what happened the day of the Uvalde Shootings Keeps Changing." *WUTC*. <https://www.npr.org/2022/06/01/1102486115/the-story-of-what-happened-the-day-of-the-uvalde-shooting-keeps-changing>
- Blad, E. (2023, April 28). "What Counts as a School Shooting? Lawmakers Want an Official Definition." *Education Week*. <https://www.edweek.org/leadership/what-counts-as-a-school-shooting-lawmakers-want-an-official-definition/2023/04>
- Bosch, T. (2007, April 17). "Thirty-Two Victims Two Guns?" *Slate Explainer*.
<https://slate.com/news-and-politics/2007/04/how-did-cho-seung-hui-kill-so-many-people-with-just-a-pair-of-handguns.html>
- Brady Campaign. (2019). "Brady Background Checks." *Prevent Gun Violence*.
<https://www.bradyunited.org/our-work/policy/brady-background-checks>
- Cahill, E. (2020). "The Columbine High School Shooting." *Edu*.
<https://courses.bowdoin.edu/history-2203-fall-2020-ecahill2/narrative-of-the-event/>
- Cardi, J. (2021, April 25). "Colorado bans high-capacity magazines, but that doesn't make them impossible to get." *HM Media*.

<https://www.heraldmillmedia.com/story/news/2021/04/25/colorado-bans-high-capacity-magazines-but-that-doesnt-make-them-impossible-to-get/43720833/>

Chapman, I., Colbert, C., Levenson, E., & Prokupecz, S. (2022, May 27). “Uvalde school shooting suspect was a loner who bought two assault rifles for his 18th birthday.”

<https://www.cnn.com/2022/05/25/us/uvalde-texas-school-shooting-salvador-ramos/index.html>

Chmielewski, K. (2023, August 13). “Mass shooting.” *Britannica*.

<https://www.britannica.com/topic/mass-shooting>

Chiu, A., Chong, L., Cox, J., Horton, A., Rich, S., Thacker, H., & Trevor, L. (2023, June 11).

“More than 356,000 students have experienced gun violence at school since Columbine.”

The Washington Post. <https://www.washingtonpost.com/education/interactive/school-shootings-database/>

CNN Editorial Research. (2023, April 03). “Virginia Tech Shootings Fast Facts.” *CNN*.

<https://www.cnn.com/2013/10/31/us/virginia-tech-shootings-fast-facts/index.html>

CNN. (December 2013). “Sandy Hook Shooting: What Happened?” *CNN*.

<https://www.cnn.com/interactive/2012/12/us/sandy-hook-timeline/index.html>

Conner, T., Johnson, A., Ortiz, E., Rascon, J., & Williams, P. (2015, October 02). “Oregon

Shooting: Umpqua Community College Gunman Talked Religion.” *U.S. News*.

<https://www.nbcnews.com/storyline/oregon-college-shooting/oregon-shooting-umpqua-community-college-gunman-talked-religion-n437051>

Cowan, A. (2014, November 21). “Adam Lanza’s Mental Problems ‘Completely Untreated’

Before Newtown Shootings, Report Says.” *The New York Times*.

<https://www.nytimes.com/2014/11/22/nyregion/before-newtown-shootings-adam-lanzas-mental-problems-completely-untreated-report-says.html>

Crane, M. (2019, August 22). “How Background Checks and ‘red flag’ laws work.” PBS NewsHour. <https://www.pbs.org/newshour/nation/how-background-checks-and-red-flag-gun-laws-work>

Cullen, D. (2004, April 20). “The Depressive and the Psychopath.” *Slate*. <https://slate.com/news-and-politics/2004/04/at-last-we-know-why-the-columbine-killers-did-it.htm>

Davey, M. (2005, March 26). “Family Wonders if Prozac Prompted School Shootings.” <https://www.nytimes.com/2005/03/26/us/family-wonders-if-prozac-prompted-school-shootings.html>

Deliso, M. (2022, May 30). “What we know about 21 Texas school shooting victims; teacher’s widower dies of heart attack.” *ABC News*. <https://abc7.com/texas-school-shooting-victims-uvalde-elementary-eva-mireles-victim/1189287/>

Despart, Z. (2023, March 20). “He has a battle rifle”: Police feared Uvalde gunman’s AR-15.” *The Texas Tribune*. <https://www.texastribune.org/2023/03/20/uvalde-shooting-police-ar-15/>

Dolak, Kevin. (2013, November 20). “Gun Debate Spurred by Kennedy Assassination Rages on Today.” *ABC News*. <https://abcnews.go.com/US/gun-debate-spurred-kennedy-assassination-rages-today/story?id=20677433>

Drabold, W., & Fitzpatrick, A. (2019, January 15). “The Florida School Shooter Used An AR-15 Rifle. Here's What to Know About the Gun.” *TIME*. <https://time.com/5160267/gun-used-florida-school-shooting-ar-15/>

- Duva, N. (2014, November 20). "Gun laws vary state by state: CNBC Explains." *CNBC*.
<https://www.cnbc.com/fintech/>
- Encyclopedia Staff. (2013). "Columbine Massacre." *Colorado Encyclopedia*.
<https://coloradoencyclopedia.org/article/columbine-massacre>
- Enger, J. (2019, July 13). "The Shooting at Red Lake: What Happened." *MPR News*.
www.mprnews.org/story/2015/03/18/red-lake-shooting-explained
- Evans, G. (2022, October 14). "Parkland school shooting: Why the gunman was spared the death penalty." *BBC NEWS*. <https://www.bbc.com/news/world-us-canada-63237156>
- Everytown for Gun Safety. "Background Checks." (2022). *Gun Law Navigator*.
https://maps.everytownresearch.org/navigator/states.html?dataset=background_checks&states=NY
- Fitz-Gibbon, G. (2022, June 28). "Salvador Ramos' Grandmother released from hospital a month after school massacre." *Breaking News*. <https://nypost.com/2022/06/28/salvador-ramoss-grandmother-released-from-hospital/>
- Frandsen, R. (2010, June). "Regional Justice Information Service." *Enforcement of the Brady Act*. <https://www.ojp.gov/pdffiles1/bjs/231052.pdf>
- Fuller, J. (2014, February 28). "It's been 20 years since the Brady bill passed. Here are 11 ways gun politics have changed." *The Washington Post*.
<https://www.washingtonpost.com/news/the-fix/wp/2014/02/28/its-been-20-years-since-the-brady-law-passed-how-have-gun-politics-changed/>
- Garcia, U. & Evan, L. (2023, May 22). "A year ago, these Uvalde kids left school early. They're haunted by what happened next." *The Texas Tribute*.

<https://www.texastribune.org/2023/05/22/texas-uvalde-shooting-robb-students-family-trauma/>

Gardner, B. (2005, March 22). "10 killed in Red Lake shooting spree; several others wounded."

Los Angeles Times, <https://www.latimes.com/nation/la-na-school-shootings-2017-story.html>

Giffords Law Center. (2023). "Gun Laws". <https://giffords.org/lawcenter/gun-laws>

Gimbel, A. (2023, May 18). "5 Years ago today, 10 people died in the Santa Fe High School shooting." *CBS News Texas*, 18 May 2023, <https://www.cbsnews.com/texas/news/5-years-ago-today-10-people-died-santa-fe-high-school-shooting/>

Grabow, C. (2018, May 21). "The US has had 57 times as many school shootings as the other major industrialized nations combined." *CNN*.

<https://www.cnn.com/2018/05/21/us/school-shooting-us-versus-world-trnd/index.html>

Greve, J. (2023, February 03). "California gun laws can't stop mass shootings without federal support." *The Guardian*. <https://www.theguardian.com/us-news/2023/feb/03/california-gun-laws-federal-support>

Hardy, D. (n.d.) "THE FIREARMS OWNERS' PROTECTION ACT: A HISTORICAL AND LEGAL PERSPECTIVE." https://guncite.com/journals/hardfopa.html#fn*

Hayes, C. (2018, May 18). "Texas School Shooter Used Shotgun, pistol in deadly assault." *USA Today*. <https://www.usatoday.com/story/news/2018/05/18/gun-used-texas-shooting-explosives/623202002/>

Holman, K. (2005, March 22). "Teen Goes on Shooting Rampage at Minnesota High School."

PBS News Hour. <https://www.pbs.org/newshour/show/teen-goes-on-shooting-rampage-at-minnesota-high-school>

“How Waiting Periods Affect Gun Use Outcomes.” (2023, January 10). *Objective Analysis Effective Solutions*. <https://www.rand.org/research/gun-policy/analysis/waiting-periods.html>

Keneally, M. (2015, October 02). “Umpqua Community College Shooter Armed With 6 Guns and Flak Jacket.” *ABC News*. <https://abcnews.go.com/US/umpqua-community-college-shooter-armed-guns-flak-jacket/story?id=34191422>

Keneally, M. (2019, September 13). “Understanding the 1994 assault weapons ban and why it ended.” *ABC News*. <https://abcnews.go.com/US/understanding-1994-assault-weapons-ban-ended/story?id=65546858>

K12 Academics. (2004). “History of School Shootings in the United States.” *Toledo*. <https://www.k12academics.com/school-shootings/history-school-shootings-united-states>

Langley, R. (2022, February 2). “The Brady Bill and Background Checks for Gun Buyers.” *Thoughtco*. <https://www.thoughtco.com/brady-act-gun-buyer-background-checks-3321492>

Lopez, B. (2023, May 28). “Lawmakers approve a school safety bill that would require an armed person at every Texas campus.” *The Texas Tribune*. <https://www.texastribune.org/2023/05/28/texas-school-safety/>

Maddox, B. (2021, November 05). “FFL- ATF Child Safety Lock Act.” FFL123. <https://www.ffa123.com/atf-ffa-child-safety-lock-act/>

Magaddino, J., & Medoff, M. (1982). “Handguns, Homicides and the Gun Control Act of 1968 (From Handgun Control Legislation - Hearings, P 318-338, 1982 - See NCJ-93399).” *Office of Justice Programs*. <https://www.ojp.gov/ncjrs/virtual-library/abstracts/handguns-homicides-and-gun-control-act-1968-handgun->

[control#:~:text=The%201968%20law%20imposed%20Federal,manufacturers%2C%20importers%2C%20or%20collectors](#)

Mendez, M. (2023, May 24). “Uvalde School Shooting: What we know one year later.” *The*

Texas Tribune. <https://www.texastribune.org/2023/05/24/uvalde-school-shooting-what-to-know/>

“More than 356,000 students have experienced gun violence at school since Columbine.” (2023,

June 11). *The Washington Post*.

<https://www.washingtonpost.com/education/interactive/school-shootings-database/>

National Constitution Center. [https://constitutioncenter.org/the-](https://constitutioncenter.org/the-constitution/amendments/amendment-x)

[constitution/amendments/amendment-x](https://constitutioncenter.org/the-constitution/amendments/amendment-x)

Mullen, M., Onion, A., Sullivan, M., & Zapata, C. (2023, June 29). “Columbine Shooting.”

History. <https://www.history.com/topics/1990s/columbine-high-school-shootings>

Mullen, M., Onion, A., Sullivan, M., & Zapata, C. (2011, April 13). “Virginia Tech Shooting

Leaves 32 Dead.” *This Day in History*. [https://www.history.com/this-day-in-](https://www.history.com/this-day-in-history/massacre-at-virginia-tech-leaves-32-dead)

[history/massacre-at-virginia-tech-leaves-32-dead](https://www.history.com/this-day-in-history/massacre-at-virginia-tech-leaves-32-dead)

National Archives and Records Administration (2000, November 16). *The White House*.

<https://clintonwhitehouse4.archives.gov/WH/Work/080698.html>

Norman, R. (2020, February 24). “Clarifying the Firearm Owners’ Protection Act.”

Congressman. <https://norman.house.gov/news/documentsingle.aspx?DocumentID=452>

NRA- ILA Institute for Legislative Action. (2019, September). “Waiting Periods.”

<https://www.nraila.org/get-the-facts/waiting-periods/>

- Osterweil, N. (2007, August 30). "Virginia Tech Missed 'Clear Warnings' of Shooter's Mental Instability." *MedPageToday*.
<https://www.medpagetoday.com/psychiatry/anxietystress/6546>
- Oxner, R. (2022, May 25). "Uvalde gunman legally bought AR rifles days before shooting, law enforcement says." *The Texas Tribune*. <https://www.texastribune.org/2022/05/25/uvalde-shooter-bought-gun-legally/>
- Parul, E. (2011, August 31). "Columbine High School Shooting." *Britannica*.
<https://www.britannica.com/event/Columbine-High-School-shootings/additional-info#history>
- Price, W. & McCarthy, J. (2018, February 17). *Florida Today*.
<https://www.floridatoday.com/story/news/2018/02/17/minute-minute-how-parkland-school-shooting-unfolded/345817002/>
- Ray, M. (2023, June 16). "Sandy Hook Elementary School mass shooting, Newtown, Connecticut, United States [2012]." *Britannica*.
<https://www.britannica.com/event/Sandy-Hook-Elementary-School-shooting>
- Reilly, P. (2022, February 11). "Accused Sante Fe School Shooter Still Not Mentally Fit for Trial." *New Your Post*. <https://nypost.com/2022/02/11/accused-santa-fe-school-shooter-dimitrios-pagourtzis-still-not-mentally-fit-for-trial/>
- Rose, V. (2010, November 10). "Olr backgrounder: Relief from Federal Firearms Disabilities on Mental Health Grounds." *OLR Research Report*. <https://www.cga.ct.gov/2010/rpt/2010-R-0456.htm>
- Sandoval, E. (2023, May 24). "A Year After the Uvalde Massacre: Did Anything Change?" *The New York Times*. <https://www.nytimes.com/2023/05/24/us/uvalde-shooting-fallout.html>

- Schemmel, A. (2022, May 25). "Texas shooter struggled with mental health dysfunction, was fascinated with guns." <https://khqa.com/news/nation-world/texas-shooter-struggled-with-mental-health-family-dysfunction-was-fascinated-with-guns-ualde-salvador-rolando-ramos>
- Sokol, J. (2018, March 22). "America Passed Gun Control in 1968. Can it Happen Again?" *The New York Times*. <https://www.nytimes.com/2018/03/22/opinion/gun-control-1968.html>
- Spencer, T. (2022, July 15). "Florida school shooter's AR-15 rifle shown to his jurors." *The Associated Press*. <https://apnews.com/article/education-florida-fort-lauderdale-parkland-school-shooting-60791bdf38785f494400c43b90a97c39>
- Spencer, T. (2022, October 06). "School Shooter Chose Valentines Day to Ruin it Forever." *The Associated Press*. <https://apnews.com/article/shootings-education-florida-fort-lauderdale-parkland-school-shooting-045455fc875b7a91800468995c18dcf5>
- "The Columbine High School Shootings." (n.d.) Jefferson County, Colorado.
<http://www.cnn.com/SPECIALS/2000/columbine.cd/Pages/NARRATIVE.Time.Line.htm>
- Then, A. (2017, September 07). "Umpqua Community College shooting: Killer's manifesto reveals racist, satanic views." *Pacific Northwest*. https://www.oregonlive.com/pacific-northwest-news/2017/09/umpqua_community_college_shoot_3.html
- Tikkanen, A. (2023, August 8). "Virginia Tech Shooting." *Britannica*.
<https://www.britannica.com/event/Virginia-Tech-shooting>
- "Timeline of the Brady Bill." (n.d.) "Timeline of the Brady Bill".
<https://www.clintonlibrary.gov/education/timeline-brady-bill>
- Travis, J. (1999, March). "Impacts of the 1994 Assault Weapons Ban: 1994–96." *National Institute of Justice*. <https://www.ojp.gov/pdffiles1/173405.pdf>

- Turkewitz, J. (2015, October 9). "Oregon Gunman Smiled, Then Fired, Student Says." *The New York Times*. <https://www.nytimes.com/2015/10/10/us/roseburg-oregon-shooting-christopher-harper-mercier.html>
- Turner, R. (2020, November 20). "The Second Amendment Protects Weapons of War." *The Federalist Society*. <https://fedsoc.org/commentary/fedsoc-blog/the-second-amendment-protects-weapons-of-war#:~:text=But%20the%20Supreme%20Court%20has,to%20possess%20weapons%20of%20war>
- Tyne, J. (1994). "Printz v. United States: An Assault Upon the Brady Act or a Tenth Amendment Fortification?" *Journal of Civil Rights and Economic Development*.
<https://scholarship.law.stjohns.edu/cgi/viewcontent.cgi?article=1408&context=jcred>
- Vanderhart, D. (2015, October 1). "Oregon Shooting at Umpqua College Kills 10, Sheriff Says." *The New York Times*. <https://www.nytimes.com/2015/10/02/us/oregon-shooting-umpqua-community-college.html>
- Vigderman, A. & Turner. (2023, May 10). "A Timeline of School Shootings Since Columbine." *Security.org*. <https://www.security.org/blog/a-timeline-of-school-shootings-since-columbine/>
- Waxman, O. (2018, October 30). "How the Gun Control Act of 1968 Changed America's Approach to Firearms—And What People Get Wrong About That History." *TIME*.
<https://time.com/5429002/gun-control-act-history-1968/>
- Woolington, R. (2017, September 09). "UCC shooting investigation: Shooter describes himself as dejected, while witnesses paint scene of horror." *Pacific Northwest*

World Population Review. (2023). "Magazine Capacity Laws by State."

<https://worldpopulationreview.com/state-rankings/magazine-capacity-laws-by-state>

Yale Law School. (n.d.) "Brady Handgun Violence Prevention Act; November 11, 1993."

https://guncite.com/journals/hardfopa.html#fn*

Young, T. (2019, May 13). "Psychological Aspects of Adam Lanza." *Linked in*.

<https://www.linkedin.com/pulse/psychological-aspects-adam-lanza-trish-roberts-bsn-lnc>

Zuvanich, A. (2023, February 02). "Santa Fe High School shooter remains mentally incompetent to stand trial, further dragging on 5-year-old case." *Houston Public Media*.

<https://www.houstonpublicmedia.org/articles/news/school-shooting/2023/02/02/442923/santa-fe-high-school-shooter-remains-mentally-incompetent-to-stand-trial-further-dragging-on-5-year-old-case/>

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Article 10

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Vacation For All: Optimizing Scheduling Coverage for Coptic Orthodox Priests in the Southern Diocese of the United States

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Abstract

The Coptic Orthodox Diocese of the Southern United States has considerably grown since its establishment in 1993. Congregational growth has tended to outpace clergy growth, and it is becoming increasingly difficult to provide adequate staffing for weekly liturgies. These growing pains are especially evident in the instances of priests taking paid time off, with many clergy being unable to take accrued yearly time off. A discussion of current scheduling procedures and literature review precedes the proposed assumptions and criteria sought to be optimized. The multifaceted mathematical modeling approach considers a data-analytic and computer-simulated approach.

Introduction

The Coptic Orthodox Diocese of the Southern United States has considerably grown in the past few years. Priesthood in this denomination is not a career, but rather a calling; ordination of priests is not an easy matter. As such, denominational growth has placed considerable strain on administrators who ensure that there are an adequate number of staff for weekly services known as *liturgies*. A direct consequence of scheduling strain is that many priests are unable to take full advantage of their allocated vacation time. The goal of this project is to identify issues with current scheduling practices and propose a better solution. Furthermore, this report seeks to lay a robust mathematical modeling framework by considering multiple methods and approaches to subsequent work on a solution. Of all approaches outlined, the data-analytic method is the most utilized for this phase of the project.

Priests serve in several capacities as it pertains to scheduling. Churches have at least one resident priest on staff. Communities do not have a resident priest on staff but are instead served

by a nearby priest. This necessitates that community liturgies and church liturgies do not create a time conflict for the priest who serves them. For the purposes of scheduling, church liturgies must be hosted, and community liturgies may be hosted if a priest, either the designated priest or a covering priest, can accommodate that timeslot. Generally, communities will cancel services if their resident priest is on leave.

Prior to discussing how to fix the scheduling issues, it is important to understand the existing scheduling framework. The existing scheduling procedures are hosted on a Google Form. Priests complete the form with relevant information for their vacation request, namely the dates they are requesting off. After completion, requests that are categorized as “Vacation”, meaning that this request counts towards yearly allocated vacation days, are sent to His Eminence Metropolitan Youssef, who will either accept or reject the request based on factors including the number of vacation days the priest has remaining. Vacation requests that are approved by His Eminence but do not require a Sunday coverage assignment are not processed by the system. From there, accepted vacation requests and all non-vacation requests that necessitate coverage of a Sunday liturgical service at a church are sent to covering priests who are available in the requesting priest’s region, of which there are four regions.

Availability considers a covering priest’s existing coverage assignments and if that priest has previously gotten approval for their own vacation. If multiple covering priests are available to offer coverage, the covering priest with the lowest number of year-to-date completed coverage assignments is asked to fulfill the coverage assignment. An email is sent to that priest, who has 72 hours to respond. If no response is given, the requested covering priest is automatically assigned for the coverage assignment. This feature has been put in place by Diocese administrators to encourage prompt responses times. If the priest accepts the coverage

assignment, the process terminates, and the requesting priest is notified that coverage has been found. If the first covering priest declines the coverage assignment, the process continues by going to the remaining priest who has fulfilled the least number of coverage assignments until coverage can be fulfilled. If all covering priests in the requesting priest's region decline, the request is sent to the administrator of the region who will attempt to manually find coverage via covering priests in a different region. If no coverage is found via this method, the request remains unfilled in the system. Requesting priests are free to resubmit a request for the exact same dates in the future if desired.

Currently, the system meets the needs of Diocese priests via automating parts of the process. Prior to this infrastructure, priests were responsible for finding their own coverage for their vacations. Some priests benefitted from this arrangement more than others, especially those who would partner up with a fellow priest or small group of priests. These priests would mutually meet each other's vacation requests. Many other priests did not benefit from this system, mainly those who were unable to partner up with a nearby priest. After several conversations with administrators, four key issues were identified.

1. Priests who request coverage more than 4 months in advance are often met with low rates of finding a coverage assignment. One of the largest factors in this is that many of the covering priests do not wish to confirm a covering assignment when they themselves have not made vacation plans.
2. The current system does include some measure of equality in how it assigns coverage assignments by sending requests to the covering priest who has completed the smallest number of year-to-date requests. However, since covering priests are free to accept and deny requests as they wish, some covering priests end up carrying the load of multiple

other covering priests. The Diocese does not wish to restrict vacations on the end of the requestor, such as issuing blackout dates for the most popular time of year or requiring how far in advance priests request off. The lack of restrictions extends to covering priests as well, with no requirement or quota on how many coverage assignments each priest should take for the year. The system is heavily subject to the individual and collective preferences of the priests.

3. Resident priests employed at the same church will cover for each other, but typically will not record their coverage in the system. While this is easier for them, it is an exclusionary practice for other priests in the region and unfairly guarantees vacation time for churches with more than one resident priest.
4. There are many instances of priests who are requested to cover not responding within the 72-hour window. Oftentimes this is an accident on the end of the covering priests, and the coverage acceptance will be redacted. This not only gives false hope to the requesting priest but also necessitates that they resubmit a vacation request for those dates.

The most optimal solution consists of solving each of the four issues to the highest degree possible while keeping the administrators, requesting priests, and covering priests satisfied.

Literature Review

No research seeking to optimize scheduling of priests could be found during the literature review process. Consequently, a new approach to literature review would be required. Leading with the assumption that optimal priest scheduling lies in the mathematical subfield of Discrete Optimization, this paper begins with classifying the problem. The Priest Scheduling Problem (PSP) lies in the field of Operations Research and is a member of the large family of scheduling problems, specifically as a variant of the Job Scheduling Problem. The Job Shop Problem (JSP)

or Job Shop Scheduling Problem (JSSP) considers a set number of workers with an equal number of tasks to be accomplished [7]. Each worker and task are subject to contextual criteria, typically worker skill and associated time on task, with the goal being to optimize across all workers and jobs. Scheduling priests is much the same, with an associated coverage assignment needing fulfilled by an available and willing priest.

The most prolific member of the Job Scheduling family of problems is the Nurse Scheduling Problem; it is also remarkably like the PSP. [3] proposes an objective function subject to stratified criteria of two opposing groups. One group represents the interests of the hospital at large, whether that be administrators, owners, managers, or any entities in a supervisory role. The primary objective of this group is to ensure full staffing at the lowest cost; this entails minimizing overtime for employees, cutting staffing during lower demand hours, scheduling nurses on the most convenient shifts, and more. Objectives of the other group, the nurses, represent the group of employees or entities that are to be scheduled. The goals of this group are typically more diverse and numerous and represent the personal preference of nurses. Such preferences include but are not limited to the desire to work on a specific shift, wishing to avoid working with other staff members, the desire to get as many hours per pay period, and more. [4] continues the two-group schema further and discusses how the criteria between administrators and personnel is numerous, and oftentimes the constraints that represent nurse must be relaxed to produce a valid .An optimal schedule meets all possible criteria that represent administrators and nurses. Subsequent developments in the NSP generally stick with the 2-group schema framework, albeit each article has different means of producing a solution in a different manner. [1] proposes an integer programming methodology, where each goal subject to an objective function must satisfy hard and soft constraints. [6] considers implementation of a

genetic meta-algorithm that automatically updates the penalty weights of the associated graphic construction. [5] suggest bypassing the search for the most optimal scheduling due to intense computational needs, and instead suggests varying avenues for heuristic algorithmic developments.

Methodology, Assumptions, and Modeling

Given the novel nature of this problem, the approach outlined in this article relies heavily on modeling techniques used by NSP research and other JSP analogues. Scheduling priests is much the same to both the JSP and the NSP, with an associated coverage assignment needing fulfilled by an available and willing priest. The assumptions underpinning the model are as follows:

- All priests will attempt to take their full allotment of vacation days per year.
- Requesting priests will seek to find future coverage as far in advance as necessary.
- Covering priests will generally not accept coverage assignments if they are on vacation, if their partnering priest(s) (if applicable) are on vacation, or if they are uncertain of their plans for that range of dates.
- Covering priests are less inclined to accept a coverage assignment if they oversee a community and accepting said coverage assignment would require them to cancel liturgies for their communities.
- Covering priests are more inclined to accept a coverage assignment if it is categorized as an emergency for the requesting priest.
- Covering priests will seek to minimize time and cost associated with accepting a coverage assignment.

Mathematically, this is represented as discrete time model for the existing vacation request submission structure. Requests and coverage assignments are sent out one at a time and sequentially. The method of producing a mathematical model will be met by two techniques. First, a graph theoretic construction of the graph is considered and its relevance to the implementation of a suitable matching algorithm. Secondly, a data analytic approach considers mining historical data for trends both hypothesized and non- hypothesized correlations.

Graph Theoretic

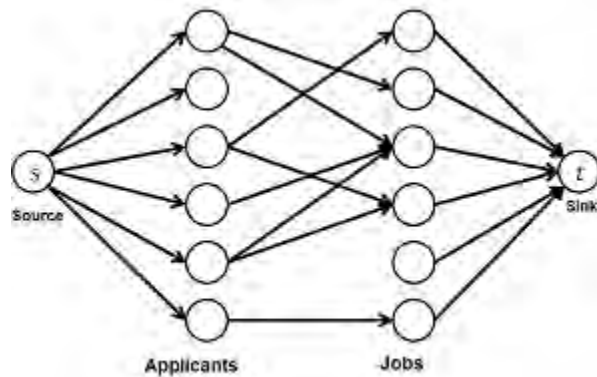
Graph theory is concerned with two mathematical objects, the vertex and the edge. The edge represents a possible relation between two vertices. Vertices that share an edge are called adjacent. Edges can be directed, where an edge proceeds from one vertex to another, or undirected. Weights represent a numerical value assigned to an edge. A complete graph has every vertex connected to every other vertex. A bipartite graph consists of two sets of vertices, where members of each set are not adjacent to any other member of the set but are adjacent to all vertices in the other set [2].

To take a graph theoretic approach, assume that the foundations of the PSP are like those of the JSP. Consider two sets, or groups, of priests: the covering priests and the coverage assignments. For a given time interval, a finite number of requests will be made with a finite number of priests to cover for them. A numerical value can be assigned to each edge that represents some degree of relation. Assuming there are at least as many available covering priests as coverage assignments, there exists at least one optimal matching between priests of each set. Contextually, a matching for this scenario would see a covering priest paired together with a coverage assignment. Matching algorithms, such as Ford-Fulkerson [2], work by adding two additional vertices, the source and the sink. Edges are now directed and proceed from the

source to set A, to Set B, and finally stopping at the sink. Ford Fulkerson evaluates all possible paths, and the most optimal matching is the sum of all paths that is either maximal or minimal.

Figure 1 depicts an example Ford Fulkerson Algorithm.

Figure 1



There are several structural challenges associated with a simple graph matching algorithm. The principal issue is that the coverage assignments for a given time interval are not static. No restrictions exist on when a requesting priest may submit a request. Since this quantity of requests per time interval is dynamic, it prioritizes requests that are as far out in the future as possible. This itself is not an issue; it becomes troublesome, however, when covering priests are typically not willing to accept coverage assignments more than six months in advance. An additional structural issue is that covering priests are free to accept and deny coverage requests as they choose. There is an underlying expectation that designated covering priests do accept some coverage opportunities, but there is no minimum quota per priest on coverage assignments. Therefore, a purely graph theoretic approach seems unlikely to succeed, although graph theory may still prove helpful in modeling the problem at individual time steps within a dynamic model.

Data Analytics

A data analytic approach will yield insights regarding hypothesized and not hypothesized patterns of priest vacation requests. Five key statistical correlations are the basis for preliminary data analytics.

1. Does the time of year have any bearing on the success rate of priest's vacation being honored? It is hypothesized that times of the year when fewer requests are made will have higher rates of coverage success.
2. Are there any trends associated with the quantity of requests submitted for a given timeframe? It is hypothesized that requests will be highest in the months of May, June, and July.
3. Is there a correlation between the probability of acceptance/denial of a request and the geographic distance of the requestor and the geographic distance of the requestee? It is hypothesized that these quantities will be negatively correlated; priests that are farther apart will have a lower rate of acceptance.
4. How far in advance are priests requesting vacation?
5. Is there a correlation between the length of time requested in advance and the success rate of a request?

Data analytics will also provide a baseline measure of efficacy of the produced solution at project completion. Efficacy will be gauged via comparison of priest's objective and subjective satisfaction of the solution. Subjective satisfaction will consist of polling priests about the current scheduling system and what they would want in a new scheduling system. Objective satisfaction will seek to numerically optimize key performance indicators, such as improving success rate or

reducing the time a priest spends waiting on a request. Exact questions of the survey can be found in the appendix.

Future Work

The first phase of the project sought to classify the problem, understand how it fits into the larger body of research, and suggest a method of analyzing the problem mathematically. The second phase of this project will continue to build upon this robust modeling framework. We hope to get more survey data from the existing survey and from a survey exclusively targeted towards covering priests. Appropriate analytics will seek to understand newly hypothesized trends, such as how the liturgical calendar affects the personal calendars of priests. We hope to continue evaluation of the interplay between factors that are associated with a successful acceptance of a coverage assignment. Furthermore, we hope to gain more insight into how organizations with similar unique scheduling constraints have implemented a solution to scheduling priests, such as from a different Coptic Orthodox Diocese or a different organization.

To facilitate the eventual construction of a genetic algorithm, a large body of simulated vacation request data will need to be generated. Like the actual structure of the current scheduling scheme, this data will simulate the path a request takes from initial submission to final acceptance or rejection. Simulated data will be evaluated by construction of a confidence interval of key indicators of historical data, such as the success rate of a request and the distribution of requests throughout the year.

The third phase will see the construction of a genetic meta-algorithm. The algorithm will take a user-inputted algorithm that optimizes matching a covering priest with request, such as Ford-Fulkerson, and modify parameters to increase the success rate of acceptances. The genetic

algorithm will allow rapid testing of proposed algorithms. The fourth and final phase of the project will seek implementation of a schedule solver on a web hosted platform, such as Google, accessible by all priests. This would involve a web portal for both requesting and covering priests. Such an implementation could include status updates on requests, allow covering priests to tailor preferences of assignments offered to them, and have easy manual override options for Diocese administrators.

Bibliography

- [1] Baskaran, G., Bargiela, A., Qu, R. *New Solution for a Benchmark Nurse Scheduling Problem Using Integer Programming*. Presented at the 2014 International Conference on IT Convergence and Security (ICITCS), Beijing, China. 1:1-4. doi.org/10.1109/ICITCS.2014.7021791.

- [2] Doer, A., Levasseur, K. (2022). *Applied Discrete Structures*. Published under Creative Commons Attribution-Noncommercial-ShareAlike 3.0 United States License

- [3] Hamar, J. (2021). *Nurse scheduling problem by considering total number of required nurses as well as nurses' preference for working shift: An algorithmic game-theoretic approach*. International Journal of Science and Technology, Volume 28. doi.org/10.24200/sci.2021.56780.4906

- [4] Hasabe, M., Yamazaki, T., Ryumae, M., Wu, W., Nonobe, K., Ikegami, A. (2017). *A comparison of integer programming formulations and variable-fixing method for the nurse scheduling problem*. Presented at the 2017 International Conference on Industrial Engineering and Engineering Management (IEEM), Singapore, Singapore, December 10-13.

- [5] Karmakar, S., Chakraborty, S., Chatterjee, T., Baidya, A., Acharyya, S. *Meta-heuristics for solving nurse scheduling problem: A comparative study*. Presented at the 2016 2nd International Conference on Advances in Computing, Communication, & Automation (ICACCA) (Fall), Bareilly, India, September 30-October 1.

- [6] Ohki, M., Kishida, S. (2013) *A Parameter Free Algorithm of Cooperative Genetic Algorithm for Nurse Scheduling Problem*. Presented at the International Conference on Advances in Computing, Communications and Informatics (ICACCI), Mysore, India. August 22-25.

- [7] Yingchen, Y. (2021). *A Research Review on Job Shop Scheduling Problem*. E3S Web of Conferences Volume 253. doi.org/10.1051/e3sconf/202125302024.

Appendix

The following is the list of survey questions sent to all priests.

The following are a series of demographical and personal questions designed to identify any factors that influence the timing and duration of the allotted vacation time designated for priests employed by the Coptic Orthodox Diocese of the Southern United States.

Question 1.) Please provide your name. (Open ended verbal response)

Question 2.) Please provide the name of the church where you serve as priest. (Open ended verbal response)

Question 3.) Please provide the name of the community where you serve as priest. If you do not serve as priest of a community, leave this entry blank. (Open ended verbal response)

Question 4.) Except for duties concerning special services (such as feasts of the Church, baptisms, matrimonies, etc.) indicate which day of the week the services for your church are held. (Check all that apply)

- Option 1.) Sunday
- Option 2.) Monday
- Option 3.) Tuesday
- Option 4.) Wednesday
- Option 5.) Thursday
- Option 6.) Friday
- Option 7.) Saturday

Question 5.) Do you have any school-aged children? (Multiple choice)

- Option 1.) Yes
- Option 2.) No

Question 6.) If you have school-aged children, does the timing of school breaks and vacations impact when you decide to take your vacation? (Multiple choice)

- Option 1.) Yes
- Option 2.) No
- Option 3.) Not applicable

Question 7.) Please list other factors that impact when you decide to take your vacation throughout the year. (Open ended verbal response)

Question 8.) When submitting your vacation request, how do you split up your allotted vacation days? (Check all that apply)

- Option 1.) All at once
- Option 2.) 2 parts
- Option 3.) 3 parts
- Option 4.) 4 parts
- Option 5.) 5 or more parts

Question 9.) For the following question, indicate which months of the year you would *prefer* to use your allocated vacation time in. (Check all that apply)

- Option 1.) January
- Option 2.) February
- Option 3.) March
- Option 4.) April
- Option 5.) May
- Option 6.) June
- Option 7.) July
- Option 8.) August
- Option 9.) September
- Option 10.) October
- Option 11.) November
- Option 12.) December

Question 10.) In the past 5 years, or for as long as you have been a priest (whichever is shorter), how often have your vacation requests been denied due to the non-availability of coverage? (Multiple choice)

- Option 1.) 1 time
- Option 2.) 2 times
- Option 3.) 3 times
- Option 4.) 4 times
- Option 5.) 5 times
- Option 6.) 6 times
- Option 7.) 7 times
- Option 8.) 8 times
- Option 9.) 9 times
- Option 10.) 10 or more times

Question 11.) Have you ever refrained from submitting a vacation request due to concerns that no coverage would be available? (Multiple choice)

- Option 1.) Yes
- Option 2.) No

Question 12.) In general, rank your overall satisfaction with current vacation scheduling practices. (Multiple choice)

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Influences of the Spanish Language on the K'iche' Status and Lexicon: A Literature Review

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Abstract

The indigenous Mayan language, K'iche', is becoming unrecognizable to speakers due to Spanish language influences. Since Spanish is the national language of Guatemala, Spanish is viewed as high-speech whereas K'iche' is viewed as vernacular in modern-day Guatemala. This perspective has led to loss of identity and language maintenance within K'iche'. The language is typically spoken as a first language by older generations but spoken as a second language by younger generations. Social institutions use Spanish for means of communication, teaching, and signage—though some K'iche' translations are available. Some K'iche' speakers speak a hybrid language of Spanish and K'iche' called K'iche'tellano but not all K'iche' speakers understand it. The Mayan genocide has aided in the lack of growth for K'iche' and other Mayan language speakers due to the numerous, gruesome deaths of the Maya. The tragic event has interrupted or stalled linguistic research, but revitalization programs seemed to become more active. This paper aims to evaluate the significant language changes within the K'iche' language by analyzing code-switching, bilingualism between K'iche' and Spanish, and diglossia. Additionally, the research considers historical events when explaining the cause of linguistic changes in the K'iche' language. The continuing relationship between K'iche' and Spanish must be evaluated in order to preserve K'iche' identity and authenticity, while promoting harmonious coexistence between the two languages.

Introduction

K'iche' is the most studied language out of all of the Mayan languages. Initially, the prenotions believed that the K'iche' language was at risk of language death; however, the study has revealed it could be on the trajectory of language endangerment due to Spanish language influences. The primary influences include, but are not limited to, language contact, bilingualism, and the past relationship between Spanish and the K'iche'. The Spanish Conquest, which occurred in the sixteenth century, is considered to be the first interaction with Mayan civilizations and the rest of Central America. As a result, the relationship has been dominated by the Spanish, but the K'iche' have remained strong and relevant. The most recent tragic event is the Mayan Genocide that occurred less than fifty years ago. The genocide has helped determine where the current status of K'iche' is and why perspectives of indigenous languages are negative in Guatemala. There have been attempts to reconcile and revitalize K'iche' along with other Mayan languages; however, revitalization programs, with good intentions, have been harmful and undermined the K'iche' language rather than promote language usage. This literature review will focus on code-switching, loanwords, bilingualism, and diglossia as the primary factors of the language and identity in modern-day K'iche'. The coexistence between K'iche' and Spanish can exist harmoniously, but perspectives of the K'iche' language and people must be adjusted to encourage language usage.

A Brief Overview of K'iche' History

The K'iche' reside in the Guatemalan highlands which is primarily southern Guatemala. The K'iche' community is one of the best-known Mayan communities in Guatemala (Carmack, 2017). The indigenous K'iche' peoples originated from surrounding countries like Mexico, El Salvador, Belize, and Honduras (Carmack, 2017). The language is spoken by approximately 1.5

million people and is the most spoken out of all the Mayan languages. However, Spanish is the dominant language and has a ratio of 7 to 1 for Spanish speakers to K'iche' speakers. Several sources reiterated K'iche is the most widely spoken out of twenty-two other Mayan languages and has the most communities that are still active in K'iche' traditions.

The Mayan genocide significantly impacted the language maintenance and growth of K'iche' in late twentieth-century. The tragic incident took place between 1970-1996, with the height of the civil war taking place in 1982. Guatemala's president, Carlos Manuel Arana Osorio, was elected in 1970 (Kennedy, 2023). He initiated numerous crimes towards the Mayas; he ordered Operation Sofia, which used heinous, inhumane tactics to eradicate the guerillas and the indigenous villages where they were thought to be hiding; it also enforced that Mayas were either killed or forced to disappear (Kennedy, 2023). Many Mayas fled and left behind their community, culture, and language. It was clear that the Guatemala army had more leverage and advanced technology, such as American army grade weapons and U.S. support (Kennedy, 2023). The military destroyed approximately 600 Mayan villages and killed most of their inhabitants based on the speculation that Mayans were hiding guerillas in their villages (Kennedy, 2023). The lack of trust the Guatemalan government had with indigenous groups caused immense harm to their cultures and languages. K'iche' speakers began to lose their identity and became shameful of their heritage.

K'iche' Linguistics and Linguistic Influences

Can Pixabaj, a contributor to *The Mayan Languages*, offered an organized list of linguistic features. K'iche' has twenty-two phonemic consonants and five simple vowels that can be long or short. Vowels are more likely to vary in different communities than consonants (Can Pixabaj, 2019). The excerpt highlights phonological attributes, but also explains where stress falls. The

language variation from each village can have different interactions with one another in which not all K'iche' speakers completely understand each other even though they speak the same language. Moreover, various dialects can have a different articulation point and pronunciation than the standard K'iche' that is presented. The information presented is considered to be of natural causes and without interference of loanwords or linguistics aspects not found in K'iche'.

Loanwords

Loanwords was a reoccurring topic throughout most linguistic articles. The usage of loanwords has significantly changed how K'iche' is spoken today opposed to sixty-years ago—this would be pre-Mayan Genocide. Lewis offers a method of how to identify loanwords and the direction of borrowing in *Historical Linguistics*. His guidance of phonological criteria helped identify if a word was borrowed or loaned. If the word has abnormal sounds or violates the native language's expectations for sounds, then it is likely a loanword. In opposition, borrowed words tend to be of the same language group. For example, K'iche' tends to borrow sounds from Kaqchikel as they are both Mayan languages and within the K'iche'an branch (Robertson, 1992). If K'iche' borrows a sound from Spanish, then it is considered to be as a loanword because Spanish is an Indo-European language and K'iche' is not.

Phonological Changes

The changes in phonological history has been most prominent in vowels, whereas consonants have minute differences (Grimes, 1972). Vowels are the most subject to change in any language—whether they become lengthened or shortened—and consonants appear to change by where the stress is placed. Morphology has changed the semantics and the stress put on the initial or final syllable. Henderson offered technical descriptions of suffixes, prefixes, and intonation

phrase edge. He found that tense, aspect and mood are verbal prefixes. K'iche' phonology contains various glottal stops found in consonantal phonemes.

Grimes' dissertation provides substantial information on the phonological history of the K'iche' language with reference proto-Quichéan linguistics. Most of the sound systems are generalized and pertain to all languages of the Quichéan branch, however specific attributes are designated to their respected branch or branches.

K'iche'tellano

Language maintenance is important for both Spanish and K'iche'. Using the hybrid language—K'iche'tellano—is both 'assimilationist' and 'counter-hegemonic' (Bitar, p. 31). K'iche' can be taught and spoken at home, but there is a *need* to learn Spanish; Spanish then becomes the more dignified language (Bitar, 2008). The proposal suggests there can be an identity crisis if the hybrid language becomes more respected, but also importance of maintaining K'iche'. England states that speaking K'iche' is a huge part of "authenticity" to the culture. Since the language usage of K'iche' decreased after the genocide, many K'iche'ans lost perspectives of themselves in K'iche' communities and their place in Guatemala itself. Choi performed a field study in Momostenango. However, it is possible K'iche'tellano can bridge the dissonance between Spanish and K'iche', but it can lose partial authenticity of the language. Notably, some excerpts were specific to Mam or Kaqchikel, but offered invaluable information as they share similar standings and tribulations as K'iche' has faced. Pye's research on Mamean-Spanish bilingual acquisition included circumstances that were almost identical to K'iche' circumstances, especially those pertaining to language use within a household.

K'iche' Linguistics

K'iche' is a subgroup of Eastern Mayan languages, one of five major groups, and has nine branches of languages (Bricker, 2007). Sound systems of the K'iche'an languages are quite similar to one another (Grimes, 1972). Amongst the K'iche' groups, the stress falls on the ultimate syllable of native words with the exception of Uspantec—a language of the K'iche'an branch (Grimes, 1972). Can Pixabaj describes that stress as final in K'iche' with two exceptions. The first exception is for noun phrases that contain an adjective, but some dialects add a vowel after the adjective; now, the stress is on the content word and adjective, and a secondary stress is on the epenthetic vowel—epenthesis is adding one or more sounds to a word (Can Pixabaj, 2017). The process happens due to a single compound word phonologically. Upon evaluation, the phonological changes are found in vowel systems of dialects and intonation. The K'iche' alphabet consists of twenty-seven phonemes which includes five tense and six lax vowels, but the vowel system has become simpler over time (Grimes, 1972).

Glottal stops are prominent in K'iche' and most words begin with a consonant. Grimes describes the consonantal phonemes in the following way: glottalized bilabial stops are regularly voiced in the initial and medial positions; liquids and glides are realized as voiceless in word final position; stop series are made up of fifteen elements from the bilabial, alveolar, alveopalatal, velar, post-velar, and glottalic points (Grimes, p. 16). The points of articulation are various, but phonemes that involve the throat and pushed air are plentiful in K'iche' and other languages of the same K'iche'an branch. Christenson provides pronunciations of each phoneme in the K'iche' alphabet, the /'/ symbol recognizes the phonemes as glottalized. For instance, there is /ch/ and /ch'/. The first phoneme is a consonantal cluster and is the sound as /ch/ in “child”; but /ch'/ is pronounced with the tongue in the same position as /ch/, but the throat is closed as air is forcefully pushed

through, thus making the sound glottalized. Other phonemes such as, /k/, /q/, /t/, and /tz/ follow the same pattern of the tongue staying in the same position, but the air is forcefully pushed through a closed throat.

Code-switching and Loanwords

Bitar describes code-switching as grammatical rules intermixing from one language to another and the alternation between one language to another in a single conversation. K'iche' and other Mayan languages have proto-Mayan structures and lexicons. Since these languages share the same mother language, Spanish has introduced abnormal linguistic aspects, such as morphological and phonological change. Code-switching aids in determining if K'iche' is the first or second language acquired and how often K'iche' is used compared to Spanish. Choi (2013) performed a field study in Momostenango, a K'iche' *municipio* or an American county equivalent, and found that intergenerational code-switching is a common form of communication. In fact, Choi found that parents tend to speak Spanish to their children as opposed to K'iche' (Choi, p. 62-63). He highlights an interaction between a grandmother, her maid, and her five-year-old grandson. The grandmother speaks K'iche' to the maid but chooses to speak Spanish with her grandson. Choi infers that Spanish is the grandson's first language; additionally, Spanish is the language used in public schools despite bilingual education programs—which will be discussed later.

Spanish Language Contact

Spanish has been in contact with K'iche', and Mayan languages in general, for nearly five-hundred years (Pye, p. 556). As a result, many words such as the conjunctions *pero* “but” and *y* “and” have been borrowed from the Spanish language (Pye, 2013). Within Pye's research he mentions the acquisition of other Mayan languages and how Spanish contact may affect them.

He suggests that Spanish might not interact the same way with other Mayan languages as it interacts with Mam. At the same time, Pye also suggests that Spanish nouns and verbs could have significant effect when incorporated to a Mayan language. In this case, when Spanish nouns and verbs are utilized in K'iche's speech, they are included in a complex structure based on the suffix *-b'an*. Pye claims the incorporation of Spanish nouns and verbs within adult Mayan speakers affect children who are acquiring a Mayan language may also incorporate Spanish nouns and verbs differently. Additionally, the Spanish negation form is not as complex as incorporating grammar structures, but *nada* and *no* are used frequently. The complexity of borrowing words from Spanish varies amongst generations, especially in younger generations (Pye, 2013).

Spanish can also borrow grammatical patterns from K'iche', though it is not as common as K'iche' borrowing from Spanish. Bitar's study found that K'iche' community members frequently borrow from K'iche' grammatical patterns to produce a new speech model in Spanish. Common overlaying in the grammatical patterns is usually in the use of indefinite articles like *un, uno, unos, una, and unas*, followed by a possessive pronoun *mi, tu, su, nuestro, and vuestro* and then the noun (Bitar, p. 30). Furthermore, a common practice of code-switching is K'iche'tellano (already referenced in this paper) which is a hybrid language between K'iche' and Spanish (Bitar, 2008). The hybrid language can become useful amongst communities that utilize the Spanish and K'iche' language in various situations. However, if K'iche'tellano speakers travel to another K'iche' community there is a chance other K'iche' speakers will not be able to understand them. It is necessary to learn Spanish for instrumental and practical usage, along with it being the more dignified language, whereas K'iche' is mostly spoken in K'iche' speaking homes with intergenerational households. K'iche'tellano is not the enemy, whether it is

Guatemalan prejudice towards K'iche' speakers that pressures the indigenous communities to use Spanish which is considered high speech as oppose to K'iche which is considered low speech. Not surprisingly, illegitimizing K'iche' speakers has discouraged the usage of K'iche' in social institutions and even at home.

Bilingual Education and Revitalization Attempts

The need to learn Spanish has increased as the language has become more globalized. Therefore, first language acquisition is shifting from K'iche' to Spanish as Spanish is used more in regulatory, educational, and other social institutions. Schools are the primary source of socialization, enculturation, and creating citizenship (Little, p. 76). Educational institutions have a large role in the development of bilingualism and promotion of K'iche', yet there seems to be little to no promotion at all. In the 1970s, the Proyecto Linguistico Francisco Marroquin was developed, and its primary objective was to train speakers of Mayan languages as linguists who would produce grammars and dictionaries of their languages (Bricker, 2007). This plan was interrupted due to the ongoing civil war (Bricker, 2007). The program brought official recognitions to Mayan languages and unified an alphabet for writing, which was later adopted in 1988 by the Guatemalan legislature (Bricker, 2007). In 1985, a new draft of the Guatemalan constitution included the assurance of the "rights of individuals and communities to have their own customs and languages," and recognizes that Spanish is the national language, but "indigenous languages are a part of the cultural patrimony" and "should be taught in schools in areas populated mostly by Maya" (Bricker, p. 141). The change of the laws were reconciliation efforts by the Guatemalan government to the Maya due to the Mayan genocide. After the Mayan genocide, several revitalization programs were established in order to encourage language usage and preservation of Mayan languages. In 1986, the Guatemala Ministry of Public Education

advocated for the standardizing the alphabets of twenty-one Mayan languages into school systems (Little, 2009). Simultaneously, the Program for Bilingual Education had already been proposed the Guatemalan government, so the effort to put in effect the standardization of the Mayan alphabets was significant (Christenson, 1985). Christenson states, “the importance of the program was created to enhance educational institutions’ literacy and language programs by introducing bilingual dictionaries, textbooks, and official translations of the Guatemalan Constitution” (Christenson, p. 3). Choi (2013) documents the teaching methods of teachers in bilingual classrooms. He suggests there is not a standardized curriculum; rather, some teachers use K’iche’ as much as possible, some focus on Mayan culture, and others teach K’iche’ vocabulary. The methods appear to emphasize foreign language learning, despite K’iche’ being a native language to Guatemala. Consequently, the implementation of bilingual education has altered the language usage of K’iche’ and Spanish at home.

Significance of Diglossia and Language Maintenance

Diglossia is a circumstance between two languages that are used in different conditions within a society typically by the same speakers. A distinction between both with one being a high-speech and the other as vernacular. Bitar delivers a powerful statement on the status of Spanish and K’iche’, in her study she states, “Spanish has taken on the ideologies of power, privilege, and opportunity, while indigenous languages have come to embody a sense of inferiority, including a lack of intellect and civilization” (Bitar, p. 28). Currently, K’iche’ and other Maya groups struggle to keep their presence secured in Guatemala. Advocacy for indigenous rights and equality is still an ongoing battle, despite the ongoing denigration. The relationship between Spanish and K’iche’ is a prime example of how diglossia functions in a society. However, in

rural communities there is not a lot of Spanish contact or other contact besides the people residing in that community. The K'iche' language is preserved and not criticized but speakers of other languages. Even though their K'iche' dialect may vary from another rural community, the speakers embrace the language and culture and may not have as much fear compared to K'iche' speakers that reside in suburban or urban communities—these would be communities near the capital, Guatemala City, or larger cities. In opposition to rural communities, less rural communities typically are more motivated to use Spanish in societal institutions like church, government, and school (Lewis, 1995). Radio and television are primarily in Spanish, but when the news is broadcasted in K'iche', it is at an abnormal time in the day (Little, 2009).

The language maintenance of K'iche' has decreased since the Mayan Genocide. Throughout the 1970s and 1980s, large numbers of Mayas migrated to the capital and made attempts to rid of their K'iche' identity, therefore the mother tongue was not taught to future generations (Little, 1995). Additionally, some perspectives view that K'iche'ans who procreate with non-K'iche'ans contaminate the authenticity of future K'iche'ans. However, the ideology of having a 'pure culture' is mythical and highly unattainable. The culture blend between Spanish and K'iche' has created dissonance and even loss of heritage (Carmack, 2017). Since Spanish was the esteemed culture and language, the teaching of K'iche' to offspring was not a priority. Lewis claims that language maintenance depends on certain ages and domains. The location and prominence of the K'iche' are factors in how K'iche' is perceived and whether traditions and the language is passed down. Lewis performed a field study of seven different K'iche' communities in Guatemala. His results showed that most communities are moderate to strong maintenance, but older generations are in the strong category whereas younger generations are in the weak to moderate category. Due to his findings, in order to increase language maintenance, it depends on where and who

inhabit a community to determine a method that will best encourage and enhance language usage.

Purpose and Methods of Current Study

By examining K'iche' and Mayan history, there will be a distinguishment between the past and current standing of the K'iche' language. Comparisons can be made between the *Popul Vuh* and the Spanish translation of the cosmological literature. This analysis has focused primarily on syntax and vocabulary. Additionally, *titulos*, or property documents, are important to identifying Spanish language influence as these writings were written during the same time period the *Popul Vuh* was written. However, the *Popul Vuh* is considered to be the most authentic and closest version to how the language was verbally spoken. The *Popul Vuh* is the K'iche'an cosmology that had numerous contributors and was originally written in Mayan hieroglyphics. The translated hieroglyphics revealed mostly sentence structure and vocabulary—though it was closest to proto-Mayan than modern K'iche'. Most changes were found in vowels and glottalized phonemes.

This study will be further enhanced by in-person interviews with K'iche' speakers within the Chattanooga, Tennessee area. Recruitment will take place at The Howard School. The participants will need to be between 15 and 17 years of age, have a permission form signed by their parent or guardian to be able to participate, and have proficient fluency in the K'iche' language. The age group will provide insight on how adolescents have been raised in K'iche' speaking households and determine if K'iche' is used for communication with older generations exclusively or in other social institutions. Five participants will be invited to partake in a thirty-minute interview to discuss their experience learning and perceiving the K'iche' language. Answers may vary due to immigration at any point in their life or if they have been raised in the

U.S. only. They will be asked to answer any of the following questions, but not all questions will be asked:

- Is K'iche' your first language?
- Did you use K'iche' more in Guatemala or in your current residence?
- In what context do you use K'iche'? (informal, formal, education, post office, etc.)
- Do you practice ancient K'iche' rituals or adhere more to modern K'iche' practices?
- Do you know about the Mayan Genocide? If yes, how has this affected you?
- Did your parents teach you the language? And/or do you plan to teach your own children teach the language?
- Have you personally experienced prejudice due to the usage of K'iche'?
- What is your perspective on the use of K'iche' language?

Participants have the option to decline to answer. The interviews will distinguish a realistic and current status of K'iche' amongst family, language maintenance, and language usage within Guatemalan households.

Conclusion

With any language, change occurs due to external influences that later affect the internal aspects of a person and culture. Personal identity and significance coincide with language and culture, thus when a language or culture becomes threatened, the human identity also becomes threatened. The means of preserving the identity and authenticity of K'iche' is not so much the responsibility of social institutions but more the responsibility of older generations in K'iche' speaking homes. Social institutions could promote the usage and decrease external prejudice, but the family must prioritize the language usage at home to create fluent, authentic indigenous

K'iche' speakers. Encouragement is an important factor to increasing language maintenance and usage; however, revitalization and preservation organizations can be harmful. Oftentimes other Mayan words, sometimes from the K'iche'an branch, are inserted in hopes to of preserving the language. Consequently, the insertions can alter K'iche' to be a completely different language that is inauthentic. Language change should occur organically. K'iche' translations and bilingual education can be beneficial if the teachers' mother tongue is K'iche', but if it is not, then it is inauthentic due to first or other language influence.

According to Bricker, legislative victories have made it possible to move ahead with programs to revitalize and even revive indigenous language use in communities where Spanish now dominates. The attention brought to the Maya after the Mayan genocide has brought positive and negative aspects, but it has also brought reconciliation and programs with intentions to enhance the indigenous Maya. Notably, the K'iche' have been a strong force in regard to the Spanish Conquest, and it still remains true as they still believe in advocating for their culture and people. The K'iche' language seems to maintain a relatively noticeable presence in Guatemala; however, it is viewed as vernacular and not as useful in daily communication as Spanish. Likewise, the status is comparable to the Southern English dialect in the U.S. in which both are deemed less esteemed and the prejudice given by non-Southern English speakers and K'iche' speakers.

However, K'iche' differs because the dominant language, Spanish, is utilized more in social institutions and circumstances, whereas the English language is prominent throughout the U.S. and the Southern dialect vocabulary is not drastically different from the language used in social institutions and circumstances.

Spanish contact is unlikely to stop total inference with K'iche', but it is an organic phenomenon. The Spanish language itself is not single-handedly contributing to the loss of K'iche', rather the

influences of revitalization programs, bilingual education, and external perspectives are contributing to the language shift of K'iche'. Yet, the factors are a product of the Spanish Conquest and Mayan Genocide which was caused by the Guatemalan government. The future status of K'iche' will remain at the expense of how current K'iche' speakers use their native language. Spanish is more practical to use due to opportunities available, but it should not risk the loss of heritage or identity for the K'iche' and other Mayan communities.

Works Cited

- Bitar, Martha, et al. "Language Gain, Language Loss: The Production of K'iche'tellano in Highland Guatemala." *The International Journal of Language Society and Culture*, no. 26, 2008, pp. 25–32.
- Bricker, Victoria R. "A Quarter-Century of Mayan Linguistics." *Mexicon*, vol. 29, no. 6, Dec. 2007, pp. 138–147, <https://doi.org/http://www.jstor.com/stable/23759758>.
- Campbell, Lyle. "How Do We Identify Loanwords and Determine the Direction of Borrowing?" *Historical Linguistics: An Introduction*, The MIT Press, Cambridge, UK, 2021, pp. 69–70.
- Can Pixabaj, Telma A. "K'iche'." *The Mayan Languages*, ROUTLEDGE, New York, NY, 2019, pp. 461–462.
- Carmack, Robert M. *The Indigenous Peoples of Mesoamerica and Central America : Their Societies, Cultures, and Histories*. Lexington Books, 2017. EBSCOhost, search.ebscohost.com/login.aspx?direct=true&AuthType=shib&db=nlebk&AN=1587101&site=ehost-live. P. 65-79
- Choi, Jin-Sook. "Language Ideology as an Intervening Process in Language Shift: The Case for Bilingual Education in Guatemala." *Asian Journal of Latin American Studies*, vol. 26, no. 3, 2013, pp. 55–73.

- Christenson, Allen J. "K'iche'-English Dictionary and Guide to Pronunciation of the K'iche'-Mayan Alphabet." *FAMSI*, www.famsi.org/mayawriting/dictionary/christenson/. Accessed June 2023.
- England, Nora C. "Mayan Language Revival and Revitalization Politics: Linguists and Linguistic Ideologies." *American Anthropologist*, vol. 105, no. 4, 2003, pp. 733–43. *JSTOR*, <http://www.jstor.org/stable/3567138>. Accessed 15 May 2023.
- Grimes, James Larry. *The Phonological History of the Quichean Languages*. University Museum, Southern Illinois University, 1972.
- Kennedy, Adrienne, MA. "Guatemalan Genocide." *Salem Press Encyclopedia*, Jan. 2023. *EBSCOhost*, discovery.ebsco.com/linkprocessor/plink?id=24a4247f-ecb5-3283-bdc5-1faa7d10c374.
- Lewis, M. Paul. "Measuring K'iche' (Mayan) Language Maintenance: A Comprehensive Methodology." U.S. Department of Education, 1995.
- Little, Walter E., et al. "Bilingual Bicultural Education: Best Intentions across a Cultural Divide." *Mayas in Postwar Guatemala: Harvest of Violence Revisited*, University of Alabama Press, Tuscaloosa, AL, 2009, pp. 84–95.
- Pye, Clifton L. "A Tale of Two Mam Children: Contact-Induced Language Change in Mayan Child Language." *International Journal of American Linguistics*, vol. 79, no. 4, 2013, pp. 555–575, <https://doi.org/10.1086/671775>.

Robertson, John S. "K'iche'an." *The History of Tense/Aspect/Mood/Voice in the Mayan Verbal Complex*, University of Texas Press, 1992, pp. 124–53. *JSTOR*, <http://www.jstor.org/stable/10.7560/720756.9>. Accessed 12 May 2023.

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ALL TOGETHER IN ONE PLACE: A SURVEY OF PENTECOSTAL HERMENEUTICS

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I. Introduction

Since the latter half of the 20th century, Pentecostal scholars have written extensively on hermeneutics, the Spirit, and the Bible.¹²⁶ Until this time, Pentecostals had predominately relied upon texts and doctrines of fundamentalist traditions to explain their interpretation of scripture, while editing out portions that contradicted views based on their personal experiences with God.¹²⁷ By the 1980s, Pentecostalism's distinctiveness and rapid growth led these scholars to ask, "Is there a particular hermeneutic of the Spirit?"¹²⁸ Many of these scholars had been formally educated in evangelical seminaries that looked disparagingly upon Pentecostals and relegated them to be "Evangelical plus" tongues.¹²⁹ The questions asked by these Pentecostal scholars led to an abundance of new scholarship, which in turn, provided the legitimacy needed for Pentecostals to enter larger theological conversations in the academy and pushed back against the idea that Pentecostals were merely fundamentalists. Since then, Pentecostals have been noted for their distinctive hermeneutic and, more broadly, for their theological reflection regarding the Spirit. In this paper, I will provide a survey of the primary ideas that characterize Pentecostal hermeneutics and an exposition on the importance of experience for Pentecostal theological reflection and scriptural interpretation. In what follows, I exposit an answer to the following question: "What does it mean to read the Bible as a Pentecostal with an emphasis on experience

¹²⁶ In this essay, I will use uppercase Pentecostal in reference to those tied to a classical Pentecostal tradition.

¹²⁷ Cheryl Johns, *Re-Enchanting the Text* (Grand Rapids, MI: Baker Academic, 2023), 20.

¹²⁸ Cheryl Johns, *Re-Enchanting the Text*, 21.

¹²⁹ Cheryl Johns, *Re-Enchanting the Text*, 20.

and the Holy Spirit?” This work will seek to join the continuing conversations on the Spirit, Pentecostal experience, and Scripture.

II. Pentecostals and the Holy Spirit

In this section, we will explore the ways Pentecostals reflect theologically on the Holy Spirit, the Spirit in the Bible, and the Spirit within Pentecostal religious experience. These three subsections will explore the intersection of Pentecostals and the Holy Spirit. Since the beginning of the Pentecostal movement, Pentecostals have been viewed as a community focused on the work and person of the Holy Spirit. We will begin by exploring a Pentecostal theology of the Holy Spirit, then move to the Spirit in scripture and experience.

A. Studebaker and Pentecostal Pneumatology

Using Steven Studebakers’ text “From Pentecost to the Triune God,” we will explore trinitarian Pentecostal pneumatology as a precursor for our discussion on Pentecostal hermeneutics. Historically, Christians have used Eastern and Western theological thought for reflection on the person of the Holy Spirit. Studebaker notes that while both traditions seek to distinguish their differences, they are in many ways similar inasmuch as they both deal greatly with the “doctrine of processions to define the divine persons.”¹³⁰ That is, in regard to the Spirit, the Holy Spirit either proceeds from the Father and the Son, merely from the Son or acts as a bond of love.¹³¹ Although we will not explore these doctrinal developments in depth for this paper, it is important to note the conclusions of Studebaker’s historical study—namely, that many Eastern and Western theologies relegate the Holy Spirit to a passive force whose identity comes from the Father and Son. This understanding of the Spirit has become a “functional

¹³⁰ See Steven Studebaker, *From Pentecostal to the Triune God: A Pentecostal Trinitarian Theology* (Grand Rapids, MI: Wm. B. Eerdmans Publishing Co, 2012), 101.

¹³¹ Studebaker, *From Pentecost to the Triune God*, 103-106.

subordination of pneumatology to Christology.”¹³² Although Studebaker is not advocating for a complete abandonment of these ideas, he does seek to reaffirm the role of the Holy Spirit within the Trinity by starting with Spirit baptism as a theologically significant act. This act, in turn, can serve as a starting point for Pentecostal theological reflection.¹³³

Even though Studebaker’s approach is not inherently Pentecostal, he nevertheless uses Pentecostalism and the phenomenon of Spirit baptism to inform his argument. In fact, he mentions how much of the Pentecostal movement hinges on the “fivefold gospel,” an inherently “Christocentric paradigm of grace that portrays Jesus Christ as the one who saves, sanctifies, baptizes in the Holy Spirit, heals, and will soon return.”¹³⁴ This seems to further demonstrate how Pentecostalism can easily fall into a functional Christology that needs to be supported with more “pneumatological content.”¹³⁵ We will not delve into these ideas in excess, but they do set up our exploration of Pentecostal hermeneutics. While Pentecostals focus on the Holy Spirit, they can, at times, resort to the fundamentalist language we discussed above. In this paper, we will focus more closely on this “pneumatological content” by breaking Pentecostal hermeneutics into subsections on experience and the Holy Spirit.

Keeping in mind that historically the Church has relegated the Spirit to a rather passive force and the Pentecostal “fivefold gospel paradigm,” Studebaker demonstrates how the Spirit can be easily suppressed even in a tradition that is seen as holding a high view of the Holy Spirit. All in all, Studebaker advocates, “The Holy Spirit facilitates the believer’s - and collectively the church’s - induction into the communion of the Trinity and thus informs the pathos of the church and her doctrines and core practices.” Although Pentecostals can, at times, rely on a

¹³² Studebaker, *From Pentecost to the Triune God*, 119.

¹³³ Studebaker, *From Pentecost to the Triune God*, 6-7.

¹³⁴ Studebaker, *From Pentecost to the Triune God*, 37.

¹³⁵ Studebaker, *From Pentecost to the Triune God*, 37.

Christological paradigm, the inclusion of the Holy Spirit in Pentecostal hermeneutics cannot be ignored. As Studebaker notes, the Spirit informs the church's doctrines, and one might add hermeneutics. In the following sections, we will survey major themes within Pentecostal hermeneutics and their implications for Pentecostal spirituality. Starting with the Holy Spirit and experience, we will then move to reading with the Spirit, and personal interpretation. After this, we will conclude with a look at the state of Pentecostal hermeneutics and its implications for broader theological hermeneutics.

III. Pentecostal Hermeneutics: A Survey

As previously stated, Pentecostals have become trailblazers with respect to Spirit-filled interpretation of the Bible, including distinguishing a unique "Pentecostal hermeneutic."¹³⁶ This work to describe Pentecostal hermeneutics has not come without challenges because it is often difficult to define what constitutes a "Pentecostal."¹³⁷ Nonetheless, work has continued within Pentecostal circles to distinguish their unique identity as it relates to scriptural interpretation, thereby creating the flourishing subdiscipline of "Pentecostal hermeneutics."¹³⁸ I will use

¹³⁶ There have been many substantial publications concerning Pentecostal or pneumatic theological hermeneutics. See, e.g., Lee Roy Martin, ed., *Pentecostal Hermeneutics: A Reader* (Leiden: Brill, 2013); Kenneth J. Archer, *A Pentecostal Hermeneutic: Spirit, Scripture, and Community* (Cleveland, TN: CPT Press, 2009); Craig S. Keener, *Spirit Hermeneutics: Reading Scripture in Light of Pentecost* (Grand Rapids: Eerdmans, 2017); Daniel D. Isgrigg, Martin W. Mittelstadt, and Rick Wadholm Jr., *Receiving Scripture in the Pentecostal Tradition: A Reception History* (Cleveland, TN: CPT Press, 2021); Philemon Leulseged, *Pneumatic Hermeneutics: The Role of the Holy Spirit in Theological Interpretation of Scripture* (Cleveland, TN: CPT Press, 2019); Larry R. McQueen, *Joel and the Spirit: The Cry of a Prophetic Hermeneutic* (Cleveland, TN: CPT Press, 2009); L. William Oliverio, *Pentecostal Hermeneutics in the Late Modern World* (Eugene, OR: Wipf and Stock, 2022); Rickie D. Moore, "Altar Hermeneutics: Reflections on Pentecostal Hermeneutics," *Pneuma* 38 (2016): 148–59.

¹³⁷ See, e.g., Cheryl Bridges Johns, *Pentecostal Formation: A Pedagogy among the Oppressed*, (Eugene, OR: Wipf & Stock, 2010), 63: "Pentecostals represent many denominations and a variety of theological beliefs. Among the movement's adherents one can find Trinitarians and non-Trinitarians, those who practice adult baptism only and those who utilize infant and adult baptism. Not all Pentecostals speak in tongues, but none would forbid the practice. There are Catholic Pentecostals, Anglican Pentecostals and a host of separate Pentecostal denominations. There exists no worldwide Pentecostal organization which serves to unify all its adherents. Clearly it is difficult to identify theologically or sociologically Pentecostalism."

¹³⁸ See, e.g., L. William Oliverio, Jr., *Pentecostal Hermeneutics in the Late Modern World*, (Eugene OR: Wipf & Stock, 2022), 85-85. Pentecostal Scholars like L. William Oliverio, Jr. have further distinguished the unique nuances of Spirit-filled hermeneutics in his work, "Pentecostal Hermeneutics in the Late Modern World." Oliverio breaks down "identifying Pentecostals" into five categories: Pentecostalism; Charismatic or charismatic; (small 'p')

Pentecostal resources and the commonality of Pentecostal experience with the Spirit to survey this subdiscipline. In this portion of the paper, we will explore what informs a Pentecostal hermeneutic and the strong emphasis on the Holy Spirit within Pentecostal biblical interpretation. In each section, we will highlight particular authors and themes that have contributed to these assumptions within Pentecostal hermeneutics.

A. Reading and Experience (with the Holy Spirit)

As we begin our analysis of Pentecostal hermeneutics, we now look to interpretation, experience, and the Spirit. This assumption describes the Pentecostal emphasis on reading “as an encounter” and “an experience” with God. When talking about their approach to Scriptural texts, Pentecostal scholars frequently make reference to some “experience” that the Bible somehow hosts or fosters. Not only does the text become a means of experience, but a person’s religious experience, experience with the Holy Spirit, and the experience of illumination by the Spirit become the cornerstone of describing Pentecostal experience. The term “Pentecostal experience,” though variously explained, is not a foreign one for Spirit-filled believers.¹³⁹ Regardless of how Pentecostals articulate or define this phenomenon, they consistently value experience as both the source and goal of a faithful reading of Scripture.¹⁴⁰ As a result, they often present the relationship between religious experiences and Scriptural reading as mutually informative: the believer reads the text as one shaped by spiritual experiences, just as the biblical

Pentecostal; Charismatic-pentecostal; and Renewal Christianity. Although we will not break down the differentiations here, this work demonstrates Pentecostalism’s vast well of scholarly work along with its rapid growth.

¹³⁹ It is often hard to define a “Pentecostal experience” because of the uniqueness of Pentecostalism. “All Christians have had some level of experience with God, but not all Christians share in some of the depths of experience and insight which have been a part of the modern Pentecostal movement. It is, therefore, difficult to describe an experience which is not held in common by all.” See Scott Ellington, “Pentecostalism and the Authority of Scripture,” in *Pentecostal Hermeneutics: A Reader*, 153.

¹⁴⁰ Although an overarching Pentecostal experience is hard to define, it might be inferred that “Pentecostal experience” is synonymous with the experience of Spirit baptism or the initial evidence of tongues.

text forms the Pentecostal believer and facilitates further such “Pentecostal experiences.”

Experience is, in many ways, why Pentecostals began to interpret narrative portions of Scripture as a source of theology. According to Craig Keener, early Pentecostals began to experience the phenomenon of speaking in tongues and “read Acts looking for clues to the narratives’ signs of Spirit baptism.”¹⁴¹ In other words, their “experience” is predicated on their theological interpretation of the Bible. Keener notes that many scholars at the time did not see narrative portions of the Bible as a source of theological education. Many of these same scholars would not affirm experience as a means of theological reflection.¹⁴² In the following sections, we will visit the ways in which Pentecostals read particular texts and facilitate further experiences through the Bible and the Spirit.

1. Becoming a Part of the Story

One of the distinct ways that Pentecostals interpret Scripture is by reading the Bible as a metanarrative. For the Pentecostal, a key point of interpretation is the value of seeing oneself within the broad history of God in the world. This is unique to Pentecostals because of their pneumatology: they see themselves as a part of the larger story of God’s redemptive plan, and, according to their high view of the Spirit, they, therefore, participate in the same Spirit that once inspired the biblical texts and the events to which they bear witness. Cheryl Bridges Johns notes this in her discussion of the Bible as “Spirit-Word”: “This account of Scripture requires a pneumatology that covers the entire span of God’s actions in history.”¹⁴³ That is, experience leads Pentecostals into theological reflection about the Trinity, bringing Biblical interpretation to

¹⁴¹ Craig Keener, *Spirit Hermeneutics: Reading Scripture in Light of Pentecost*, (Grand Rapids, MI: Wm. B. Eerdmans Publishing Company, 2016), 22.

¹⁴² Keener, *Spirit Hermeneutics*, 22.

¹⁴³ Cheryl Bridges Johns, “Grieving, Brooding, Transforming,” in *Grieving, Brooding, Transforming* (Leiden: Brill, 2021), 14. The “Spirit-Word” represents the Pentecostal conception of Scripture’s marriage to the work of the Spirit. Johns explains, “[J]ust as Jesus could not minister apart from the work of the Spirit, so the Bible cannot speak apart from the work of the Spirit” (“Grieving, Brooding, Transforming,” 13).

the community of believers.¹⁴⁴ In light of this robust trinitarian pneumatology, Pentecostals begin to read in a way that transcends human history and bridges the expanse of time between ancient authors and modern readers by the Spirit. The Spirit present in the text is the same Spirit that allows us to enter the communion of the saints and interpret the scriptures for a fresh encounter with God.¹⁴⁵ This fresh encounter allows Pentecostals to view “the Bible as a single unified narrative of God's redemptive plan.”¹⁴⁶ Pentecostals view the Spirit at work throughout the metanarrative of Scripture. From the Spirit hovering over the waters in creation (Genesis 1:2) to the outpouring of the Spirit (Acts 2), Pentecostals see the Spirit as a co-equal and co-eternal person in the Trinity. This is the same Spirit that has informed their religious experience, leading Pentecostals to see themselves as a partaker of this salvation narrative that is unfolding by the Spirit.

As I have alluded to, Pentecostals can view themselves in this redemptive plan because of the marriage of Spirit and Word in Pentecostal conception. As Pentecostals are brought into the story of the Bible, they experience or encounter not only the text but also the God to whom the text bears witness. The act of reading brings them into the text in such a manner that they “interpret Scripture by encounter more than exegesis.”¹⁴⁷ According to Pentecostal theology, Scripture's authority is thus located in its Spirit-empowered capacity to facilitate transformative

¹⁴⁴ See, e.g., Amos Young, *Spirit-Word-Community*, (Eugene, OR: Wipf and Stock, 2002), 219. In his section called, “Theological Interpretation: The Trialectic of Spirit-Word-Community,” Amos Young states, “[B]eginning with the Spirit leads toward a robust trinitarianism, and that this movement reflects both the shape of a hermeneutical theology and the intuitions of a theological hermeneutics.”

¹⁴⁵ See, e.g., Studebaker, *From Pentecost to the Triune God*, 256-268. Studebaker provides a connection point for the Spirit in creation and the Spirit of Pentecost that is at work in bringing forth the fullness of God. He states, “Without the Holy Spirit, there is no Trinity.” In other words, if the Spirit is not co-eternal or at work in the text continually, there is no Trinity.

¹⁴⁶ Lee Roy Martin, “Introduction to Pentecostal Biblical Hermeneutics,” in *Pentecostal Hermeneutics: A Reader*, 4.

¹⁴⁷ Andrew Davies, “What Does It Mean to Read the Bible as a Pentecostal?” in *Pentecostal Hermeneutics: A Reader*, 254.

experiences with the presence of God via the mediation of the text.¹⁴⁸ Secondly, the text then provides the language by which Pentecostals justify and further explain their experiences to others.¹⁴⁹ For Pentecostals, reading the text is not a past historical document for criticism; it is a locus for the present encounter with the Spirit. Historical distance does not bind Pentecostals to mere historical criticism or the discernment of the meaning “back then,” for they are brought into the text by the Holy Spirit who transcends time. This unique relationship with the text encourages a mode of reading that sees Scripture as a site of divine encounter as enabled by the power of the Spirit.

2. Reading as “Holy Space”

As a part of this experiential hermeneutic, Pentecostals often speak of the text as a “space” wherein the reader encounters God. In this textual space, God is immediately available to the believer, whom the Spirit comes and meets in a divine exchange. Once again, Pentecostal pneumatology looms large here, for it is the Spirit that enables communion between the reader, the biblical authors, the community of believers, and God. As Cheryl Bridges Johns explains: “[T]he sacred space of the Bible reaches back in time to include those who were the first witnesses to the Word, as well as those who are now standing in the presence of that Word. It is thus a large, corporate space and not just an individual, existential one.”¹⁵⁰ For the Pentecostal reader, the lack of historical distance between the text's original composition and the reader allows the Bible to become a “holy space” for an encounter. Johns calls this a “sacramental space” that “offers the reader the real presence of the Triune God.”¹⁵¹ As the Pentecostal reads

¹⁴⁸ Davies, “What Does It Mean to Read the Bible as a Pentecostal,” 150.

¹⁴⁹ This seems to be distinctive in capital “P” Pentecostal hermeneutics, whereas Charismatic readers may use language outside the canon.

¹⁵⁰ Johns, “Grieving, Brooding, Transforming,” 15.

¹⁵¹ Johns, “Grieving, Brooding, Transforming,” 14.

the Bible, the text becomes a physical space where the presence of God meets the reader. This holy space is open and free from the confines of time, forcing the Pentecostal to “re-envision the context for approaching Scripture and Scripture interpretation.”¹⁵² Rickie Moore notes the importance of viewing scripture this way by saying, “It is not just that Scripture needs to be drawn into the zone of sacred space, but also that Scripture itself needs to be recognized as a kind of sacred space that we are graciously invited to enter.”¹⁵³ This radical view of experiencing God while reading Scripture is of the utmost importance within Pentecostal scriptural interpretation. The ability to encounter the Holy Spirit in the sacred space of the text only further demonstrates the importance of experience and the Spirit’s work within Pentecostal Hermeneutics. Once again, we see trinitarian pneumatology reflected within the experience and interpretation of the Bible. Chris Green writes,

“We cannot understand what the scriptures are or what we are expected to do with them until we begin to understand the nature of the God who gives them to us. Coming to know how to read the scriptures creatively and beautifully begins, therefore, with reflection on the doctrine of the Trinity, because that is the way we begin to see how God is beautiful. As Trinity, God lives eternally, giving and receiving the beauty we name as”Love.”¹⁵⁴

For the Pentecostal, this understanding of the nature of God comes primarily via experience. This ultimately affects “what the scriptures are, or what we are expected to do with them,” in turn, this informs our hermeneutics.

B. Reading with/for the Spirit

As I have noted above, reading for and as an experience with God hinges on the work of the Holy Spirit in the lives of Pentecostals. Although there is no prescribed method for bringing

¹⁵² Moore, “Altar Hermeneutics,” 152.

¹⁵³ Moore, “Altar Hermeneutics,” 152.

¹⁵⁴ Chris Greene, “Beautifying the Beautiful Word: Scripture, the Triune God, and the Aesthetics of Interpretation,” in *Constructive Pneumatological Hermeneutics in Pentecostal Christianity*, (New York, NY: Palgrave Macmillan, 2016), 108.

the Spirit into Pentecostal reading, the Pentecostal believes the Holy Spirit is an active presence in the act of interpretation and reads *for* the Spirit—that is, the reader reads *for the sake of* encountering the Spirit just as the reader *searches for* the Spirit in the details of the text. The dwelling of the Spirit within the believer allows the Pentecostal to read and interpret the text *with* the Holy Spirit. Interpretation becomes an act of worship as the Pentecostal waits on the Spirit to come and fill the reader, just as on the day of Pentecost in Acts 2. Kenneth Archer writes,

“The role of the Holy Spirit is continually referred to by Pentecostals as an important element in hermeneutics. A fundamental principle is that ‘Scripture given by the Holy Spirit must be mediated interpretively by the Holy Spirit.’ The Holy Spirit is viewed as both inspirer of Scripture as well as illuminator of Scripture; therefore, the Holy Spirit plays a vital part in elucidating the contemporary meaning of Scripture.”¹⁵⁵

The Holy Spirit meets the reader and illuminates the scriptures even if they do not know it, and consequently, the Spirit becomes the prime interpreter of the text. Once again, the inextricable bond between Spirit and Word remains central: “Pentecostals understand the Bible as married to the work of the Spirit in actualizing the presence of the Living Word and in actualizing the work of God in the healing of creation.”¹⁵⁶ This “marriage of Spirit and Word” cannot be separated by Pentecostals and should be seen as of utmost importance because it allows Pentecostals to read presently with the Spirit.

1. Reading in Light of Acts 2

In some way, the Pentecostal emphasis on the Spirit-Word marriage has its basis in the biblical text itself, and few passages are as paramount for Pentecostals as Acts 2. For the Pentecostal, Acts 2 represents more than just a memory of divine power; it also serves as a contemporary model and ongoing reality for biblical interpreters. In this conception, the

¹⁵⁵ Kenneth Archer, “Pentecostal Hermeneutics: Retrospect and Prospect,” in *Pentecostal Hermeneutics, A Reader*, 145.

¹⁵⁶ Johns, “Grieving, Brooding, Transforming,” 12.

Pentecostal focus on “baptism in the Holy Spirit with speaking in other tongues” plays an integral role in the interpretation of the Spirit-Word.¹⁵⁷ Rickie Moore writes,

“Thus, among all the things for which the Day of Pentecost serves as a foundational matrix for us Pentecostals, including the experience of being filled with the Spirit, the charismatic gift of tongues, empowerment to be witnesses, the inauguration of the multicultural mission of the church, the arrival of Joel’s eschatological vision, the manifestation of ‘the prophethood of all believers,’ and so on, another significant thing that needs to be included is the setting forth of a pneumatic paradigm for hermeneutics and Scripture interpretation—one that is born out of what we would understand as an altar setting of divine-human encounter.”¹⁵⁸

Pentecostals indeed cannot separate the event of Pentecost in Acts—and their subsequent “personal Pentecost”—from their biblical interpretation. As such, Pentecostals read through the lens of the full gospel,¹⁵⁹ wherein Spirit baptism with the evidence of speaking in tongues further enables the believer to read with the active presence of the Holy Spirit. A byproduct of this presence is a special attention to Acts 2 themes throughout the canon.

2. Wind and Fire

Many of the themes that Pentecostals search for within Scripture come from the Acts 2 narrative. The mighty rushing wind (Acts 2:2) and tongues of fire (2:3) are motifs that have personal meaning to the Pentecostal and are sought throughout. The narrative quality of Pentecostal reading allows the interpreter to find these themes within other stories in the Bible: all Scripture is interpreted in a way that points to God’s Spirit-filled plan. For the Pentecostal, stories of wind and fire dot the landscape of the biblical metanarrative and invite new pneumatological meaning.

¹⁵⁷ Archer, “Pentecostal Hermeneutics,” 136.

¹⁵⁸ Moore, “Altar Hermeneutics,” 152.

¹⁵⁹ The book of Acts is the continuation of the book of Luke, which includes the day of Pentecost. Pentecostals often refer to themselves as individuals who preach the “full gospel,” because they also preach heavily on the experiences of Pentecost. As Archer writes, that the early classical Pentecostals’ “interpretation was theologically colored by their Christological ‘full gospel’ pre-understanding.” See Archer, “Pentecostal Hermeneutics,” 135.

In Pentecostal perspective, a story like that of Ezekiel in the valley of dry bones (Ezek 37) points to the Spirit's work in the contemporary world to bring life to dead things. Because these themes are easily identifiable, anyone can read in this way (pneumatologically and faithfully), regardless of whether they have received formal theological training. The accessibility of Pentecostal hermeneutics highlights the priest and prophethood of all Pentecostal believers. Interpretation becomes an experience open to all and sometimes "puts the 'modern' person at a distinct disadvantage,"¹⁶⁰ precisely as their concern with dispassionate dissection and historical explanation precludes divine experience. The Pentecostal approach thus allows those not traditionally heard within the world of theology to participate in the interpretive dialogue. The marginalized are invited to contribute their unique perspective on the text in a manner that other reading communities might exclude.¹⁶¹ The search for Pentecostal themes allow the uneducated and overlooked to tell their testimony and read the Bible in ways typically seen as unfit for theological reflection in the academy.

C. Personal Interpretation

As a part of Pentecostalism's emphasis on divine encounter when reading the Bible, they often articulate this experience of "reading the text" as a "being read by the text." When Pentecostals read Scripture, they ultimately understand that they are opening themselves to the transforming power of the Holy Spirit, wherein the Spirit "reads" the believer and begins to "interpret" them. This is an open, intimate exchange between the believer and God, even if it occurs during a corporate worship gathering. As the Spirit-Word is opened, the space between

¹⁶⁰ Ellington, "Pentecostalism and the Authority of Scripture," 159.

¹⁶¹ There are many different types of Pentecostal Hermeneutics and "each expression is deserving of its own particular version of Pentecostal Hermeneutics." See Lee Roy Martin, "An Introduction to Pentecostal Hermeneutics," 9.

the reader and the Spirit becomes thin,¹⁶² and an “altar setting of divine-human encounter” is fostered.¹⁶³ This may seem like a sort of ecstatic or euphoric event, but Pentecostal readers do not always frame it as a pleasant experience: the Pentecostal believer often understands that examination and purification must occur when the Spirit is invited into a space. It can often be a dangerous space because it “offers to us God as the living subject.”¹⁶⁴ We no longer act as the subject objectifying the scriptures, but rather, the objects searched by the Spirit via the text. In this “reversal” of Pentecostal interpretation, “we are known and read more than we know and read.”¹⁶⁵ Being read by the Spirit as we read may not be “new” in the Christian tradition, but it does distinguish Pentecostal hermeneutics from other methods that see the Bible as an object of scrutiny.

1. Sanctification

Over against the standard exegetical methods of the academy, Pentecostals have emphasized Scripture’s sanctifying capacity. Though Pentecostals had inherited rationalist and fundamentalist ways of reading Scripture, they “found it necessary to revise their hermeneutics in the light of their Pentecostal experience of the Spirit.”¹⁶⁶ The focus shifts from historical contextualization (rationalism) and doctrinal construction (fundamentalism) to the sanctification of the Pentecostal. The search for “Acts 2” themes across the canon—especially the “fire” of God—exegetically underscores this purification process.

2. Affection

¹⁶² Cheryl Bridges Johns notes that the nature of “Sacred Space” is “a thin space where the veil between the supernatural and the natural world become transparent.” See Johns, “Grieving, Brooding, Transforming,” 14.

¹⁶³ Moore, “Altar Hermeneutics,” 152.

¹⁶⁴ Johns, “Grieving, Brooding, Transforming,” 15.

¹⁶⁵ Johns, “Grieving, Brooding, Transforming,” 15.

¹⁶⁶ Martin, “Introduction to Pentecostal Hermeneutics,” 3.

Because sanctification is holistic, the act of reading in Pentecostal conception even re-shapes the believer's affections. While many read primarily for orthodoxy (proper thinking) or orthopraxy (proper practice), a Pentecostal hermeneutic may also inform its adherents in matters of orthopathy (proper feeling).¹⁶⁷ In the reading event, the Spirit comes and allows the believer to grieve, rejoice, and mourn for what God does. Cole calls this "learning to feel as God feels."¹⁶⁸ As the Pentecostal reader examines the feelings of those within a given passage, they feel what the characters in Scripture feel and thereby share in divine empathy, anger, or joy. This is done within and via the holy space of the Bible and represents a unique exchange of time and space. This should be expected because of the unique way Pentecostals can weep, groan, and grieve with the Holy Spirit. One might also include orthopathy in the myriad of experiences utilized in Pentecostal hermeneutics.

IV. Conclusion

In this paper, we embarked on a journey through the realm of Pentecostal hermeneutics, uncovering the dynamic interplay between Pentecostal theology, the Holy Spirit, and the interpretation of Scripture. The latter half of the 20th century witnessed a transformative shift within Pentecostal scholarship, as scholars sought to define a distinctive hermeneutic grounded in their unique experiences with the Spirit. This departure from fundamentalist traditions allowed Pentecostals to forge their own path in theological discourse, engaging with the broader academy as genuine contributors rather than mere appendages to existing traditions. Our exploration led us to the heart of Pentecostal theological reflection: the relationship between the Holy Spirit and the interpretive process. Drawing from trinitarian Pentecostal pneumatology, we uncovered the

¹⁶⁷ Casey Cole, "Taking Hermeneutics to Heart: Proposing an Orthopathic Reading for Texts of Terror via the Rape of Tamar Narrative," in *Pentecostal Hermeneutics*, 58 (italics original).

¹⁶⁸ Cole, "Taking Hermeneutics to Heart," 58.

historical subordination of the Spirit within broader Christian traditions, urging for a renewed emphasis on the Spirit's active role. We followed the footsteps of scholars like Steven Studebaker, who highlighted the significance of Spirit baptism as a pivotal point for theological reflection, thus setting the stage for our investigation into Pentecostal hermeneutics.

The concept of Pentecostal experience emerged as a guiding light, illuminating the path toward a unique hermeneutic. We observed how Pentecostals read the Bible not merely as a text, but as an encounter with the divine. This experiential approach rooted in the Holy Spirit transformed Scripture from a historical artifact into a sacred space, a conduit for encountering God. The marriage of Spirit and Word allowed Pentecostals to partake in the ongoing narrative of salvation, bridging the gap between ancient authors and modern believers through the unifying power of the Spirit. Acts 2 emerged as a pivotal touchstone, symbolizing more than a historical event; it served as a contemporary model for reading and interpreting Scripture. Pentecostals, fueled by their own experience of Spirit baptism, read the Bible with a keen eye for Pentecostal themes like wind and fire, viewing themselves as active participants in the unfolding divine drama. In the act of reading, Pentecostals discovered a reciprocal relationship, a divine exchange where they were not just reading the text, but being read by it. This intimate encounter with the Spirit through the written Word fostered spiritual formation and reshaped the reader's affections, infusing orthopathy into the interpretive process. The sanctifying power of Scripture became evident as the Spirit guided believers to grieve, rejoice, and empathize with the characters and emotions presented within its pages. Ultimately, Pentecostal hermeneutics stands as a testament to the transformative potential of experience-driven interpretation, where the Holy Spirit serves as the guide, illuminator, and interpreter. The distinctiveness of Pentecostal theology finds its

expression in this unique approach to Scripture, inviting all believers into a sacred dialogue where the Spirit's presence breathes life into the text and the reader alike.

As we conclude this survey of Pentecostal hermeneutics, we leave with a profound appreciation for the Spirit-filled nature of this approach. Pentecostals have shown us that the encounter with the Spirit is not confined to historical narratives or ancient texts, but is a living, breathing reality accessible to every believer who approaches the Word with open hearts and a longing for divine communion. In the ongoing conversations surrounding the Spirit, Pentecostal experience, and Scripture, we find a rich tapestry of thought that continues to shape theology and bridge the gap between human understanding and divine mysteries.

BIBLIOGRAPHY

- Archer, Kenneth J. *A Pentecostal Hermeneutic: Spirit, Scripture, and Community*. Cleveland, TN: CPT Press, 2009.
- Archer, Kenneth J. "Pentecostal Hermeneutics: Retrospect and Prospect." Pages 131-148 in *Pentecostal Hermeneutics, A Reader*. Edited by Lee Roy Martin. Leiden: Brill, 2013.
- Cole, Casey. "Taking Hermeneutics to Heart: Proposing an Orthopathic Reading for Texts of Terror via the Rape of Tamar Narrative," Pages 53-62 in *Grieving, Brooding Transforming: The Spirit, The Bible, and Gender*. Edited by Cheryl Bridges Johns and Lisa P. Stephenson. Leiden: Brill, 2021.
- Davies, Andrew. "What Does It Mean to Read the Bible as a Pentecostal?" Pages 249-262 in *Pentecostal Hermeneutics, A Reader*. Edited by Lee Roy Martin. Leiden: Brill, 2013.
- Ellington, Scott. "Pentecostalism and the Authority of Scripture," Pages 149-170 in *Pentecostal Hermeneutics, A Reader*. Edited by Lee Roy Martin. Leiden: Brill, 2013.
- Isgrigg, Daniel D., Mittelstadt, Martin W., and Wadholm Jr., Rick. *Receiving Scripture in the Pentecostal Tradition: A Reception History*, Cleveland, TN: CPT Press, 2021.
- Johns, Cheryl Bridges. "Grieving, Brooding, Transforming," Pages 7-19 in *Grieving, Brooding Transforming: The Spirit, The Bible, and Gender*. Edited by Cheryl Bridges Johns and Lisa P. Stephenson. Leiden: Brill, 2021.
- . *Pentecostal Formation: A Pedagogy among the Oppressed*, Eugene, OR: Wipf & Stock, 2010.
- . *Re-Enchanting the Text*, Grand Rapids, MI: Baker Academic, 2023.
- Keener, Craig S. *Spirit Hermeneutics: Reading Scripture in Light of Pentecost*, Grand Rapids: Eerdmans, 2017.
- Leulseged, Philemon. *Pneumatic Hermeneutics: The Role of the Holy Spirit in Theological Interpretation of Scripture*, Cleveland, TN: CPT Press, 2019.
- Martin, Lee Roy. "Introduction to Pentecostal Biblical Hermeneutics." Pages 1-10 in *Pentecostal Hermeneutics, A Reader*. Edited by Lee Roy Martin. Leiden: Brill, 2013.
- McQueen, Larry R. *Joel and the Spirit: The Cry of a Prophetic Hermeneutic*. Cleveland, TN: CPT Press, 2009.
- Moore, Rickie D. "Altar Hermeneutics: Reflections on Pentecostal Hermeneutics." *Pneuma* 38 (2016): 148–159.

- Moore, Rickie D. and Brian Neil Peterson. *Voice, Word, and Spirit: A Pentecostal Old Testament Survey*, Nashville: Abington Press, 2017.
- Oliverio, L. William. *Pentecostal Hermeneutics in the Late Modern World*. Eugene, OR: Wipf and Stock, 2022.
- Studebaker, Steven. *From Pentecostal to the Triune God: A Pentecostal Trinitarian Theology*. Grand Rapids, MI: Wm. B. Eerdmans Publishing Co, 2012.
- Wariboko, Nimi and L. William Oliverio, Jr. "The Society for Pentecostal Studies at 50 Years." *Pneuma* 42 (2020): 327-33.

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Elegy for the Humanities: Liberal Arts Education as Modern Democracy's Lifeblood

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Abstract

Postsecondary liberal education disintegrates under democracy. The democratic regime is founded upon tenets of liberty and equality for all, with utility as the guiding force for securing these ends. However, modern democracy's misunderstanding of its own founding values demotes liberal education, rendering it a divisive force between equal members of society that often fails to meet the regime's requirements for gratifying self-interest. Consequently, a common and extreme approach to specialized technical education follows, and democratic citizens then lead a tumultuous and shortsighted half-life, separated from the knowledge of their humanness, and absent from the beauty of virtuous communal life. A true liberal arts education actually equips the individual with cognitive and actionable skills to lead a good and fulfilling life. It assists the individual in fulfilling their potential and magnifying their inherent humanness and shared equality for the sake of their community's edification. A proper postsecondary liberal arts curriculum cultivates a thorough understanding of liberty and equality, the ability to envision the image of the participation of virtuous citizens in a flourishing democracy, and the motivation to adequately contribute to this end. This education is not only possible in democracy, but essential to its flourishing for years to come.

Elegy for the Humanities: Liberal Arts Education as Modern Democracy's Lifeblood

The beauty of philosophic education disintegrates in democracy. In aristocracy, the philosophic education thrives, but is left to the few in the higher classes to be exemplars for the many. To compensate for the inequalities of aristocratic hierarchies, American democracy rests its education upon the tenets of equality and liberty, guided by considerations of utility. As a result, democracy caricaturizes philosophic education fruitless and marginalizing. However, the truly philosophic education is not as inutile as perceived. It equips one with cognitive and actionable skills to lead a good life by refining reason, desires, and spiritedness. Properly done, philosophic education equips individuals to fulfill their potential as virtuous citizens. This education is not only possible in democracy, but is essential to its flourishing. A proper philosophic education entails a robust postsecondary liberal arts curriculum that cultivates a thorough understanding of liberty and equality, the ability to envision the image of the participation of virtuous citizens in a flourishing democracy, and the motivation to adequately contribute to this end.

Context

Much of American democracy is a reactionary response to aristocracy. Aristocracy's tenets of duty and obligation support a hierarchical system at odds with democratic equality and liberty.¹⁶⁹ The tenets of both regimes are powerfully educative, creating common affections and habits among its citizens. When democracy abandons aristocracy's system of interdependent classes, it effectively shifts the individual's disposition from selfless obligation and love of beauty to self-interested love of utility. The primary motivator of the democratic individual in every endeavor is merely the useful. If the individual is incentivized to intense self-interest, then they will only be able to perceive their interests in everyone else. The opportunity for communal flourishing is lost to democratic short-sightedness.¹⁷⁰

The Challenges of Democracy

This is largely due to the failure of democratic institutions to understand equality in the most important sense. Individuals are unequal in talents and abilities, but their shared humanity equalizes them; it is both common and everlasting. True equality does not manifest in skills attributable to a particular point in time. However, when democracy tries to ignore the particulars that distinguish individuals, true shared humanity is traded in for surface level commonalities, and this fundamental equality is dishonored. If the individual cannot perceive any obvious distinctions between them and their neighbor, they are far less likely to spot the innate qualities that eternally bind them together. The communal identity integral to institutional longevity will be lost, and what is both common and particular to individuals cannot be nourished to cultivate

¹⁶⁹ Mansfield HC, Winthrop D. Alexis de Tocqueville, *Democracy in America*. Chicago: University of Chicago Press; 2000, p. 500.

¹⁷⁰ *Ibid*, p. 501.

virtue. In short, when democracy detaches a man from his humanity, it backfires, harming the nation and its citizens.

The Virtues of Democracy

In spite of its setbacks, equality serves as ideal soil to restore the democratic soul to virtue through proper education. Democracy naturally encourages equal opportunity and equal access to education. However, unchecked democracy's leveling habits incentivizes an approach to education that fails to serve its citizens as whole people. The proper approach to education in a democratic regime can properly ameliorate its failures in cultivating a virtuous soul and a good citizen for democracy.

The Problem of Specialized Education in Democracy

Considering democracy's approach to equality and its love of utility, specialized, vocational education logically follows. A specialized education prepares the individual for a career that may be useful to the economic growth of the reigning regime. Additionally, specialized education can cultivate interdependence between individuals. If democracy provides each citizen an opportunity to tangibly contribute to the regime, then the citizens will lean into the utility and economic growth of the regime as the highest good. If the individual adequately contributes to this above all else, then they have fulfilled the purpose of their equality and attained the good life. The goal of democracy should be the refinement of citizens moral and intellectual faculties and a thorough cognizance of its purpose. If the proper education will lead democratic students into holistic refinement and the consequent flourishing of their regime, then the specialized approach is not suitable to this end.

The Benefit of the Liberal Arts in Democracy

Liberal arts education optimizes the ability of individual to think intelligently, contemplate higher things, and to compose themselves in a manner that recognizes and honors their humanity. If the student is taught that the only way they can contribute is through acquired skills, the student will register that their equality only exists in surface-level common abilities. The study of the liberal arts helps grounds the individual to the reality of the shared existence, troubles, and glories of human life. When the individual is taught to reason, struggle, and act virtuously, then what they contribute to the regime will much more fruitful in the pursuit of flourishing than the mindless exchange of ephemeral goods.

The study of the liberal arts recognizes the triune human soul, composed of spiritedness, desire, and reason, each often in conflict. The liberal arts seek to balance and correctly order the soul to cultivate virtue, preparing the student for a life of public engagement oriented towards a common good. To that end, it is a proper counter to the potential catastrophes of modern liberal democracy. The citizen educated in the liberal arts is an intelligent, adaptable, and persistent student of higher things and a thoughtful participant in the common good.

The Unique Role of the Liberal Arts University

The university is the vanguard of education in the United States. The university presents a clear end goal for education and provides an occasion for students to continue their learning to its completion. This level of liberal education directs individuals to historic voices that provide a broad scope of insight and wisdom that incites desires for individual and communal betterment. The consistent introduction and reintroduction of these deeply human ideas enable the student to step into a life of continual learning. This constant growth and a love of learning is directly related to human flourishing. The liberal arts curriculum is twofold, depending on the method of learning as well as the particular content involved. The method cultivates a habituated love of

lifelong learning, while the content involves a thorough study of Great Books that investigate the glories and challenges of human life.

The love of lifelong learning is habituated as the liberal arts balances the individual's desires, will, and reason. The balance of these qualities encourages a humility and openness within the student, which motivates them to grow intellectually and morally through the characteristic changes of democratic regimes. The Great Books program of the liberal arts education is especially critical to this end, since its works address both the practical and theoretical issues that humanity has shared for centuries.¹⁷¹ The study of Great Books helps the democratic citizen to look beyond their immediate context and peer into the human struggles that transcend it. In this, the student will better perceive the eternally shared humanity that can re-ground democracy. This exposure to human essence motivates the love of learning which drives the consistent pursuit of the common good and the evil that prolongs suffering. These qualities, when paired, essentially offer a freedom found beyond utilitarian self-interest. The liberally educated democratic citizen is equipped with the intellect, heart, and willpower to adequately resolve human issues in the manner they can best. This satisfies the democratic tenet of the equality in the truest sense, that all are valuable in their humanness as well as their unique strengths. If we are to live together, we must live together well. To live together well, we must see each other as valuable, encourage growth, and seek to complement one another in the pursuit of the common good. This is the goal of the liberal arts university and is pursued best in the context of the modern democracy.

The Road to Democratic Flourishing

¹⁷¹ Adler, Mortimer J. "Adult Education." *The Journal of Higher Education* 23, no. 2 (1952): 59–115.

The liberal arts model of higher education is consistent with modern liberal democracy, it can contribute to regime flourishing without sacrificing the valuable tenets of democratic principles. Unchecked democracy does not benefit the individual, and its leveling only provides the illusory relief that man is able to engage with himself, his neighbor, and the world on his own. However, since the liberal arts values the transcendent and a common capacity for men to uniquely flourish, this model of higher education can encourage that shared capacity to engage in transcendence. Democracy's true issues are rooted in the unfulfilled potential of its citizenry and the obstinate defense of self-interested utility. A liberal arts education benefits the individual long term by refining their innate capacity for personal growth and public engagement to the resolution of these timeless and necessarily human issues that are especially prominent in democracy.

Chapter 1: The Virtues and Challenges of Democracy

American Origins

Alexis de Tocqueville defines democracy as a regime founded upon pillars of equality and freedom. To understand the nature and trajectory of American democracy, one must look to its origin.¹⁷² The origin of American democracy is identified by a repulsion to aristocracy. The emigrants coming to the colonies rejected the idea of the superiority of some individuals over others, and when laws were made to establish a hierarchy of ranks, the citizenry reacted rebelliously. The laws bent to equality, consigning to the interests of the citizen. The hierarchical class system of aristocracy would be poison to the American citizenry.

¹⁷² Mansfield HC, Winthrop D. Alexis de Tocqueville, *Democracy in America*. Chicago: University of Chicago Press; 2000, p. 28

The Attributes of Aristocracy

Aristocratic regimes are founded upon tenets of inequality, obligation, and improvement. Citizens are ranked according to birth, rank, or profession, and are constrained to a predestined path. The individual can only conceive of human power according to his class' boundaries. That tangible representation of human limits translates into their understanding of their own human nature, and is traceable to how they conduct themselves. The aristocrat adheres to the principle of improvement within imposed bounds. They conceive of what is *better*, not merely different. Therefore, the aristocratic citizen does not believe they have arrived at any sovereign good, but rather a level of perfection that their bounds of imperfect nature permit.¹⁷³ Since each class is divided on the basis of status or wealth, then the ruling classes are composed of the fewest citizens while the lower classes are composed of the majority. The guiding moral doctrine of aristocratic regimes is that obligation to another individual, usually family or one's own class, is a glorious participation of the essence of God Himself.¹⁷⁴ A man's identity is not self-centered, but dependent upon his community. Obligation need not be motivated by individual desires.

The Attributes of Democracy

American democracy rejects caste systems. As classes dissolve, citizens are tumultuously mixed, and laws and customs shift. The lack of caste systems presents greater possibilities of human perfection to the democratic mind.¹⁷⁵ There are no longer any limits for public or private engagement. The democratic citizen is always found seeking, falling, and tending ceaselessly towards that elusive image of greatness.¹⁷⁶ There is no single path, no clear direction, and no

¹⁷³ Ibid, p. 427

¹⁷⁴ Ibid, p. 500.

¹⁷⁵ Ibid, p. 427

¹⁷⁶ Ibid, p. 427

provocation to dutiful obligation to anyone besides oneself. Tocqueville makes an insightful comparison to the common democratic soul's orientation to the work of an American sailor.

Tocqueville meets an American sailor and inquires about the short-life span of their boats. Without hesitation, the sailor replies that the art of navigation progresses so rapidly that the most beautiful ship would be rendered useless if its existence were prolonged beyond a few years.¹⁷⁷ That endless ceasing towards that image of greatness is productive in the pursuit of knowledge, but is dangerous for an active participation in beautiful things. There is no incentive to pursue beauty and goodness for its own sake since outside the aristocratic system of improvement within imposed limits. Beauty and absolute truth is a useless distraction from progress in democracy.

The Virtues of Democracy

The virtues of democracy are rooted in their moral pillars. Within a democratic regime, an individual has the opportunity to be actualized into their more perfect self without the artificial limits of class. One might be born into a family of cobblers, but innate potential and particular abilities might otherwise deem them worthy of a career in politics. Within an aristocratic regime, unfulfilled potential is much more likely. Democratic equality deems the individual born into a cobbler family inherently equal in value and potential to the one born into a family of wealthy legislators. Freedom provides that individual with the means to be perfected according to their natural abilities. The cobbler will have no obligations to his career or community that would prevent him from quitting his vocation to pursue another. Much like aristocracy's moral pillars, democracy affects the individual's disposition and desires.

The Challenges of Democracy

¹⁷⁷ Ibid, p. 428.

American democracy directly influences the individual's soul. Each aspect of an individual's soul needs maturation and direction to facilitate the common good. The soul can be best understood by its individual parts, namely reason, spiritedness, and desire. Each of these parts are influenced by their environment, and, in this way, a regime is educative. A misguided democratic regime indirectly teaches harmful ideas and habits rooted in a misinterpretation of the good life, which denigrates individual and communal flourishing.

The Philosophy of the Democratic Soul

Democratic souls are not contemplative, but they do adhere to a philosophic method. The democratic philosophic method is instinctually Cartesian without ever having read Descartes.¹⁷⁸ The individual clings to what is true according to their immediate intellectual capabilities, and the democratic vision of flourishing flows from this intellectual habit. Therefore, this vision is not concerned with intellectual and moral growth, but rather the assurance of the freedom to utilize one's perfectly "sufficient and equal" intellect. The democratic approach to the Cartesian method propels the individual into a life of constant and directionless change. Therefore, the connections that bind the individual to previous generations are loosed or even broken, and the individual loses their central ideas. The democratic soul harbors an intense need to be free from the yoke of habits, class opinions, and national prejudices. Tradition is nothing more than information, and new facts are only useful insofar as it propels further change.

The tenet of equality that dissolves classes and inadvertently stifles improvement affects the ability to reason beyond one's immediate abilities. The democratic soul has no concept of bounded perfection because it has no vision of its true potential. So, as they experience easy resolutions of small difficulties of everyday life, it is easy for them to conclude that nothing in

¹⁷⁸ Ibid, p. 403

the world is inexplicable and their immediate intelligence is sufficient for the challenges to come.¹⁷⁹ There is no need for further educative experience unless it aids them in developing a useful skill. This priority of utility and the lack of habitual contemplation explains the persistence of self-interest well understood.

The Democratic Soul and Self-Interest Well Understood

There is a deep connection between a less lofty intellectual life and the devaluing of selfless obligation. When an individual is only able to consider what is helpful to him in an immediate moment, the idea of sacrifice becomes frightening.¹⁸⁰ So, whatever particular interest of the individual also meets the general interest of the citizenry, it is immediately magnified. What was once isolated is now common, so, the individual learns to believe that in serving those like him he is also serving himself, and the incentive is always to do good unto oneself. This incentive to benevolence maintains an image of virtue, but this virtue is not practiced for its own sake. Virtue is never said to be beautiful, but useful, in the United States, and it is proven daily.¹⁸¹

The doctrine of self-interest remains consistent with the intellectual habits of the democratic soul. The doctrine is not lofty, but sure and certain. It seeks to attain aims without too much effort, and cannot seek to attain great objects since the self-interested individual cannot conceive of greatness, even though democracy provides the freedom to do so. Instead, the doctrine creates a vast empire easily by seizing personal interest and taking advantage of the spurs that excite them. It demands only a little effort from the individual every day rather than their wholehearted devotion, and this makes it easy for the citizenry to operate according to self-

¹⁷⁹ Ibid, p. 404

¹⁸⁰ Ibid, p. 501

¹⁸¹ Ibid, p. 501

interest consistently. So, true beauty and great virtues are exchanged for these miniature sacrifices. The comfort of minute sacrifices and immediate gratification of the needs they can discern builds up longings that are attracted towards the world of industry and commerce.

The Democratic Soul and Commerce

It is important to note the origins of the love of wealth and industry in American democracies. Tocqueville observes that there is no poor person who did not cast a hopeful glance to the enjoyments of the rich, and the rich in democracies do not disdain material well-being as the rich in aristocracies might.¹⁸² Most of the wealthy in democracies have been poor. These few have risen through the ranks and know the pain of lack, and they have fought long for their victory, and the passions that contributed to their survival live on.¹⁸³ These passions have translated into a restiveness in spite of material prosperity. The habits and desires born of equality and freedom, when lacking a common knowledge of origin and tendency to contemplate truth, nourish fears of lack, of imprisonment to tradition, and of inequality. From this, a natural love of commerce and industry forms.¹⁸⁴

Commerce presents itself as the most powerful and prompt method of acquiring wealth, security, and freedom. The tendency toward equality and the leveling that ensues multiplies low-level workers, and the self-interested habits of the democratic citizenry brings them closer to their work than to each other. According to Tocqueville, this condition essentially brings the mindset of the wealthy to that of the poor without actually having their needs. The virtues and habits of the wealthy are corrupted, and virtues and habits of the many remain stagnated and rot over time. There is no sense of direction that could guide the individual to look outwardly or to

¹⁸² Ibid, p. 507.

¹⁸³ Ibid, p. 507.

¹⁸⁴ Ibid, p. 526.

challenge his understanding of goodness for the sake of himself or his community. The democratic individual's understanding of goodness is confined to a very base image of flourishing that results from the acquisition of their perception of true freedom and equality.

A Return to the Virtues of Democracy

Regardless of a democracy's potential for corruption, fertile grounds remain for the flourishing of the democratic citizen and nation. The potential virtues of democracy are embedded within equality and freedom just as the vices are. The democratic regime projects the individual soul into a life of movement and change. Though there is still intellectual and moral stagnation, there is a spark of desire for action within the soul that could be directed into something aimed towards virtue. Since this active disposition and desire for freedom leans into the doctrine of self-interest, the direction necessary for the individual's moral and intellectual edification lies in an education that presents the utility of virtue.

If a democratic citizen is educated in the utility of virtue, then their habits, dispositions, and longings shall change. Their ability to contemplate and make sound judgements would improve, which would help disintegrate the love of immediate gratification of material needs and habituate the individual into loving the good that comes from learning for learning's sake. The individual would become humble, understanding the breadth of knowledge and wisdom in the world there is to learn from, and not be satisfied with the bare minimum use of their intellect or skill set. In the process of carefully opening the individual's mind to possibility, the individual would notice what is common between himself and his neighbor. These similarities would expand past the surface level particular needs noted by moralists and legislators in Tocqueville's doctrine of self-interest. They would point to the very essence of human nature embedded in every individual. When a citizen is grounded in this knowledge, the accident of public

benevolence when operating under self-interest becomes less of a mindless habit and more of a cognizant deliberation. These possibilities are only possible under the principles of freedom and equality that a democratic regime accounts for.

The Educative Regime and the Democratic Soul

The origin of American democracy is unique in their break from their aristocratic origin in order to maintain democratic ideals. The laws and mores bent to this rebellion, prioritizing total equality and freedom in order to protect the citizens against the limitations that aristocracy presented. However, the motive to protect the citizens so adamantly against aristocracy's artificial limitations overcame the recognition for a need to direct the citizenry in a truer understanding of liberty and equality's implications. Though aristocratic regimes provided some semblance of tyrannical limitations, they provided guidance for how an individual ought improve themselves and their community according to their capacities and environment. They were not subject to whims, and could not be, since they were bound to the good of their city. American democracy rejected this approach as it also prohibited the maturation of individual's natural abilities and prevented them from thinking or acting as free and equal members of society. So, emigrated citizens are thrust into the influence of total equality and total freedom under the democratic regime. Although these ideological pillars have their merits, they are a dangerous influence on the individual soul when misguided. The democratic soul is non-contemplative, intensely self-interested, and consequently loving towards commerce and industry.

The democratic citizen is among the least philosophic of citizens, according to Tocqueville. They are Cartesian at heart, but not in study, meaning they are only concerned with what they can absolutely know by their own immediate means of thinking. They are detached from the ties of generations before them and the ideas that defined them, just so they can be free

from tradition or the means to any end. This prevents the inventive to speculate the common good of life or improve upon whatever level of intellect one already has. Additionally, the pillar of equality dissolves the aristocratic hierarchical system, and effectively prevents individuals to looking at lives or people beyond what is noticeably shared. This stunts the citizen's ability to contemplate beyond one's own limitations. Tocqueville notes this inability to contemplate with his doctrine of self-interest well understood. This doctrine is not lofty but clear, making it incredibly attractive to the democratic soul. Any sacrifice, either in growth or service to one's community, at the expense of what is immediately helpful to one's own interest becomes unsettling. It is only by accident that any benefit to the public occurs, according to the recognition of particular desires of individuals that so happen to be shared by the citizenry. When each citizen serves themselves, they indirectly serve their community, but it provides only a mere image of virtue. The doctrine of self-interest naturally leans into the love of commerce. This love gratifies the common desire for any need being instantaneously met, and the desire to protect oneself from material lack revels in the opportunity commerce provides. This love of commerce brings people farther from each other and from themselves, feeding the idea that the truest common good is material prosperity, boundlessness, and the superiority of self-interest under the protection of democracy's equality and liberty. However, these pillars can promote a life of true change and growth into a virtuous life embedded in the common good without allowing the democratic citizen to be misguided by vice. Democracy provides for a necessary life of movement, which is integral to any necessary growth. This disposition to movement paired with the desire for freedom and gratified self-interest can be beneficial to the individual if they are provided with instruction on the utility of virtue. Tocqueville refers to Montaigne's words to support this, that even when Montaigne does not follow righteousness for righteousness' sake, he

follows it for having found that it is commonly the most useful and the happiest.¹⁸⁵ Just as the democratic soul is consumed by vice through small habits, the same can be said for the growth of virtue. The democratic regime proves itself to be rich soil for the cultivation of the common good under the authority of shared humanity, beyond base longing that connect the good of the citizenry to short-term satisfaction and mindless action.

Chapter 2: Vocational Education and the Half-Life of the Moneymaking Art

The Harm of Half-Hearted Learning

Unchecked American democracy creates a system of education that reflects the democratic soul's desires. Though individuals instituted American democracy, they are continually affected by it. Their project is not static. The regime is, in a sense, educative to the citizenry's habits and dispositions. Unfortunately, the habits and dispositions of the democratic soul are not conducive to flourishing. Flourishing, in its fullest sense, entails a vivacious moral and intellectual life that is directed towards understanding and operating within a transcendent good. This life does not avoid suffering or hardship, but it protects individuals and societies from the boundless life that prevents discovering truth, knowing beauty, and understanding how they ought live according to these. If the democratic individual leans into self-interested and utilitarian proclivities, they deny themselves the opportunity to understand the beauty of their shared human essence. They will lead a half-life with a half-understanding of their potential, and if one were to go down this path, it will be difficult to conceive of human life as more than mere survival. Regardless, America's primary educational values and institutions seek to gratify the demands of democratic proclivities. The democratic soul receives a largely vocational approach

¹⁸⁵ Ibid, p. 501.

to education that reduces the individual to a half-life, sectioning off their faculties to perpetuate harmful habits.

The American Rationalist

The democratic soul's disposition decides their moral life. If the individual's disposition is educated by their regime as much as a formal educational institution, then the moral life they align with depends upon this education.¹⁸⁶ Though they lack philosophic tendencies, their actions have value-based motivations. Two major forms of moral life inform moral human activity.

The first moral life can be described as habitual affectionate behavior. The individual within this moral life operates according to actionable instincts rather than reflection.¹⁸⁷ This form of moral assumes life operates with a sense of urgency, where one lacks time for reflection and conduct is not bound by natural necessity.¹⁸⁸ However, these habitual affections do not safeguard against vice, regardless of how frequently the individual tries to secure their well-meaning interests. And, in spite of the desire to be free to endlessly change, these habits inevitably become customary behavior. This life is continued in every waking moment of those who adhere to it, emergency or not. So, what begins as habit becomes conformity, regardless of the context of the situation or individual's true needs.¹⁸⁹

The second form of education has a starkly different vision of a moral life. This educative moral life is founded upon the reflective application of moral standards. These standards are created through by the self-conscious pursuit of moral ideals and a reflective observance of moral guidelines. While the first life is led by habit, this life is led by reflection. Even the

¹⁸⁶ Oakeshott, Michael. 1991. *Rationalism in Politics and Other Essays* New and expanded ed. Indianapolis: Liberty Fund., p. 468.

¹⁸⁷ Ibid, p. 468.

¹⁸⁸ Ibid, p. 468.

¹⁸⁹ Ibid, p. 469.

attempted application of a reflected-upon standard is a reflective activity. However, even though application is required, there is a resistance to action. The individual tries to secure the correct ideal so its application will protect against their fear of harm.¹⁹⁰ This fear's power encourages intellectual habits according to one's own ideological "tradition". The need for the perfect and most comprehensible ideal paralyzes the individual, and their ideal's truth is diluted for certainty's sake. The familiarity of these ideals brings them down to earth, rendering them concrete and handy in a pinch.¹⁹¹

Both of these approaches to moral life, as they are essentially two extremes. The first presents an incapability to reflect on a given situation. The democratic individual has an unconscious adherence not to an ideal, but to instinct. The second moral life presents an incapability inability to act at all. This life would teaches the individual to indefinitely pause and reflect instead of working through uncertainty. This approach makes it difficult to translate any ideals into action. The education in both moral lives teaches the individual to avoid fear and uncertainty at all costs. Either one must only act to live well, or one must only reflect to live well. Ironically, both forms create reflect democratic dispositions of superiority and utility. Either way, the democratic individual believes their moral life is best, and any other variety is unsuitable for securing self-preservation. Self-preservation and self-assurance are deeply rooted in the democratic dispositions of self-interest and utility, especially when intellectual and moral abilities are lacking. The two moral lives that manifest in modern democracy are Rationalist.

The Rationalist disposition is essentially oriented to self and certainty.¹⁹² The Rationalist individual is intellectually independent and free from all obligatory authority, such as habit or

¹⁹⁰ Ibid, p. 473.

¹⁹¹ Ibid, p. 474.

¹⁹² Ibid, p. 16.

tradition, save their own reason. Their circumstances have made them contentious, but they retain both skepticism and optimism. They are optimistic only in their superior reason in, and skeptical of their neighbor's ability, despite their belief in the power of common reason.¹⁹³ This approach to the belief in superior common reason drives the Rationalist to question and reject familiar traditions.¹⁹⁴ Their conduct is driven by problem-solving a clear-cut, explainable fashion, which usually comes in the form of a new invention not meant to repair. Any patient solution that provides stability or reveals long-standing knowledge must be disregarded for the patience it requires.¹⁹⁵ This resistance to tradition prevents the knowledge of tradition itself. This ignorance prevents the Rationalist from identifying societal change unless it is self-induced, so the customary and traditional seem irrelevant to them.¹⁹⁶ Though they claim to love change, the Rationalist's political affairs are marked by perfection and uniformity. Every human struggle or experience can be understandable and orderable. The idea of the boundlessness of humanity's common reason rejects the existence of complexity or mystery.¹⁹⁷ It This is Rationalism's essence. It is reminiscent of the forms of moral life that eventually create rigid, fearful, and unthinking individuals. With regards to education, this is the direct effect of the boundless freedom and the lack of direction that a newborn and unguided democracy has on the individual soul.

The democratic person cannot learn because they cannot fail. They cannot fail because they do not know how to accept failure. Every situation must be fixed, solved, or mended quickly so the journey towards greatness is not compromised. This disposition entails the belief

¹⁹³ Ibid, p. 6.

¹⁹⁴ Ibid, p. 8.

¹⁹⁵ Ibid, p. 9.

¹⁹⁶ Ibid, p. 9.

¹⁹⁷ Miller, Ted H. "Oakeshott's Hobbes and the Fear of Political Rationalism." *Political Theory* 29, no. 6 (2001), p. 812.

that machinery, or artifice, can take the place of a sufficient education.¹⁹⁸ The formal education that follows is specialized, often taking a vocational approach whose aim is the domination of nature and the fulfillment of democratic self-interest. This is not to confuse Rationalism with vocationalism simply, but to clarify the influence of the democratic and Rationalist disposition in developing vocational education within an unguided democratic regime. This sole approach to education will only make the man a half-man in his abilities, desires, and skills.

There are two kinds of knowledge under the doctrine of Rationalism. There is technical knowledge, which is concerned with rules, principles, and maxims that can be comprehensively learned, remembered, and mechanically applied.¹⁹⁹ It is, in short, textbook-learning. Practical knowledge, on the other hand, exists only in use, and this knowledge's necessary pedagogy is not that of individually reasoned doctrine.²⁰⁰ It is more of an apprenticeship, so what is learned is learned by acting. These forms of knowledge are involved in concrete human activity, and, in a true sense, they are inherently complementary to one another and intrinsically inseparable in human activity.²⁰¹ However, Rationalism asserts that practical knowledge is useless and fraudulent, and claims that the only useful knowledge to exist is technical knowledge.²⁰² Rationalisms' error in this is endowing incomplete knowledge with the credit and power belonging to full knowledge.²⁰³ The Rationalist cherry-picks whatever knowledge might be useful in gratifying their immediate interests. It is that central motivator of self-assurance and certainty through technical knowledge that drives this belief and perpetrates human life into modern technology that a specialized education supports.

¹⁹⁸ Ibid, p. 11.

¹⁹⁹ Ibid, p. 12-15.

²⁰⁰ Ibid, p. 12-15.

²⁰¹ Ibid, p. 14.

²⁰² Ibid, p. 15.

²⁰³ Ibid, p. 16.

Rationalism and Specialized Education

Education a twofold process in which the individual initiates themselves into civilization by cultivating their talents to their community's benefit.²⁰⁴ This education helps the individual bear the civilization's moral, intellectual, and emotional inheritance.²⁰⁵ A Rationalist education, however, does not have this function because of its ignorance of tradition and societal inheritance. It believes in the superiority of technical knowledge alone, and trains the individual in technique and application according to the vision of a flourishing civilization being one of change and progress.²⁰⁶ In doing so, the Rationalist disposition indirectly circumvents the realm of morality and moral learning.²⁰⁷ The Rationalist approach to morality aims to rid of inheritance and compensate for cognitive blanks with technical knowledge and insufficient common reason.²⁰⁸ These foundational beliefs manifest in a specialized, or vocational, approach to education.

A specialized education helps the student acquire skills, borrowing an appropriate amount of technical knowledge and learning to use it for money making or for making innovations in a particular field.²⁰⁹ These skills change as innovations are made. But most of specialized education is an education in a single skill, acquiring a specific measure of knowledge in order to operate safely within the that knowledge's boundaries. But these skills enter into relevance just as quickly as they take their leave.²¹⁰ Over time, this educational imbalance leaves the individual irrelevant to the progress of his society, forcing them to start over with a new skill. Although

²⁰⁴ Oakeshott Michael. 1991. *Rationalism in Politics and Other Essays* New and expanded ed. Indianapolis: Liberty Fund, p. 187.

²⁰⁵ Ibid, p. 188.

²⁰⁶ Ibid, p. 38.

²⁰⁷ Ibid, p. 40.

²⁰⁸ Ibid, p. 40.

²⁰⁹ Ibid, p. 191.

²¹⁰ Ibid, p. 191.

democratic education's aim is boundless change and utility, the rationalist student risks uselessness and stagnation without preparation for the complexity of democratic social life.²¹¹ The rise of modern technology has only exacerbated the current condition of specialized education its students.

Technology is a means to an end, and human activity is to consider ends and acquire deliberate the means to these ends.²¹² The means is the specific method of bringing something about in a particular or desired way.²¹³ This promotes a transition from nonexistence into existence, or, in other words, a bringing-forth.²¹⁴ A bringing-forth is also considered a revealing, since it uncovers reveals what was once concealed, and is often specifically connected to the discovery of a transcendent truth.²¹⁵ The essence of technology is related to revealing since technology brings-forth through deliberated means. Original technology, the essence of human activity, then, is to contemplate truth and to deliberate means to uncover it. However, modern technology has less to do with uncovering transcendence.

Modern technology does not uncover truth, but challenges it. It puts an unreasonable demand on nature – nature that otherwise may be investigated to uncover truth – to be extract and store it later use.²¹⁶ Older technology, for example, a windmill, turns in the wind, and the power created and used is left entirely to the wind's movements. Modern technology devises a plan to capture, store, and reserve the wind to generate power when the wind does not blow.²¹⁷ This method makes nature into a standing-reserve for the democratic individual's self-interested

²¹¹ Miller, Ted H. "Oakeshott's Hobbes and the Fear of Political Rationalism." *Political Theory* 29, no. 6 (2001), p. 812.

²¹² Heidegger, Martin, 1889-1976. *Basic Writings from Being and Time (1927) to The Task of Thinking (1964)*, p. 312.

²¹³ *Ibid*, p. 314.

²¹⁴ *Ibid*, p. 317.

²¹⁵ *Ibid*, p. 318.

²¹⁶ *Ibid*, p. 320.

²¹⁷ *Ibid*, p. 320.

purposes.²¹⁸ Modern technology directly caters to the democratic soul's inclinations, garnering the standing-reserve's maximum yield of anything at the minimum expense.²¹⁹ With self-interest, utility, and certainty as the central values of the Rationalist democratic individual, anything that can be used as standing-reserve shall be used as one. For a thing can only be appreciated not in its existence, but in its use for making order out of the orderable.²²⁰ This disposition blocks the discovery of any transcendent truth, changing man's habitual revealing into a continual pursuit of the standing-reserve.²²¹ This revealing changes man's habitual revealing into a continual pursuit of the possibilities of what he can immediately understand and make use of, from which come all standards of living.²²² In this technical education, the individual's mind becomes a neutral, well-refined tool to contribute to modern democracy's agenda of technological power and assurance.²²³ This effectively endangers the individual.

The method of quick and useful revealing risks the individual misinterpreting the meaning of the revealed.²²⁴ In endeavors of modern technology, whatever is true may withdraws behind everything the merely factual.²²⁵ This drives out any other possibility of revealing where the truth, not the correct or simply useful, might be uncovered.²²⁶ This paradigm even affects the dispositions of those in religious vocations. Theologians and pastors who seek to use atomic physics or other sciences to prove God's existence obey the rationalist temptation to dominate the eternal into something humanly orderable.²²⁷ In this, man thinks himself lord of the earth, but

²¹⁸ Ibid, p. 322.

²¹⁹ Ibid, p. 321.

²²⁰ Ibid, p. 323.

²²¹ Ibid, p. 325.

²²² Ibid, p. 331.

²²³ Miller, Ted H. "Oakeshott's Hobbes and the Fear of Political Rationalism." *Political Theory* 29, no. 6 (2001), p. 812.

²²⁴ Heidegger, Martin, 1889-1976. *Basic Writings from Being and Time (1927) to The Task of Thinking (1964)*, p. 331.

²²⁵ Ibid, p. 331.

²²⁶ Ibid, p. 332.

²²⁷ Blitz, Mark. "Understanding Heidegger on Technology." *The New Atlantis*, no. 41 (2014), p. 72.

become is nothing more than a standing-reserve himself. His existence depends upon the shallow discoveries of the profitable. Nowhere will the individual be able to encounter the essence of their humanity.²²⁸ They will be blind to even the possibility of such transcendence. The individual's intellect and moral judgements will be denigrated by the habits cultivated by vocational education and modern technology as the primary standard of human flourishing.

The Hidden Saving Power of Education

However, there is a saving power within the educative disposition of modern technology in democratic regimes.²²⁹ To save something is to return it to its essence in order to properly reveal it.²³⁰ This effect of this saving power for education will only come with time and preparation. The essence of technology, the revealing of truth, can be nurtured as the effective salvific power for education.²³¹ The essence of a thing is whatever endures of it from its beginning.²³² So the enduring of technology's essence is the individual's discovery of transcendence. Doing so restores the individual's own essence, which lies in watching over this the revealing instead of merely gaping at modern technology's appearances.²³³ The ambiguity of this revealing is where truth lies. The However, the Rationalist democratic soul's penchant for utility, certainty, and self-interest cannot operate in this ambiguity. Their extreme concern with factual certainty only offers representations of something much greater.²³⁴ The ambiguity of the unfolding requires the individual to discover truth just to behold it, not to store it for later use. This discovery would reveal human essence, since the individual's life is known in the

²²⁸ Heidegger, Martin, 1889-1976. *Basic Writings from Being and Time (1927) to The Task of Thinking (1964)*, p. 332.

²²⁹ *Ibid*, p. 333.

²³⁰ *Ibid*, p. 333.

²³¹ *Ibid*, p. 334.

²³² *Ibid*, p. 335.

²³³ *Ibid*, p. 337.

²³⁴ Blitz, Mark. "Understanding Heidegger on Technology." *The New Atlantis*, no. 41 (2014), p. 74.

enduring's meaning, not the standing-reserve's utility. This creates room for true, directed freedom that perpetuates the flourishing of the individual and democratic society at large. The democratic citizenry would be able to understand their inheritance and judge how they ought operate according to it. Otherwise, they'd continue to tumble into a half-life, with half-minds and half-hearts.

If a specialized education only focused on skills and the utility of materials and students, then the proper alternative educational approach would focus on the development of a whole human and a "whole" life. This mode of education would prioritize the individual's intellect, their emotional well-being, and their moral fortitude over their moneymaking skills. However, it is important to consider how to optimize the individual's learning experience. A Rationalist approach heeds technical knowledge, where only rote memorization and application are necessary. That habit would only prepare the student to respond to the plethora of life's challenges with mechanized and fruitless responses. This habit is inconsistent with what is natural and enduring of human activity.

"Poetically man dwells on this earth."²³⁵ Human activity follows the process of creating a poem. A poem is a composition of repeated efforts to formulate an idea or conceive an image. Nothing exists ahead of the poem except the passion that motivates its creation. Natural human activity does not function with a static end in mind but operates within a cycle of action and reflection. This process is consistent with all true moral activity. It does not assume the end of a thing, or even decide that one's reflected action is superior because of common reason.²³⁶ So, the

²³⁵ Heidegger, Martin, 1889-1976. *Basic Writings from Being and Time (1927) to The Task of Thinking (1964)*, p. 340.

²³⁶ Oakeshott Michael. 1991. *Rationalism in Politics and Other Essays* New and expanded ed. Indianapolis: Liberty Fund, p. 479.

ideal model of education would provide guidance for operating according to natural human moral activity. Since education is integral to developing a moral life in society, one can refer to the aforementioned extreme forms to consider a model of education for modern democracy. A holistic education would entail a learning within a mixture of the two forms of moral life.

This mixed moral life entails natural human activity that preserves the foundations of modern democratic regimes in a fashion conducive to flourishing. Individual moral conduct will not be tainted by hesitant reflections upon ideals that prevent necessary action. However, one can still to enjoy the advantages of a self-conscious moral code. The advantages include the ability to criticize, reform, and explain one's unorthodox beliefs and convictions without usurping moral habit or disintegrating moral life.²³⁷ This mixed moral life offers societal advantages similar to a religion loyal to its vital customs of communal living.²³⁸ The education that suitably promotes a balanced life functions according to natural human activity so individuals can efficiently learn moral and intellectual virtues.

Most human knowledge must be carefully acquired through experience since it is not innate.²³⁹ It would be difficult for an individual to instinctively understand how precisely to think and act according to a rigid set of standards given complex and ever-changing conditions. So, the democratic student must be exposed to certain situations in a controlled manner in order to cultivate that essential experience. If this is done properly, then the educative cycle of action and reflection will be prioritized. Both of these faculties are deeply interconnected, and so affecting one affects the other. John Locke provides an example of this in the cultivation of physical

²³⁷ Ibid, 477.

²³⁸ Ibid, p. 478.

²³⁹ Locke, John, 1632-1704. *Some Thoughts Concerning Education*, p. 2.

resilience, implying how the mind individual might be educated in both active and reflective habits.

A newborn's face is no less soft than any other part of their body. But because their face is consistently exposed, it becomes tougher than all other parts of their body that are otherwise covered. Therefore, the face is more able to endure hard weather.²⁴⁰ The body and the mind can endure anything that they become accustomed to through repetitive pedagogic rituals.²⁴¹ For example, if a child becomes accustomed to cold socks, so they are not harmed by it, their feet will be as resilient as the hands or the face. It is the repetition of a similar pedagogic ritual that secures a student's habits and affections.²⁴² Essentially, an education of guided and controlled exposure to various situations, contexts, ideas, and standards, will strengthen the student's mind and fortify them against the needless change, liberality, and excess that modern technology and vocational education contributes to.

It is proper that the student be taught according to what can be naturally done in order to cultivate individual flourishing.²⁴³ The mind must be habituated to this learning as soon as possible, but not overwhelmed with improper content at the wrong time at the risk of misinterpretation. Artificial constrictions boundaries and rigid expectations such as these are common to vocational and technical education, and lead to the deformity of natural faculties. John Locke makes another physical comparison using the corsets and painful dresses often worn by the young women of his time. These constrictions result in ill lungs, short breaths, and crookedness. Though they may make fine shapes, these fashionable trends only serve more to

²⁴⁰ Ibid, p. 6.

²⁴¹ Ibid, p. 7.

²⁴² Ibid, p. 8.

²⁴³ Ibid, p. 18.

impair the state of the body and damage stunt its natural growth.²⁴⁴ The long-term goal for education is individual flourishing through the cultivation of habitual virtues for the benefit of society that, at the same time, do not deter from timeless truths. When considering the mode of education suitable for the flourishing of democratic society, one should continue to contemplate the poetic process of human activity. Locke's method of guided exposure to various ideas and traditions satisfies natural poetic human activity, and is integral to proper education. A satisfactory curriculum is also necessary to this end.

Poetic human activity is naturally meant to induce a bringing-forth, a revealing, of what endures. What endures is the truth, not merely what is correct. Though modern technology alters the revealing of truth into the discovery of the orderable, this was not always the case. Since the saving power of modern technology and, by extension, modern democratic education, is hidden within its essence, one should remember that the essence of technology is not simply technological. The Greek word for technology, *technē*, was once the word for the bringing-forth enduring through the fine arts.²⁴⁵ The fine arts were not merely enjoyed aesthetically. They illuminated the dialogue of the gods and human poetic processes, yielding to the safekeeping of truth.²⁴⁶ The study of the fine arts is not confined to subjects of the non-specialized sort. They introduce the student to various modes of thinking through enduring works of history, poetry, philosophy, science, and mathematics that are productive in bringing-forth. Though this education includes math and science, the intent of learning is no longer utility, but discovery for its own sake. The next and final variable of the proper education for in modern democratic society is the learning environment.

²⁴⁴ Ibid, p. 10.

²⁴⁵ Heidegger, Martin, 1889-1976. *Basic Writings from Being and Time (1927) to The Task of Thinking (1964)*, p. 339.

²⁴⁶ Ibid, p. 339.

The university is the ideal locale for this curriculum and method of education. Individuals learn effectively within a community that shares experiences and habits. The postsecondary liberal arts community tends to the citizen's moral and intellectual virtues that help build a flourishing civilization. This endeavor is not confined to the university, but only in the university is this learning uniquely done.²⁴⁷ The university offers practice in thinking, carefully guiding the student through understanding the various contexts of philosophy, history, and science. These subjects are not to be memorized, but learnt like living languages that serve the discovery of the enduring for all time.²⁴⁸ Therefore, the student of the university shall have an intimate knowledge of what it is to explore and operate within these areas of study as more than standing-reserves.

Coping with Transcendence

The democratic soul adopted the Rationalist paradigm and unknowingly instituted a regime that perpetuates vicious habits. This paradigm is Rationalist. Instead of cultivating intellectual habits of prudent judgement, the Rationalist individual challenges nature and creates extreme and rigid standards that are blindly applied to various situations. This disposition manifests in the rise of modern technology. Nature is captured and stored for its powers in an attempt to secure certainty and the means for living comfortably. These habits are consequential to specialized education. Specialized, or vocational, education idealizes technical knowledge that is learned in manuals and can only be applied mechanically. Once this education takes root, the role of the individual as a man, not as moneymaker, will disintegrate. The individual will lose sight of their essence if the specialized education is prioritized and understood as the sole pathway to the ideal good life.

²⁴⁷ Oakeshott Michael. 1991. *Rationalism in Politics and Other Essays* New and expanded ed. Indianapolis: Liberty Fund, p. 194.

²⁴⁸ Ibid, p. 197.

This mode of moral life denigrates the individual's habits, affections, and intellectual abilities. The effect is the deformity of their natural process of human activity, of cycle of reflection and action. This cycle reveals the truth of the enduring and of human essence. Natural human activity is poetic, and in order to achieve a realignment with humanity's essence, the democratic citizenry must be taught by a suitable education that encourages the return to poetic human activity to the end of individual and communal flourishing. This education is found in the university, particularly a university whose curriculum is focused on the enduring languages of philosophy, history, and the sciences. This approach will bring citizens into the fray of people who now share a common goal that is bound up in the transcendent and enduring. This environment is ideal to cultivate virtuous moral and intellectual habits that will root the American democratic regime in transcendence and ensure the opportunity for each citizen to learn and participate in transcendence to the benefit of their community.

Chapter 3: Freedom, Love, and the Liberal Arts

Educating the Heart and Mind

The cultivation of individual virtues through the love of lifelong learning is essential for democratic flourishing. However, the rise of Rationalist habits and an extreme approach to vocational education teaches the democratic individual that the good life is found secured in certainty. Whether through common reason or ephemeral skills, modern education develops habits of self-interest and love of utility that prevents the discovery of enduring transcendence and human essence. Edifying education is holistic, nurturing the individual's soul. It is founded in love that both desires and is transcendence. It is informed by the enduring, so it encourages the individual to participate in a bringing-forth, not a challenging, of truth. The virtue consequential

to this involves the restoration of the individual's special and common abilities, which include what only they can do, and what every individual must do. This education humbles the individual's belief in superior common reason through exposure to their special abilities and present imperfections in light of the beauty of the enduring in order to motivate persistent leaning and the restoration of poetic human activity. Restorative education deeply influences local communities and the regime at large. The liberal arts university in particular is an integral hub of holistic learning that fashions a disposition of love rather than utility.

Understanding Freedom

Proper education propels the individual into long-term growth within the context of a community.²⁴⁹ Without this, the individual lacks an understanding of their freedoms and their true personhood beyond their immediate abilities and self-interested pursuits. This individual is like a slave to any authority.²⁵⁰ Education fortifies the faculties necessary for freedom beyond the debilitating need for absolute certainty.²⁵¹ The need for certainty prevents the individual from participating in truth in changing times, trading off flourishing for immediate and short-lived gratification. "What is the use of standing a man on his feet, if when we let him go, his head is again brought to the pavement?"²⁵² The individual can stand on their own when their character is habituated to growth in virtue, intelligence, love of learning, and self-respect.²⁵³

The need for absolute certainty and rigid ideals caps the individual's capacity to grow inherently human characteristics, such as high moral responsibility. This reduces the individual

²⁴⁹ John Dewey, *Democracy and Education* (LaVergne, TN: Simon & Brown, 2011), p. 42.

²⁵⁰ Roth, Michael S. "Pragmatic Liberal Education." *New Literary History* 44, no. 4 (2013): 521–38., p. 524.

²⁵¹ Brotz Howard. 1992. *African-American Social and Political Thought 1850-1920*. New Brunswick N.J: Transaction, p. 205.

²⁵² Ibid, p. 205.

²⁵³ Ibid, p. 207.

to a machine, a slave to more powerful forces.²⁵⁴ Proper education frees the individual from this defacement. For example, Frederick Douglass, as a young slave, was forbidden from learning to read, for “there would be no keeping him. It would forever unfit him to be a slave. He would at once become unmanageable, and of no value to his master.”²⁵⁵ That moment revealed to Douglass his chance at freedom, and, in spite of the difficulties ahead, he set out with high hopes and a renewed sense of moral responsibility to continue his education.²⁵⁶ Though it began with reading, it would set Douglass on the path to the freedom’s virtue, wisdom, and self-mastery.²⁵⁷ But once an individual is freed, institutionally and otherwise, they must know how to operate within that freedom.

Freedom Cultivated in the Liberal Arts

Education, while an end in itself, is also a means to the betterment of men and society.²⁵⁸ The betterment of the individual consists in the improvement and balance of their reason, spiritedness, and desire.²⁵⁹ These parts contribute to the makeup of the individual’s special functions that are particular to them, and common functions, which are shared among humankind. Special functions refer to what the individual can do while common functions point to what every individual must do.²⁶⁰ The makeup of an individual’s day, in their work, play, or leisure, contribute to the development of these functions.²⁶¹ Leisure is the only voluntary and restorative activity where time spent in it is both meaningful by itself and beyond itself.²⁶² Both

²⁵⁴ Ibid, 217.

²⁵⁵ Douglass, Frederick, and Robert B. Stepto. *Narrative of the Life of Frederick Douglass: An American Slave, Written by Himself*. Harvard University Press, 2009, p. 44.

²⁵⁶ Ibid, p. 45.

²⁵⁷ Adler, Mortimer J. “Adult Education.” *The Journal of Higher Education* 23, no. 2 (1952), p. 61.

²⁵⁸ Ibid, p. 35.

²⁵⁹ Bloom, Allan. “The Failure of the University.” *Daedalus* 103, no. 4 (1974), p. 58.

²⁶⁰ Adler, Mortimer J. “Labor, Leisure, and Liberal Education.” *The Journal of General Education* 6, no. 1 (1951), p. 36.

²⁶¹ Ibid, p. 37.

²⁶² Ibid, p. 40.

special and common functions can improve from participation in leisure activities, such as learning, thinking, writing, conversation, love, friendship, political activity, artistic activity, and the like.²⁶³ The form and goal of these activities are core attributes of the liberal arts education, particularly in the Great Books program, and can contribute to the flourishing of the individual's soul when well-directed.²⁶⁴

Liberal studies require careful attention to the Great Books.²⁶⁵ The Great Books consists of a conglomeration of literary works that expose the liberal arts student to the enduring voices and ideas that enable them to understand, think, and speak about their human essence. The Great Books component of the liberal arts curriculum is especially conducive to imaginative judgment, is necessary to cultivating individual and communal virtues. Imaginative judgement operates within two standards: Internal standards, which ask whether an object is inherently good, and external standards, which are concerned with effects of an object. Internal standards ask if a poem was inherently good according to the standard of poetry or if an argument was logically valid. External standards ask if the poem fostered vibrant communities or if the argument was based on true premises.²⁶⁶ Both standards are inconsistent with the Rationalist and democratic philosophic method, that seeks to eradicate existing authorities, such as true premises or inherent goodness, that are perceived as a potential threat to democratic freedoms.²⁶⁷ However, the Great Books contribute greatly to the individual's growth in guided freedom through the development of imaginative judgement.

²⁶³ Ibid, p. 37.

²⁶⁴ Adler, Mortimer J. "Adult Education." *The Journal of Higher Education* 23, no. 2 (1952), p. 63.

²⁶⁵ Bloom, Allan. "The Failure of the University." *Daedalus* 103, no. 4 (1974), p. 60.

²⁶⁶ Ibid, p. 39.

²⁶⁷ Ibid, p. 60.

An individual's imagination allows them to see a thing in its present and future state, remaining tethered to present details while developing for a greater purpose. "Our ability to imagine wholeness even in the midst of brokenness is central to the task of renewal."²⁶⁸ The Great Books are pivotal to democratic restoration. They present a fund of human wisdom dealing with timeless practical and theoretical human issues that are inexhaustibly re-readable. The re-readable Great Books satisfy the need for an education consistent with poetic human activity.²⁶⁹ So, this study helps return the student to their human essence and edifies their ability to make imaginative judgements about the good life in changing times.

Despite this, there remains a common contention against the liberal art's Great Books program, that the study of past products stunts the student's ability to contribute to present life. It is the past life, not its literary products, clarify the present situation.²⁷⁰ Essentially, if the aim of education is to positively affect our present and future life, then the study of historical works won't actively contribute to that. There are examples of the beneficial influence of the study of the Great Books in helping an individual understand timeless human paradigms, which helps cultivate private virtues conducive to communal flourishing.

For example, the more Douglass read, the more his enslavement was unjustifiable. One book he read, *The Columbian Orator*, had a dialogue between a master and his slave, after the return of the slave on the third escape attempt. The slave's impressively eloquent arguments against slavery bought his freedom.²⁷¹ It gave Douglass the words to express the thoughts of his

²⁶⁸ Baker Jack R Jeffrey Bilbro and Wendell Berry. 2017. *Wendell Berry and Higher Education: Cultivating Virtues of Place*. Lexington: University Press of Kentucky, p. 25.

²⁶⁹ Adler, Mortimer J. "Adult Education." *The Journal of Higher Education* 23, no. 2 (1952), p. 115

²⁷⁰ John Dewey, *Democracy and Education* (LaVergne, TN: Simon & Brown, 2011), p. 43

²⁷¹ Douglass, Frederick, and Robert B. Stepto. *Narrative of the Life of Frederick Douglass: An American Slave, Written by Himself*. Harvard University Press, 2009, p. 49-50.

soul. His repeated study of this book ignited the knowledge of the enduring truth of Douglass' human essence. Because of his education, he grew into the directed freedom and discovered the truth always intended for him. It is hard to enslave a man who knows the path to freedom. A similar effect was brought about in Allan Bloom's university classroom.

In class, Allan drew a discussion from Tocqueville's *Democracy in America*. When discussing American intellectual life, Tocqueville noted that if Pascal had been motivated by profit or glory alone, then his commitment to study and global influence would not have been so great. The students' attention was "forcibly drawn" to this discussion.²⁷² They initially ignore it under the assumption that Tocqueville is describing a primitive America, but the discussion's effect on the students is comparable to a scientist's first encounter with a foreign creature. The scientist gives a description of this entirely new and incredibly nasty creature, only to discover that it is us as we look to others.²⁷³ Tocqueville's work is a mirror to the student, just as *The Columbian Orator* held a mirror up to Douglass. Both instances inspired the reader to operate in the world cognizant of their human essence, and allowed them to better view their present state while imagining visions of prospective virtue.²⁷⁴

The Great Books promote a self-awareness and that helps individuals understand the beauty and utility of enduring truth.²⁷⁵ However, this understanding bears a heavy burden. Douglass' master's prophecy of slave education concluded that the educated slave will inevitably be unhappy.²⁷⁶ The more Douglass intellectually matured, the more he regretted the slave existence unsuitable to the freedom meant for his soul. He could neither participate in freedom

²⁷² Bloom, Allan. "The Failure of the University." *Daedalus* 103, no. 4 (1974), p. 62.

²⁷³ *Ibid*, 62.

²⁷⁴ *Ibid*, 62.

²⁷⁵ *Ibid*, 63.

²⁷⁶ Douglass, Frederick, and Robert B. Stepto. *Narrative of the Life of Frederick Douglass: An American Slave, Written by Himself*. Harvard University Press, 2009, p. 50.

nor share it with other slaves. Though Great Books make substantial progress on the individual soul, there's a communal aspect of education that cultivates habitual and loving virtues that contribute to the institutional perpetuation of true freedom.

Communally practiced virtue requires a paragon that offers a vision of what to aim for. This reference must be beautiful, appealing, and desirable without being disconnected from the truth of the enduring. If the goal is to edify the whole human being, then only edifying the intellectual and physical faculties to the detriment of the heart would be pointless. So, the proper education must include a proper formation of the heart's central loves and desires. Since an individual's habits shape their loves, imaginations, and, consequently, how they participate in their communities, the proper education must be offered since it properly orients affections by encouraging virtuous habits.²⁷⁷ The liberal arts are an integral facet of this aim because of its timeless stories that reveal goodness within beauty, glory, and tragedy that moves the student's affections. This can be especially done in an education of the fine arts. The constant exposure to beautiful and glorious works of human art reforms the individual's aesthetic perceptions and ability to distinguish good from evil.²⁷⁸ This education in properly oriented affections can come in books and physical, communal experiences.

If this education's aim is the cohesive unity and flourishing of the democratic regime, then the shared socialization depends on an agreement of habits and aims among its citizens.²⁷⁹ Students can share in the habituation of virtue from by learning from its exemplars. Bloom's students are fascinated by Tocqueville's observations, but it is his grace and love of justice that

²⁷⁷ Smith James K. A. 2009. *Desiring the Kingdom: Worship Worldview and Cultural Formation*. Grand Rapids Michigan: Baker Academic, p. 25.

²⁷⁸ Ibid, p. 62.

²⁷⁹ John Dewey, *Democracy and Education* (LaVergne, TN: Simon & Brown, 2011), p. 47.

drives them to imitate him.²⁸⁰ Additionally, when people attend church together, the beauty and glory of the iconographic sculptures or stained glass lining the church walls stirs their heart into movement. The witness' imagination expands to envision the good life the beauty points to and desires to participate in that life.²⁸¹ In that moment, the witness' love was shaped by beauty, glory, and the meaning imbued within it. Because these physical icons represent real human lives, like many Great Books do, the student of either is not only affected in their loves, but are intellectually affected by tangible examples of possibilities of the good life in an imperfect human world.²⁸² However, since common reason needs to be challenged, the individual is not likely to wisely imitate their forbears immediately. If proper education is consistent with natural poetic human activity, then learning must be a communal experience so that the learning and relearning of proper affections, judgements, and imitations can be effectively practiced. The liberal arts university, then, is the ideal forum for this form of education.

Chapter 4: How Democracy Benefits from Healthy Liberal Arts Universities

The Unique Role of the Liberal Arts University

Liberal arts universities are unique in their communal nature, curriculum, and mission of individual flourishing. It's a common temptation for the democratic soul to take whatever they learn, store it, and use it whenever convenient. But, looking deeper into the effects of the vicious habits of the rationalist disposition and modern technology, it is clear that ideas must be considered and reconsidered, much like the cyclical pattern of poetic human activity.²⁸³ Since the

²⁸⁰ Smith James K. A. 2009. *Desiring the Kingdom: Worship Worldview and Cultural Formation*. Grand Rapids Michigan: Baker Academic, p. 63.

²⁸¹ Ibid, p. 21.

²⁸² Ibid, p. 22.

²⁸³ Ibid, p. 67.

Great Books are meant to be reread, and virtuous activity is best learned when shared, the liberal arts university provides experiences that edify the democratic individual's intellectual and moral faculties. Without political or moral experience, the individual is not equipped to learn and relearn what constitutes the good life.

If this environment is not encouraged, then the alternative to postsecondary liberal arts education shall perpetrate the separation of equal persons into masters and slaves.²⁸⁴ Democracy should promote the equitable distribution of quality education regardless of each individual's capacity. Democracy so far has approached this like choosing certain liquids to store in different sized jars. Students with a smaller capacity, or jar, often receive dirty water so that the students with larger jars may receive the cream only offered to the few. The consistent quality of a postsecondary liberal arts education in the university is indicated by the equal opportunity for individuals to grow through and share the deepest and truest of human experiences with others, regardless of their perceived "capacity". A forum of this sort fosters a deep love of learning the enduring and of the service to one's community.

These positive human connections and equal access to quality curriculum is pivotal in cultivating individual flourishing. Small liberal arts universities best fit the bill of contributing to individual and communal flourishing for these reasons. Student success is often measured by positive academic and campus involvement, which are affected by a university's size, residential nature, and its student orientation by the university's faculty.²⁸⁵ It's essentially positive human connections that are pivotal in cultivating individual flourishing. Positive human connection in a liberal arts-oriented university is especially bolstered by faculty's sensitivity to the struggles of minority students, their availability to meet outside office hours, their commitment to the welfare

²⁸⁴ Ibid, p. 47.

²⁸⁵ Astin, Alexander W. "How the Liberal Arts College Affects Students." *Daedalus* 128, no. 1 (1999), p. 83.

of the institution, and their treatment of students as more than numbers in a report.²⁸⁶ Weaker student orientations among faculty are found at research-oriented universities with specialized educational curriculums. The faculty are more likely to be found engaged in their research than helping their students because of the demand put on faculty by the university paired with the surface-level perception of students according to their academic output. Though research and discovery are an inherent part of uncovering the enduring, there are significant dangers in approaching it with a mind to utility and self-preservation. With no regard for love of the student and of the truth beyond self-interest, the manipulations of the misguided democratic regime can lead its citizenry astray. Love must guide education. This is how the liberal arts university's holistic pedagogy successfully integrates the love of discovery and the devotion to the essence of the human experience. However, there are significant failures of the modern liberal arts university that denigrate their mission and ability to contribute to the holistic edification of the democratic student.

The Shortcomings of the Liberal Arts University

The original mission of the liberal arts university is the holistic flourishing of the individual as an engaged and responsible citizen. The previous chapter notes the modern paradigm of the misinterpretation of responsible citizenship's meanings and implications. The modern misunderstanding of responsible citizenship – where utility and industry are societal indicators of the good life – shifts universities into organizations, where the new aim is to create students into useful, timely, and marketable products.²⁸⁷ Financially disparaged liberal arts universities are especially at risk to bend under the pressure of modern expectations. This process perpetuates the ignorance of the individual's human essence. Instead of encouraging an

²⁸⁶ Ibid, p. 84.

²⁸⁷ Blitz, Mark. "Liberal Education and Liberalism." *The Good Society* 13, no. 3 (2004), p. 47.

education in various discussions on ideas concerning the human experience, the disparaged liberal arts university provides lectures on easily utilized and trouble-free political, moral, and intellectual viewpoints. Liberal subjects are pushed to be taught according to their utility, disconnected from their essence and link to the enduring.²⁸⁸ This ossification of the liberal arts postsecondary education is more common in small universities that contribute to positive student outcomes, but lack the money common to larger liberal arts universities to preserve their original programs.

There are three types of student outcomes in private liberal arts universities, including educational outcomes, what the student learned and how they were changed, existential outcomes, the challenge and meaning of the time spent at the university, and the fringe outcomes, which entail the practical value of the student's degree upon graduation.²⁸⁹ Small liberal arts universities tend to effect the former two outcomes, while fringe benefits are exclusive to the universities with more financial support and selectivity in their student admissions.²⁹⁰ Larger universities are able maintain the essence of their liberal curriculum while making technical additions to their educational programs. The smaller universities loyal to the historic tradition of liberal arts, then, face a great threat to maintaining relevance in the progressing modern regime.

Students of elite, selective, and independent liberal arts universities reap the fringe benefits that their smaller counterparts lack. These older and larger universities share the positive effects of smaller universities in personal student satisfaction, with additional services such as counseling centers and clinics for the most diverse subgrouping of students. Their students retain

²⁸⁸ Ibid, p. 47.

²⁸⁹ Ibid, p. 80.

²⁹⁰ Ibid, p. 80.

cultural awareness and excellent writing skills, even within the physical or social science majors.²⁹¹ Additionally, there is an increase of community involvement in the larger independent liberal arts universities and a decrease in students' materialistic and rationalist perspectives.²⁹² The worldly status of students in these universities also affects their postgraduate outcomes.

Students admitted to independent liberal arts universities participate in peer groups that are artistically inclined, diverse, permissive, academically competitive, and of high socioeconomic status (SES).²⁹³ The students' excellent writing skills and high scores in entrance exams such as the MCAT are attributable to the humanities orientation of their educational program. Smaller universities with less selective admissions tend to struggle with their curriculum, as much of their student body will not have the exposure or experience as high SES students. Consequently, not only do small liberal arts universities dilute their liberal curricula's essence, but they create and emphasize the role of professional or technical educational programs.²⁹⁴ The curriculum orientation becomes rationalist, prioritizing the acquisition of the standing reserves of the surface level truths of the enduring, preventing the positive effects of poetic human activity. This nullifies the positive educational and existential benefits maintained by a positive student orientation by a liberal arts university's curriculum and faculty. Faculty are less available because of technical education's emphasis on research, so the positive and edifying human connections that help students adjust to poetic human activity shall be lost. The students who can benefit most from the provisions of an authentic liberal arts education will continue to be marginalized and left to the education that perpetuates a half-life. The liberal arts university

²⁹¹ Astin, Alexander W. "How the Liberal Arts College Affects Students." *Daedalus* 128, no. 1 (1999), p. 86.

²⁹² *Ibid.*, p. 86.

²⁹³ *Ibid.*, p. 86.

²⁹⁴ Lang, Eugene M. "Distinctively American: The Liberal Arts College." *Daedalus* 128, no. 1 (1999), p. 93.

may remain necessary in modern democracy, but they lose their essence and surrender their mission.

The Liberal Arts' Relevance in Modernity

The small liberal arts university can restore their role in modern America by emphasizing the goal of responsible citizenship while retaining pedagogical and curricular means of restoring imagination and love in poetic human activity. Many modern liberal arts universities are less motivated by community needs than timely academic agendas.²⁹⁵ The pressure of relevance is motivated by the growing agricultural-industrial-service economy with new demands for vocational, research, and graduate educational institutions with an emphasis in the sciences and professions.²⁹⁶ This leveling of the essence of the liberal arts university is partly responsible for the rise of ambivalence about essential human struggles that require the rise of civic responsibility.²⁹⁷ The technical education is useful for particular things, but provides a limited scope of education required to help meet the humanity's timeless needs.²⁹⁸ If the citizenry is suffering in the pursuit of unbounded freedom and utility, then it must be that our holistic flourishing will be best cultivated in an alternative mode of education.

Education must teach the student how to live life well instead of simply offering steps to making a sufficient living. This includes how to best occupy one's leisure time and how that, in turn, benefits their private and public life.²⁹⁹ But in the context of self-interested modern liberal regimes, the small liberal arts university forgets their identity once they forget the needs of their community. Students often participate in community service as a curricular requirement, but they

²⁹⁵ Ibid, p. 135.

²⁹⁶ Ibid, p. 135.

²⁹⁷ Bloom, Allan. "The Failure of the University." *Daedalus* 103, no. 4 (1974), p. 64.

²⁹⁸ Baker, Jack R. and Jeffrey Bilbro and Wendell Berry. 2017. *Wendell Berry and Higher Education: Cultivating Virtues of Place*. Lexington: University Press of Kentucky, p. 30.

²⁹⁹ Adler, Mortimer J. "Adult Education." *The Journal of Higher Education* 23, no. 2 (1952), p. 63.

do not learn how to meaningfully engage with their community by adequately recognizing, understanding, and responding to them in order to effect enduring growth.³⁰⁰ The goals of both student and university lack definition, effective mechanisms for continuation, and responsibility for any real accomplishment.³⁰¹ In order to effectively educate for civic responsibility, the education must prepare the student for to adequately face fear, resistance, and anger. Since the postsecondary liberal arts education matches the natural process of human activity, of communal learning through change and tension, then this is the ideal education to cultivate habits and attitudes of civic responsibility.³⁰²

The postsecondary liberal arts education is able to adjust certain pedagogies while remaining true to its mission of meeting society's timeless needs.³⁰³ However, they must not confine their pursuits to the classroom's endeavors. To do this, the liberal arts university will have to rearrange the phrasing of their mission with contemporary terms that invokes interest in a philosophy of enlightened democratic tendencies that still preserves their mission's essence. This would make external engagement, responsible citizenship, and social action subject to higher levels of attention.³⁰⁴ These qualities, programs, and methods must be shaped by the community's circumstances. With time, the university will generate experiences and knowledge that holistically edify the student and shed light on community issues that must be sufficiently discussed.³⁰⁵ So, in addition to classroom experiences, the liberal arts university must be involved in their communities, simultaneously earning their respect and contributing to their economic and intellectual value.³⁰⁶ Despite the face-value inconsistencies, postsecondary liberal

³⁰⁰ Lang, Eugene M. "Distinctively American: The Liberal Arts College." *Daedalus* 128, no. 1 (1999), p. 135-136.

³⁰¹ *Ibid.*, p. 136.

³⁰² *Ibid.*, p. 136.

³⁰³ *Ibid.*, p. 138.

³⁰⁴ *Ibid.*, p. 140.

³⁰⁵ *Ibid.*, p. 147.

³⁰⁶ *Ibid.*, p. 148.

arts curricula and vocational training can be integrated to the cultivation of individual and communal flourishing.

Imagination, Love, and Responsible Citizenship

Democracy's priority of a purely utilitarian education pressures liberal arts institutions to abandon their holistic mission of nurturing virtues for individual and communal flourishing.³⁰⁷ Using education for self-interest and self-preservation bolsters the democratic need for security and certainty. This striving defiles the human need for connection and intellectual edification through experiencing truth.³⁰⁸ The striving individual forgets their essence, and the memory of nobility, honor, kindness, and virtue is erased from their mind.³⁰⁹ The ideal education that restores this memory is not simply liberal or vocational. This improves the student's particular abilities in addition to their common ones for the active participation in the good life as a whole human. In other words, "...teach the workers to work and the thinkers to think; make carpenters of carpenters, and philosophers of philosophers...Nor can we pause here. We are training not isolated men but a living group of men...And the final product of our training must be neither a psychologist nor a brickmason but a man. And to make men, we must have ideals, broad, pure, and inspiring ends of living – not sordid-money getting...The worker must work for the glory of his handiwork, not simply for pay; the thinker must think for truth, not for fame."³¹⁰ This education frees the individual from the harmful and misguided pursuits of democratic regimes and pushes them closer to the good life.

³⁰⁷ Astin, Alexander W. "How the Liberal Arts College Affects Students." *Daedalus* 128, no. 1 (1999), p. 98.

³⁰⁸ Du Bois, W. E. B. *The Souls of Black Folk*. Chicago: A.C. McClurg & Co.; [Cambridge]: University Press John Wilson and Son, Cambridge, U.S.A., 1903; Bartleby.com, 1999, para. 7.

³⁰⁹ Ibid, para. 8.

³¹⁰ Ibid, para. 19.

The two means of restoring humanness involve the liberal education teaching the community the meaning of human life and nourishing their intelligence and skills to create virtuous and responsible citizens.³¹¹ Although, there is a prominent objection to the role of liberal arts education in everyday life. The common perception of liberal arts education is determined by the character of many liberally educated students, who can be so educated in books that they are able to recall and recite a phrase from memory at any moment, from the Bible to Shakespeare. These people are deceived by the belief that their recitations solves issues. In reality, they are useless in the search for a true solution to human issues.³¹² These half-educated men cannot comprehend the true significance of the history, literature, and philosophy that their curriculum consisted of. Their involvement is confined to the classroom, and they are therefore ignorant of the needs of their own people and cannot truly be virtuous and responsible citizens.³¹³ The liberal arts education only bears the risk of communal ignorance when educators approach it with technical, not holistic, intent. The student of a holistic liberal arts education is edified in the knowledge of their enduring human essence and is able to both discuss its modern implications and sufficiently contribute to communal flourishing. It frees and equips an individual for political involvement, which helps justify and restore their political rights.³¹⁴ Vocational pursuits do not have to be abandoned. The only concern is whether a vocation effectively contributes to private and public flourishing.

The modern definition of success is to leave home, have a sizable salary, and remain indefinitely comfortable. However, true flourishing is not found down modernity's already

³¹¹ Brotz Howard. 1992. *African-American Social and Political Thought 1850-1920*. New Brunswick N.J: Transaction, p. 529.

³¹² Ibid, p. 429.

³¹³ Ibid, p. 434.

³¹⁴ Ibid, p. 514.

trodden road. In a story by Wendell Berry, a man named Wheeler Catlett grows up in a small farm town, goes to school, receives a law degree, and leaves to practice in Chicago. But over time he becomes discontent with his life. There was no peace, no contributing to something beyond himself. Although one day, he saw that Chicago was not the singular step towards success. He simply wanted to practice law and serve his community, and he could go wherever there was a courthouse. Upon this realization, he let himself return home.³¹⁵ Catlett's better understood his human essence when he allowed himself the opportunity to apply his education to the well-being of his community and stopped searching for greatness under the illusory promises of boundlessness. There is a critical connection between Wheeler Catlett and his son, Andy, who had his own struggles with place and meaning and eventually found his way back to his home.³¹⁶ They were able to find their way back because of memories and experiences of their origins that inspired the imagination of life shared flourishing.

Andy's vision was inspired by his love of an Amish family he stayed with, and Wheeler envisioned the peace of watching cattle graze as they did in his youth. Andy did not simply read about the Amish, and Wheeler was not attracted to rural society because of any definitive statistics.³¹⁷ Their vision of prospective love and peace was encouraged by their experiences and inspired their sense of civic responsibility. They were not only inspired to return and serve, but they were best equipped to serve because of their familiarity with their homeland's customs and language. The love and imagination in civic responsibility is directed toward particular places, things, and people. This responsibility is not merely obligatory, but generous to each of these for

³¹⁵ Baker Jack R Jeffrey Bilbro and Wendell Berry. 2017. *Wendell Berry and Higher Education: Cultivating Virtues of Place*. Lexington: University Press of Kentucky, p. 27.

³¹⁶ Ibid, p. 27.

³¹⁷ Ibid, p. 27.

the sake of communal flourishing.³¹⁸ This vision can be realized accomplished through the shared virtuous habits that define an achievable good beyond the standing-reserve.³¹⁹ This characteristic of the liberal arts education provides a return to human essence for the democratic souls whose imagination could not be inspired by memories of love and virtue. Memory, imagination, the capacity and willingness to love, and the loyalty to one's community are deeply interconnected to private and public flourishing and can be properly facilitated through a common liberal arts education.³²⁰

The liberal arts education can help restore memory, imagination, knowledge of human essence, and love of learning and community. In modern America, democratic individuals have unhealthy knowledge, memories, and desires that affect the love and imagination conducive to responsible citizenship. In order to restore these, classrooms must be forums of focused attention where students can read Great Books to be familiar with various languages in their specific context to help them participate in cultural memory and wisdom.³²¹ But the holistic education requires methods that encourage virtuous thought and action outside the classroom, indicated by responsible citizenship. The loving and responsible citizen is a lifelong learner and reflective human being capable of providing any need, be it emotional, intellectual, physical, or moral, for the benefit of their home.³²²

Wholeness in Democracy

The misguided modern liberal regime separates a man from his essence. Under boundlessness and a lack of a holistic liberal arts education, the democratic individual develops

³¹⁸ Ibid, p. 53-54.

³¹⁹ Ibid, p. 92.

³²⁰ Ibid, p. 93.

³²¹ Ibid, p. 111.

³²² Ibid, p. 129-130.

habits and affections that are overly self-interested, short-sighted, and fearful. These qualities make man a slave to his passions and to authorities that may not have their best interest in mind. When abhorrent slavery is actually institutionalized, it is an accurate image of the democratic individual when they are not taught to think, act, or communicate on a level that aligns with enduring truth. The liberal arts curriculum, specifically the Great Books quality, helps open up the heart and the mind of the democratic student to various ideas that express the enduring struggles and victories of the human experience on a private and public level. This education, though typically confined to the classroom, must be shared in the community. The university is the ideal setting to prepare the democratic student to become a responsible citizen, where they can learn and discuss various “languages”, or ideas that express particular human experiences, and notice how these ideas connect individuals on a level deeper than professional or vocational interdependence. It’s important to note that in a modern age, professional and vocational interdependence is a critical piece of public life. The pressures of active participation in the industrial-economic orientation of America’s democratic regime can negatively affect the mission and curriculum of the liberal arts university. For less selective and financially stable universities, the curriculum often bends to the utilitarian demands of technical education. The essence of the curriculum that inherently points to the enduring of human nature is diluted to the extractable aphorisms and facts that can be useful for industrial society. However, the virtuous participation in the professions can further prove the timeless relevance and legitimacy of the liberal arts education in modern regimes. As democratic regimes are constantly shifting, a determined love and capacity to imagine the good life in different contexts will fortify the virtuous approach to the professions. The liberal arts offer beautiful images and stories that inspire the student and function as their reference points for both virtue and vice in communal

life. The inspiration and education of the individual's affections through the edification of the intellect contribute to a disposition of responsible citizenship. Responsible citizenship, as an integral conductor of communal flourishing, can act as a contemporary redefinition of the liberal arts mission and further secure its relevance in modern liberal regimes.

Conclusion

The crux of the issue of education in a misguided democratic regime is the disjunct in a consistent moral vocabulary. When the definition and implications of freedom and equality are not agreed upon, or even are perceived as incomprehensible, a disposition of constant change and boundlessness follows. The citizen of a misguided democracy is not contemplative or other-oriented, but rather seeks to gratify their immediate, self-interested desires. These habits orient the citizen away from comprehending their own humanity apart from shallow perceptions, and is thereby unable to sufficiently contribute to their community's flourishing apart from worldly satisfactions. This attitude shapes the development of the democratic regime, and these developments continue to educate the citizenry in affections and habits that contribute to a certain idea of the good life.

Modern democratic regimes tend to incentivize habits of domination in their citizens, and instead of fostering a love of discovery and truth-seeking, democratic individuals work off of the bare bones of what nature and communal life provides in order to maintain security in an incomprehensible world. The education that follows is specialized and vocational, aiming to develop the skills necessary to secure the comfort integral to the boundless yet stagnant good life in misguided democracy. Consequently, the moral and intellectual faculties of the democratic citizenry remain untouched. Love of beauty and truth are sacrificed for quick and easy fixes. The

ideal education to restore the character of democracy and uncover the essence of its pillars is the postsecondary liberal arts education. This is not to imply that other vocational pursuits should be abandoned, but any vocational pursuit without the wisdom that the liberal arts education provides is fruitless. No citizen can contribute to any true flourishing if they do not care to or cannot comprehend what it means to flourish in a democratic society as a human being belonging to more than ephemeral pleasures.

The liberal arts education involves the study of philosophy, history, and the fine arts in addition to mathematics and the sciences. An integral piece of the education for whole humans is a consistent exposure to the Great Books curriculum. When modern democracy isolates humans from their essence, the Great Books offer voices on what it means to be a human in both struggle and victory, and from that the student can glean ideas how to discern right and wrong in various contexts. This education frees the individual to do this when the experience of these books is shared and can be learned and relearned in a community dedicated to the flourishing of their society. The university, then, is the optimal location for true liberal arts learning. True and directed learning must be conducive to building habits, so it cannot be done in isolation for the sake of witnessing how both moral and intellectual habits affect others. If citizens align themselves with habituated learning and shared life, then they should be able to distinguish true flourishing from imagined flourishing.

The modern liberal arts university often struggles to offer an authentic liberal arts education. Unless they are equitably offered the resources to offer all students proper education, then only students with high socioeconomic will have the opportunity to improve their moral and intellectual abilities. This process dishonors liberty and equality. An educational process that honors shared humanity and preserves authentic and healthy democratic values produces

dispositions of love and imaginative thinking in the citizens. Love inspires the individual to operate outside of self-interested and short-sighted dispositions and calls them to actively learn and pour into their community's well-being. The imaginative thinking equips the citizen with the ability to creatively provide for the community's needs when complex problems arise. The restoration of awareness, critical thinking, compassion, and positive affections towards discovering truth is the lifeblood of a fortuitous, long-lasting, and thriving democracy that secures freedom and equality for its citizens.

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Liliana Marler

Bibliography

- Adler, Mortimer J. "Adult Education." *The Journal of Higher Education* 23, no. 2 (1952): 59–115.
- Adler, Mortimer J. "Adult Education." *The Journal of Higher Education* 23, no. 2 (1952): 59–115.
- Adler, Mortimer J. "Labor, Leisure, and Liberal Education.." *The Journal of General Education* 6, no. 1 (1951): 35–45.
- Astin, Alexander W. "How the Liberal Arts College Affects Students." *Daedalus* 128, no. 1 (1999): 77–100.
- Baker Jack R Jeffrey Bilbro and Wendell Berry. 2017. *Wendell Berry and Higher Education: Cultivating Virtues of Place*. Lexington: University Press of Kentucky.
- Blitz, Mark. "Liberal Education and Liberalism." *The Good Society* 13, no. 3 (2004): 45–48.
- Blitz, Mark. "Understanding Heidegger on Technology." *The New Atlantis*, no. 41 (2014): 63–80.
- Bloom, Allan. "The Failure of the University." *Daedalus* 103, no. 4 (1974): 58–66.
- Brotz Howard. 1992. *African-American Social and Political Thought 1850-1920*. New Brunswick N.J: Transaction.
- Douglass, Frederick, and Robert B. Stepto. *Narrative of the Life of Frederick Douglass: An American Slave, Written by Himself*. Harvard University Press, 2009.
- Du Bois, W. E. B. *The Souls of Black Folk*. Chicago: A.C. McClurg & Co.; [Cambridge]: University Press John Wilson and Son, Cambridge, U.S.A., 1903; Bartleby.com, 1999.
- Heidegger, Martin, 1889-1976. *Basic Writings from Being and Time (1927) to The Task of Thinking (1964)*.
- John Dewey, *Democracy and Education* (LaVergne, TN: Simon & Brown, 2011).
- Lang, Eugene M. "Distinctively American: The Liberal Arts College." *Daedalus* 128, no. 1 (1999): 133–50.
- Locke, Thoughts Concerning Education: Locke, John, 1632-1704. *Some Thoughts Concerning Education*.
- MacIntyre Alasdair C. 2007. *After Virtue: A Study in Moral Theory*. 3rd ed. Notre Dame: University of Notre Dame Press.
- Mansfield HC, Winthrop D. Alexis de Tocqueville, *Democracy in America*. Chicago: University of Chicago Press; 2000

Miller, Ted H. "Oakeshott's Hobbes and the Fear of Political Rationalism." *Political Theory* 29, no. 6 (2001): 806–32.

Oakeshott Michael. 1991. *Rationalism in Politics and Other Essays* New and expanded ed. Indianapolis: Liberty Fund.

Roth, Michael S. "Pragmatic Liberal Education." *New Literary History* 44, no. 4 (2013): 521–38.

Smith James K. A. 2009. *Desiring the Kingdom: Worship Worldview and Cultural Formation*. Grand Rapids Michigan: Baker Academic.

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Article 14

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Heart Full of Blue: Police Burnout and Policing the Backwoods of Appalachia.

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Heart Full of Blue: Police Burnout and Policing the Backwoods of Appalachia

The recent deaths of Tyre Nichols (Sprunt, 2023) and George Floyd (Peloquin et al., 2022) heightened levels of police stress due to biased media portrayal of law enforcement, organizational challenges to confront these negative public discourses (Choi, 2021), and inability to navigate between upholding the law and the dangers they face in their working environment. Consequently, police officers are likely to be depressed, stressed out, and anxious about their jobs (Mohammed et al., 2022). Further, constant exposure to traumatic incidents (Stevelink et al., 2022) and undiagnosed depression and/or mental health issues among police officers often can lead to an early exit from their profession or suicide (Gerstner et al., 2022; Barron 2010; Di Nota et al. 2020; Meyer et al. 2003; Sapkota et. al., 2022). In the past three years, a growing literature has focused on police burnout as a leading challenge for many law enforcement organizations to keep their police officers (Stewart, 2020; Quieros et al. 2020). Research suggests that structural challenges like high operational stress and dangers outside their office (Quieros et al. 2020), lack of organizational trust (Lambert et al., 2022), organizational changes, excessive workloads, fatigue, pressures from management (Foley, 2021) are likely to be blamed.

While most studies on police burnout are focused on law enforcement in bigger metropolitan cities in the U.S. today, police burnout research on rural and small-town law enforcement agencies in the Appalachian region is lacking. The purpose of this research is to explore the “live-in experience” of police officers with burnout in three states in Appalachia (West Virginia, Tennessee, and Georgia). This research is significant because it identifies the unique personal and structural challenges of rural Appalachia policing that are contributing to this issue. Similarly, the findings of this research can contribute to the bigger discussion on how police organizations can better respond, prevent, and address police burnout.

Review of Literature

Modern policing is characterized by a significant number of stressors (Martinussen et al., 2007) that can have an impact on burnout that affects police officers at the individual, organizational, and community levels (Baker et al., 2023). The following review explores the current documented literature on burnout and policing.

Defining Burnout

Burnout is defined as a psychological syndrome involving emotional exhaustion, depersonalization, and a diminished sense of personal achievement that occurs among various individuals who work with other people in challenging situations (Maslach, 1982). Burnout is a reaction to stress from an individual's profession that could result in health issues (Maslach & Jackson, 1981). For many professionals, such as police officers, burnout can manifest as a process of successive reduction of emotional, cognitive, and physical energy, personal detachment, and reduced satisfaction with work (Rudaleva, et al., 2017).

Theoretical consideration

Organizational theory argues that burnout results from work stress from role ambiguity or work overload that eventually will lead to "depersonalization and low self-fulfillment" (Golembiewski et al., 1983; Cox et al., 1993). Social exchange theory finds that burnout occurs due to a lack of equity between the efforts and contributions made and the results obtained in their work (Schaufeli et al., 2011). Emotional degradation occurs from a lack of appreciation from coworkers and clients alike and can result in eventual cynicism (Schaufeli et al., 2011). Structural theory explains when chronic job stress coping mechanisms fail burnout will likely occur (Manzano et al., 2000). Manzano et al (2000) posit that a new coping strategy of depersonalization will occur, still leading to low personal fulfillment and emotional exhaustion.

This type of burnout is like the experiences of other professions such as teachers and nurses (Manzano et al., 2000).

Sources of burnout

Several literatures pointed out that burnout is due to organizational factors and individual experiences in life (Edu-Valsania et al., 2022). According to Edu-Valsania et al. (2022), some sources of burnout are broad, organizational factors, work overload, emotional labor, lack of influence at work, role conflict, poor leadership, lack of perceived social support, and poor working hours. Individual personality traits, sociodemographic variables, and coping strategies predispose or facilitate the development of burnout with minimal organizational stressors mentioned (Edu-Valsania et al., 2022; Violanti et al., 2018; Manzella & Papzoglou, 2014, Shoji et al., 2015).

Outcomes of burnout

Police burnout can be caused by personal, organizational, and community sources. Research links burnout with lessened personal fulfillment due to poor leadership (Baker et al., 2023), large workload (Kumar & Narula, 2021), emotional exhaustion (Maslach, 1982; Smith et al., 2021), stress (Manzano et al., 2000, Smith et al., 2021), depersonalization (Golembiewski et al., 1983; Maslach, 1982), lessened self-satisfaction (Golembiewski et al., 1983), reduced cognitive and physical energy (Rudaleva, et. al., 2017), and cynicism (Schaufeli et al., 2011; Smith et al., 2021; Violanti, et al., 2017). Research further documents that burnout can cause increased absenteeism, low morale, job turnover, aggression toward civilians, ineffective policing strategies, and ethical transgressions (Queirós et al., 2020; Shane, 2010). Unfortunately, research also reveals the correlation between strong burnout levels with suicide (Violanti et al, 2008)

Prevention and Mitigation of Burnout

Many police organizations have begun to implement prevention and mitigation strategies by recognizing “broad-based organizational interventions as well as role-specific interventions” (Baker et al., 2023). The literature acknowledges that decreasing quantitatively demanding workloads may help alleviate burnout (Kumar & Narula, 2021). Furthermore, “burnout is a venue for interventions such as counseling, and stress management training sessions” (Kumar & Narula, 2021). Administering strong support programs (Padyab et al., 2016), promoting work-life balance, and leadership development (Arble et al., 2018), and fostering a climate in police departments that can help prevent emotional exhaustion, stress, and cynicism (Smith et al., 2021).

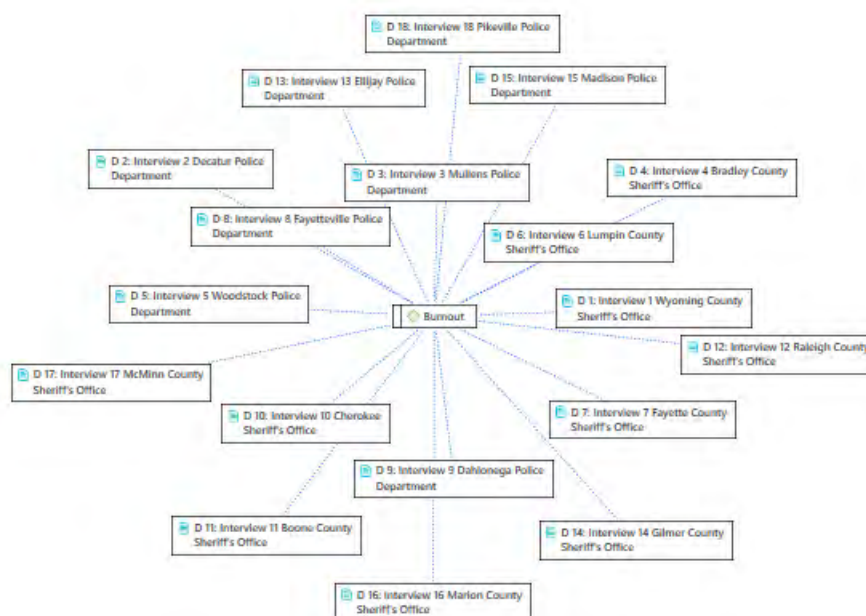
Methodology

Data

Participants for this research came from various police agencies in the tri-state of Georgia, West Virginia, and Tennessee. Ten counties belonging to the Appalachian region were chosen to highlight the rural experience of police burnout. Local city police and sheriffs’ county departments from each county were asked to participate. Each department was strategically sampled to represent various areas of the Appalachian region. All in all, 18 police departments agreed to participate in this research. Figure 1 displays the participating agencies in Appalachia. Participant departments in Georgia include the Lumpkin County Sheriff’s Department, Gilmer County Sheriff’s Department, Cherokee Police Department, and city departments such as Dahlonega Police Department, Ellijay Police Department, and Woodstock Police Department. Participant departments in West Virginia include the Raleigh County Sheriff’s Department, Fayette County Sheriff’s Department, Boone County Sheriff’s Department, Wyoming County

Sheriff's Department, and city departments such as Fayetteville Police Department, Madison Police Department, and Mullens Police Department. Participant departments in Tennessee include the Bradley County Sheriff's Department, McMinn County Sheriff's Department, Marion County Sheriff's Department, and city departments such as the Decatur Police Department, and Pikeville Police Department.

Figure 1: List of participating agencies in Appalachia



Data Collection

The procedure of selecting participants consists of contacting the leadership of selected departments and explaining the research topic and the research protocols. Should any of the

following agencies agree, the leadership recommended participants for the interview. They were contacted ahead of time and scheduled their interviews based on their convenience.

Interviews were administered to voluntary participants either by phone or in one-on-one appointments. The questions of the interviews were based primarily on open-ended questions soliciting their personal experience with burnout. The interviews began by asking the officer probing questions about their professional experiences and service and then expounded on a series of questions regarding their understanding of the risk factors, effects, and treatment options for police burnout. Probing questions include *on a scale of 1-10, how satisfied would you say you are with your career right now and why?*; *What are the positive features of your job?*; *What are the challenges you face on your job personally?*; *What are the challenges you face in your job as a department?*; *what are some challenges you face on your job that come from a source outside of policing?*; *Could you tell me about a time you experienced burnout?*; *What caused your burnout?*; *How did you cope with this burnout?*; *What are the largest sacrifices you have made thus far for your career?*; *Would you say burnout has affected your ability to do your job? If so, how much?*; *What would your advice be to a new officer or a family member who desires to become an officer?*

Participants were also warned about the risks and discomforts that may manifest in the conduct of research and they were assured that they are minimal. Subjects that experienced emotional, and/or psychological discomfort in responding to the questions were guaranteed to end the research early or they could choose to discontinue. So far, none of the participants have experienced any form of psychological discomfort.

Data Analysis

All qualitative data was recorded, transcribed, and saved on a Microsoft Word document. All transcriptions have been protected by password and saved on the researcher's personal computer. Data was analyzed using the software, Atlas.ti. Each case was thematically analyzed and then compared via cross-case analysis (Stake, 2006). The researcher followed the merging findings procedure (Stake, 2006) to produce the report. This method has the advantage of allowing the researcher to make broad generalizations, which will be helpful when trying to identify the "groundedness" of several themes emerging from the data.

Results

Figure 2: Summary of main codes of burnout themes (Personal, Organizational, and External)

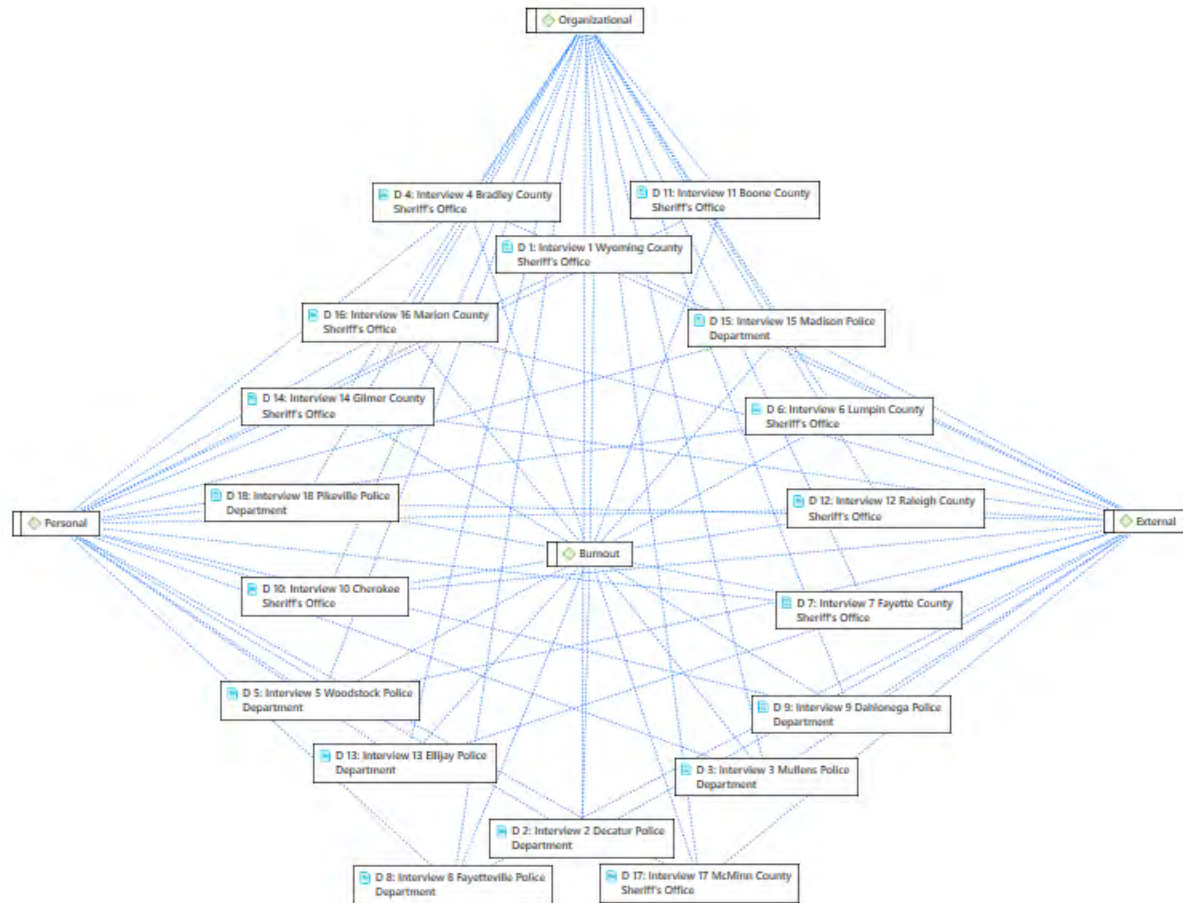


Figure 2 shows the major coding themes that emerged from the interviews. Analysis of the qualitative data shows that there are three major themes to explain police burnout: personal, organizational, and external. Thematic analysis of 18 interviews illuminates the various sources of police burnout, its personal effects, and suggested treatment options.

Personal

Figure 3: Personal code for burnout

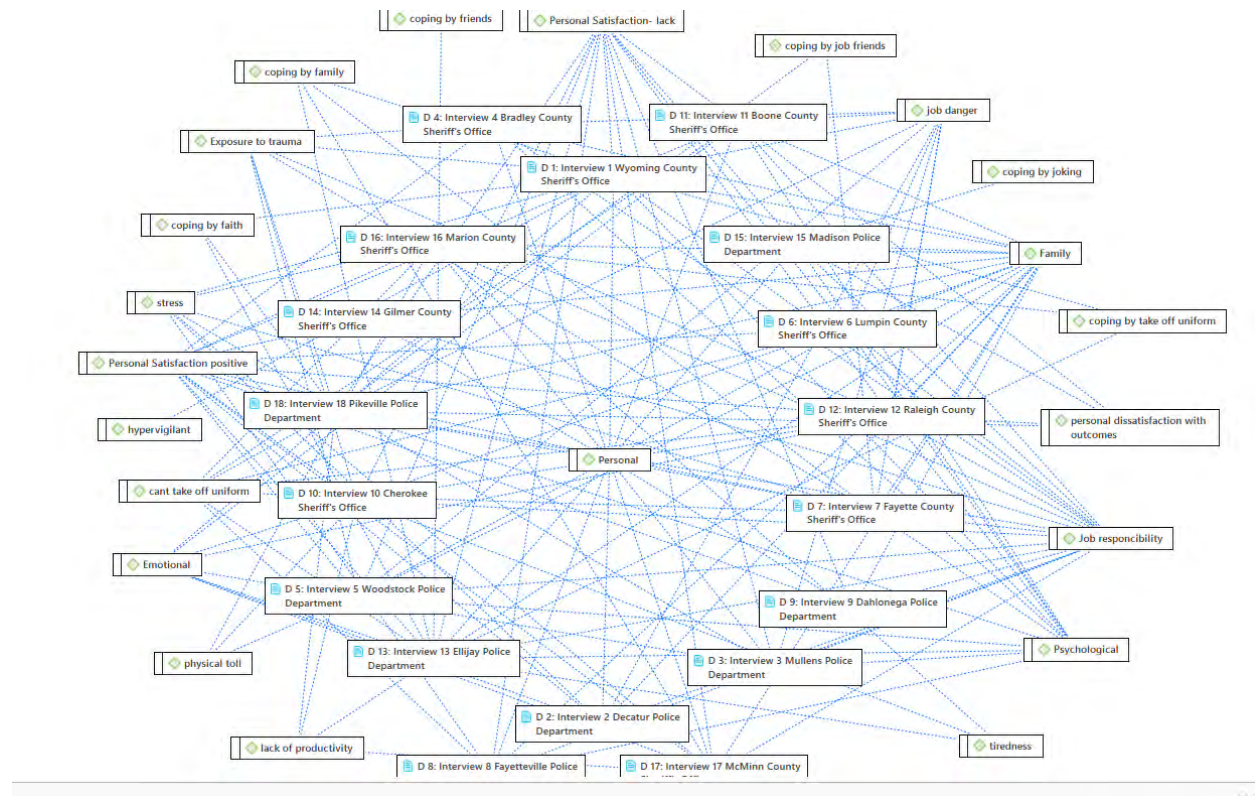


Figure 3 shows the themes that emerge in the data regarding personal experience with burnout. 21 codes relate to personal experience with burnout. Several codes interleaf with each other.

Stress and Trauma

Respondent indicated that burnout emanates from various sources such as life satisfaction, trauma/stress, and *conflicts with identity* being a police officer. Life satisfaction for police officers in the Appalachian region is affected by the attributes of their work perception and family. Officers view their work as unpopular and dangerous. They find that their life is more

difficult because they are a police officer. Families are affected by the police officer's duties and the results of those duties. Because of their job officers have missed holidays, birthdays, and memorable events with their spouse and/or children. As one of them indicated:

There are times that we're completely stressed out, wondering if we're gonna make the right decision because we got to make split-second decisions. And everybody says that, but you have no idea that the split-second decision could land us in prison, it could wind up getting us killed.

Another officer shared his experience:

I sacrifice time with family. Yeah. birthdays, Christmas, some events, some get-togethers. I mean, but it's all for a good cause. I mean, you got to work, then you got to work. Right?

Further, police officers' experience with trauma and stress at their workplace exacerbates existing forms of mental health issues: *"I've seen car wrecks, suicides, murders. I've seen, I can't even tell you how many people I've seen, or what I've seen, police officer's jobs aren't physical. It's mental and emotional. I've gone through times that I've seen more death than probably anybody that's ever gone to Afghanistan."*

The workplace environment also contributes to trauma and stress faced on the job. The exposure to trauma is found to be periodic instead of frequent. However, exposure to stress is found to be an everyday occurrence. As one respondent said, *"With this job, I have constant pressure."* Another stated, *"The largest sacrifice I made for this job is my mental health."*

Identity Conflict

Being a police officer comes with significant expectations and responsibilities. Appalachian police officers, however, experience conflicts with their personal and professional identities. There is a struggle to separate professional life from personal life. An officer stated, *"I am always taking the job home with me. It's always, It's always on my mind."* Another respondent states, *"Being a police officer, becomes who you are."* Yet another stated, *"I am never able to*

leave from the job.” One officer added, “All you think about is police and you lose your identity and you get burnout.”

Officers expressed this as a failure to take off their uniforms. The uniform is seen to be a part of the officer’s identity off-duty as well as on-duty. Because the officer struggles to dissociate from the uniform and responsibilities of being a police officer in their personal life, some have experienced a state of “hypervigilance.” This hypervigilance causes the officers to be always on guard against threats. This causes a feeling of tiredness. One officer put it this way:

You arrest dangerous people, then they get out of jail and they're at Walmart or something and they approach you. I mean, it's just a part of the job that people don't realize that we always have to stay vigilant.

Effects of trauma, stress, and identity conflict

Consequently, work perception is predominantly negative among respondents. This negative work perception causes *personal dissatisfaction* with outcomes in policing. Officers believe that criminals get away with crimes often. This causes them to see their position as a law enforcement officer as futile. As one officer pointed out, *“We're not always satisfied with what goes on in the justice system. You just arrested a guy and by evening he's right back out on the street. Then we get blamed for not doing our job.”* Another officer states, *“I'm stressed because of the lawmakers. It's the court system, and people's attitude in general. We're expected to know everything about everything in just a moment's notice. And it's humanly impossible.”*

In addition, the *poor relationship between family compatibility* and police job responsibilities causes some to experience divorce and *conflicts within their relationship with their children*. As one respondent stated:

I mean, it's hard on, it's hard on a married person with a family to work this line of work, it really is." Another put it this way, *"I've been through a couple of divorces, I'm probably a poster child for why you shouldn't do this job.*

Further, police also feel *the physical impact* of such stress. They felt that they *lacked productivity* and experienced a *decreased ability to perform on duty*.

This *tiredness* comes from emotional exhaustion and leads to a physical toll being felt and performing the job at a lower standard. As one officer points out:

There were times when I was just so exhausted with the job that I stopped and didn't want to do anything. Just kind of ride around in the car. Not really looking for traffic infractions. Or, you know, of course, you got to go to them dispatch calls, but just not try to be proactive in the community to prevent stuff from happening. You can get burnout and start to do nothing and start making a lot of mental mistakes.

Another officer states:

Unfortunately, you know, normal people normally work eight to five. And typically their job is over at five, for us, you know, we work 12-hour shifts, or eight-and-a-half hour shifts, depending on what unit you're in. And we don't necessarily stop at our stopping hour, we might have to work longer. So that takes a toll on the body, it takes time, which also puts a toll on family life, and your health as well.

This tiredness contributes to the officer's inability to perform on the job. Mental fatigue is also felt because of the inability to dissociate from the uniform/job. To the officers, it feels like they are always working. *"You just get to a point where you, you don't want to do anything. Where you have just a lack of drive and lack of attention. Really just not doing my job as well as I should have."* Another officer stated, *"I was on shift 24/7."*

Coping personally with burnout

Apparent in the data is that Appalachian officers indicated the value of faith and community in dealing with burnout. Officers expressed these coping strategies working for them coping by

faith, coping through family, coping with friends, coping with their constituents, coping by hobbies, and humor, taking off the uniform mindset, and receiving a sense of job achievement or institutional recognition of their work which contributes positively with job satisfaction.

Faith plays a big factor among the respondents. Coping by faith refers to the officer participating in faith-based practices such as church attendance and prayer. Respondents feel as though they are strengthened mentally and emotionally after such practices. This is seen as a method of combating burnout. One respondent stated, *“Personally, my faith in God, my faith in that there's a reason why things are done helps me deal with burnout.”* Another officer stated, *“I think probably the biggest thing that helped me deal with my burnout was that I got involved in church.”*

Likewise, coping with family, friends, and job friends refers to spending time/doing activities with individuals from those social groups. Referring to family and friends one officer states, *“It helped that I got friends outside of law enforcement and spent time with them.”* Referring to job friends one officer in leadership states, *“A lot of these guys, you know, they reach out for me or somebody else that they look up to, and you go play a round of golf or go fishing and talk about stuff.”*

Taking personal time to conduct activities within their interests also aids them in dealing with burnout. One officer expressed that *“a lot of people [officers] handle stress differently, there's no stress on outdoor things. I like to do hobbies and go out.”*

Humor is also seen to be a strategy through sharing with others about the details of the job, including trauma and stress, in a lighthearted manner. As one officer pointed out, *“I've learned over the years I can make a joke out of about anything and it's just survival. So you don't have to*

deal with it, you don't have to put up with it.” This may seem callous but is seen by the officer to be a processing strategy.

Further, taking off the uniform by learning to create boundaries and successfully dissociating their personal life from their professional life also helped several of the respondents.

Finally, personal satisfaction is increased with job achievement. Feeling recognized for their achievements contributes to diminishing burnout. These achievements are usually obtained by long tenures and moving within their careers and can be seen in the form of obtaining what is considered by most to be a “*high rank*” within the department. One police chief pointed out:

I’ve been doing police work for twenty-seven and a half years. My personal satisfaction on a scale of one to ten is about a nine because I’ve been doing it for a while. I’ve achieved some rank. I also live in a safer town with less crime than in places like Atlanta, Georgia.

Police officers experience many personal sources of burnout through trauma/stress and conflicts with identity. These personal sources of burnout sometimes have ranged from minimal to severe consequences and effects. Managing burnout for police at a personal level is usually accomplished through socially oriented activities, behavioral strategies, and being rewarded and acknowledged for their work and service.

Organizational

Figure 4: Organizational code for burnout

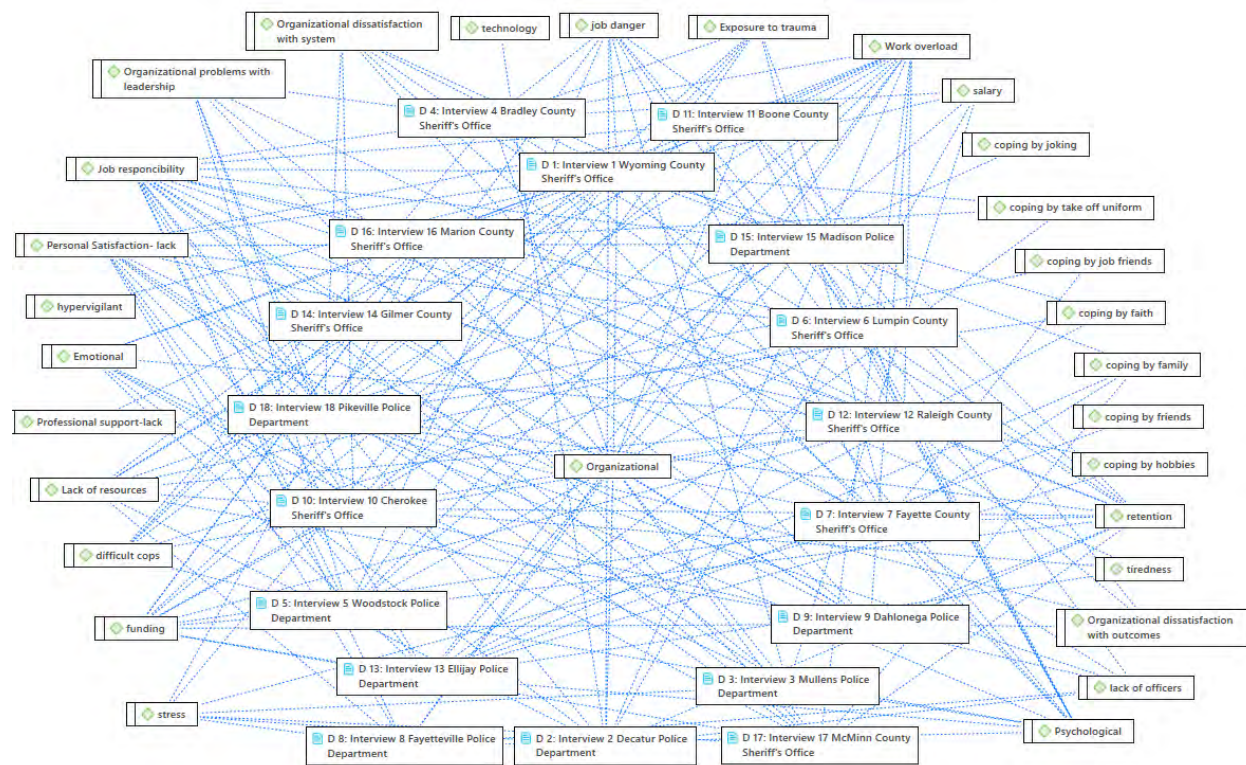


Figure 4 shows the themes that emerge in the data regarding organizational experience with burnout. 28 codes relate to organizational experience with burnout. Several codes interop with each other.

Burnout may also stem from organizational dynamics. The three themes that emerged in the data are *departmental logistics*, *job responsibility*, and *their heterogeneous perceptions* of the organization. Departmental logistics themes include *retention*, *salary*, *funding*, and *lack of officers*. Job responsibility themes also include *general responsibilities* and *overload*, *job danger*, and *expectations*. Heterogeneous perceptions include problems with *technology*, *police*

corruption, dissatisfaction with police leadership, lack of professional support, dissatisfaction with outcomes in policing, and dissatisfaction with the criminal justice system.

Departmental Logistics

Retention

In Appalachia, many departments cannot retain enough employees. Many officers leave due to personal reasons, but many can be traced to organizational factors. Several officers transfer or quit due to organizational practices or lack of. Poor retention rates cause police leadership to experience increased levels of stress and put a strain on the department. One chief stated that the *“hiring and retention are very tough right now. People don’t want to be police anymore. It’s a cost to worry about retaining the employees that you have now.”* Another officer stated that the *“challenge we face in this day and time is recruitment and retention, not everybody wants to become a law enforcement officer anymore. I do believe it’s a nationwide issue.”*

Salary and turnover

Police officers felt that they were also not compensated well. They felt that their job calls for a significant number of expectations and performance that are not compatible with their pay scale. An important theme in the data is that many of the respondents compared their work pay to *“fast-food employee”* rates. This is a source of dissatisfaction and causes a rise in departmental turnover. As one respondent claimed, *“Guys can go up here to Tutor’s Biscuit World and make my starting pay at this job.”* He added that *“one of the biggest things is the pay for what the guys do every day.”* Another stated:

Don't get in this business, you're working holidays you're working birthdays, your wife and your family suffer because the pay is not that good. You can work at McDonald's and make what some employees here make.

Finally, another officer states: *“Money and salary are always a challenge. We were not keeping up. I mean, just, not knocking the fast-food stores, but you can go to work for a fast-food store and make what police officers are making in some places.”*

Funding

Appalachian police departments generally do not generate large funding for their local government. This strains leadership to make the most of what they have. Without sufficient funding, the police departments are unable to increase officer salaries which in turn encourages retention. As one officer pointed out:

Our department was facing a retention problem due to low pay. It got better when the chief gave us a good pay raise. This is thanks to the city being willing to work with us and give us better pay. Now we're kind of in the middle of the pay scale for all these other agencies.

Another respondent expressed:

We are so understaffed right now we're running at about 50%. We have tried raising salaries, we've tried signing bonuses, we've tried whatever, but it's hard for a small municipality to compete with a larger one or with a large county with a good tax base or the state police as far as money. It's a big challenge. We don't have the resources to offer enough to draw people for a career. We'll get people and for the most part, we keep them a few years and they move on to the next challenge.

Lack of funding also causes the inability of local departments to afford replacements for aging equipment and other needed paraphernalia to police effectively in their jurisdictions. One officer in leadership stated *“We currently don't have body cams. And it's harder for smaller agencies to afford that kind of stuff and maintain them.”* *“Funding, funding, funding, it's one of the biggest issues for every department”* another one retorted.

Job Responsibility

Shortage of Officers and increased workloads

For years now, the Appalachian region has been experiencing a shortage of police officers. Some departments have less than five employees at the county level. This meant an increase in workloads for officers. Department chiefs and sheriffs attribute these shortages of officers to the problems of wages, retention, lack of funding, and perceived work danger. Many departments' perception is one of uncertainty of their future with some departments not receiving any applications for more than a decade. One sheriff claimed, *"Here's a challenge. I've not had anybody to even put in an application at my department in over ten years."*

As indicated by several respondents *"people do not want to be police officers today."* For lack of sufficient wages and work danger. *"People can just about go to a fast-food place and make more money than they would here, risking their life and going through the experiences I have to experience doing this kind of work,"* one police officer narrated.

Insufficient funding, minimal salary, increased workload distribution, and lack of safety nets such as current policing equipment, training, and knowledge of model and effective policing techniques are some of the reasons respondents indicate to relate to police shortages.

The shortage of officers also meant an increase in police workload. Long hours, increased exposure to traumatic scenes, increased expectations from leadership, and increased levels of stress and emotional stress result from work overload. As one officer in leadership stated, *"My guys work twelve-hour shifts."* Another officer also claimed, *"You're either working or you're sleeping."* Being overworked also takes a physical toll on some. One county sheriff expressed:

I think that what we're seeing in burnout is overwork, not enough help officers to spread the workload and they're just constantly being overworked and having to come in to cover other shifts in overtime.

Multiple titles also correlate with more work, hence work overload:

We've got a lot of job titles, and hats put on us that, in my opinion, shouldn't be. We're having to perform medical things. Or have the new social work kind of aspect of things which include trying to get people in rehab facilities. Just really, that's a challenge, because that's beyond our realm.

Rural police departments are likely to be more challenged due to a lack of personnel. One sheriff pointed out:

The reality is, if I got two officers on a shift, I'm satisfied, and our county is five hundred square miles. Right. Okay. And I want to help people. But in reality, it's not, it's not always feasible.

Job Danger

Respondents also expressed that their profession comes with danger. Officers report homicides, hostage situations, etc. Respondents indicated that exposure to these dangers can take a toll on their well-being as they felt that their departmental duties could risk their family's safety. One officer pointed out that "this job with its responsibilities puts your family in danger."

As previously mentioned, departmental issues such as retention, salary, funding, lack of officers, work overload, and job danger cause an increase in job responsibilities as well as departmental expectations. In turn, the officers are expected to work for long hours, miss time with family, expose themselves to hazardous conditions, and unrealistic and unfair expectations can add to officers feeling stressed, emotionally exhausted, and physically fatigued.

Heterogenous Organizational Perception

These organizational perceptions refer to a variety of problems that are seen by officers to be affecting the day-to-day activity of their departments, leading to collective organizational burnout. These dynamics include *technology concerns, police corruption, dissatisfaction with police leadership, a lack of professional support, dissatisfaction with outcomes in policing*, and dissatisfaction with the criminal justice system.

Technology Concerns:

Most respondents say that Appalachian police departments are not up to date with technology. Many departments still use paper filing techniques. One sheriff stated, “Keeping up with other departments when I’m using paper has been hard.” As previously mentioned, some do not have access to resources such as body cameras. City funding is not sufficient for the department to update its organization. This leads departments to have to operate using outdated systems, leading to stress and increased workload. One officer explained:

It has been difficult with the rapidly changing technologies within police work. You know, we are just now switching over to things a lot of departments have been doing. I'll give an example; We're just now getting into electronic citations. Departments have been doing that for several years. Just keeping up with technology is a challenge for me.

Police corruption:

Although very little was mentioned about police corruption in the participating rural areas of Appalachia, officers expressed their concern about corruption in police leadership. Police who are seen to be corrupt are reportedly swiftly reprimanded, receive disciplinary action, or are fired. It is important to note that officers feel they are also tasked to police their peers who are involved in corruption. This task of preventing and mitigating police corruption brings a high level of strain to perform their job and responsibilities.

Police leadership is also wary about the impact of police misbehavior on the organization. As one officer said, *“We try to weed out the bad officers in the hiring process. Unfortunately, we’ve seen some bad apples in the news, and a lot of people like to classify all law enforcement as the same.”* Regarding corrupt leadership, one officer stated *“I dealt with a massive amount of corruption from my leadership in my last department. It affected me poorly because it took two and a half months before I could care about anything again.”*

Dissatisfaction with Police Leadership:

Respondents also expressed dissatisfaction toward certain police leadership that is lacking personnel appreciation. Many officers felt devalued or unappreciated because their leaders were often unaware of their positive contributions to the department. One respondent claimed that *“because of our leadership there were a couple of times that I thought it was time to do something different than policing, time to go to a different organization that puts better value on their employees.”*

Police officers also disliked leaders with unrealistic expectations and micromanagement. Law enforcers felt the challenges of working without a sense of autonomy. To be constantly watched and being fault-find by superiors can add to the stress of the job. One officer related one story about a superior: *“We had a sheriff that was very difficult to work for. And quite honestly, it was a situation where he didn't feel like you could ever do anything right.”*

Police leaders who demanded unrealistic workloads for officers are also a type of leadership that officers identified to be a source of their burnout. As one officer related, *“I knew that I was responsible, statistically speaking, for about 70% of the arrests every month. I’ve experienced burnout from bad leadership.”* As to why bad leadership exists, respondents claimed *“Poor promotional systems cause poor leadership.”* Good leadership is seen as a

preventative measure against burnout as it leads to a decrease in officer stress and emotional exhaustion.

A happy employee is going to work harder, do a better job and be more professional if they're satisfied. So, when they begin to be unsatisfied, and they're not happy, we need to be receptive to be able to sit down and pick up on those things, engage them, and start those conversations.

Lack of Professional Support:

Technology concerns, police corruption, poor departmental leadership, and unrealistic expectations can contribute to feelings of isolation where officers feel a lack of professional support from their organization. Officers who felt left out experience relative stress and emotional exhaustion. They tend to perform poorly and feel lowered job satisfaction in their experiences. *"It was draining emotionally. But you know, you just must do the best you can do"* one officer related, *"burnout has affected my desire to do my job."*

Another policeman stated *"I was always working and stressed out. We were short-handed as well. It just was like, that was your life. That was there was no downtime whatsoever."*

A good sense of community gives officers emotional and social support. To have a group that they can lean on provides them with a strong camaraderie and purpose that they are not doing their job alone. *"I just kept doing and kept going just for them and thinking that focusing on them will pay off."*

Dissatisfaction with Outcomes in Policing:

Respondents also felt that they do not make a difference at times when they do not see results in providing law and order. When criminals seem to get away with their crime it affects them emotionally and psychologically. Their perception of their job is seen as futile, and they are

divorced from their mission as an organization that should bring justice. One respondent stated, *“What am I even doing? We arrest people and they beat us home.”* Some respondents express a desire for a more fair and punitive approach toward criminals. One officer expressed, *“I just get so disgusted. I see victims that get no justice.”*

Dissatisfaction with the Criminal Justice System:

Respondents also see the inefficiency of the criminal justice system overall. Officers think there is not enough mental health support for criminal justice professionals. One officer claimed, *“I’m not sure that our system is the best there is, especially with what goes on with Mental Hygiene.”* Officers also felt they were being scrutinized by other departments in the system if they felt justice was not warranted. For instance, the courts have a different milieu of operation that somehow questions police judgment and favors letting go of criminals due to technicalities, other legal junctions, or funding. One respondent claimed:

I understand it. At the end of the day, it's a money issue. There's only so much money to go around. And I understand that jail bills are very expensive. We have regional jails here; we don't have county jails anymore. So, the counties are flooding and beyond. It's very expensive.

Regarding scrutiny from the courts, a respondent claimed:

The frustration mounts when you put together criminal cases, and you take them through the court system, and the court system fails you. They don't get the sanctions or the consequences that are rightfully deserved for the criminal.

One officer puts it this way:

It's very frustrating when you pour your heart and soul into these cases, and put your very life on the line in an attempt to make the community safer. And then a judge is like, Oh, we're good. Let's give the criminal probation. There's just a humongous lack of accountability for criminals.

Another respondent added that burnout is stress-related. A lot of the guys I get out here, they work, they make the arrest, and go through the court system and the court system fails. One law enforcement professional put it this way:

It has become a trend where prosecutors are having a grand jury present. And every time a police officer uses deadly force, even if you're not convicted, you're still going to have legal expenses. You're going to have the worry and strain on your family and yourself.

Police officers in Appalachia felt as though they also have an impossible job at times seeing how not all crimes are solvable or provable in a court of law. One sheriff claimed that *“everybody expects their case to be solved and cases are not always solvable. But we're expected to do it anyway which can be stressful at times.”*

External Sources of Burnout:

Figure 5: External code for burnout

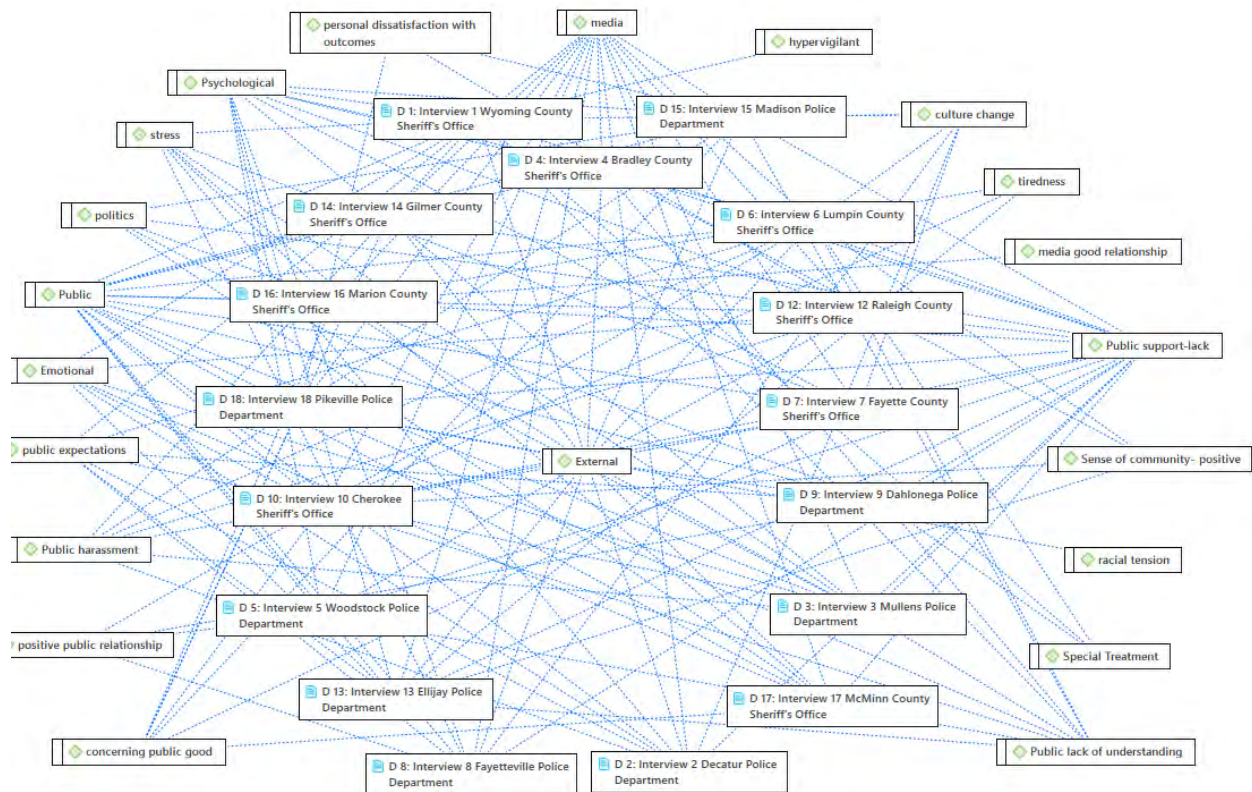


Figure 5 shows the themes that emerge in the data regarding external experience with burnout. 20 codes relate to external experience with burnout. Several codes interlap with each other.

A very significant and repeated source of burnout indicated by participants comes from two external sources: The *political nature of appointments* and *public perceptions*. The public perceptions identify the *tension between the current form of policing and their desire to uphold the public good*, *public lack of understanding of police work*, *less public support*, *harassment due to cultural change*, *media sensationalism on racial issues*, and *the rise of the anti-police movement*.

Political nature of appointments

There are political aspects to policing. When speaking to leadership in policing in the Appalachian region, several chiefs and sheriffs expressed that the nature of the job was political. Sheriffs are elected to office and see themselves as having to answer the public and police chiefs are oftentimes appointed. They are also at the mercy of local government for funding and must navigate the different interests of the local leaders while protecting the communities within their jurisdiction.

The political aspects of Appalachian policing can be characterized as “paternal” and “connected” to other non-police entities. Police leaderships are stressed because of the conflicting nature of their positions. One respondent pointed out *“I am a supervisor. I supervise seventeen guys, five women, and a tax department. They’re constantly everyday issues, you know, that have not a lot to do with policing. Because of this, I’ve felt burned out.”*

Some sheriffs have felt that other political leaders must be appeased because of their position while operating within the bounds of the law. *“The political end of this job is frustrating at times. My position is politically appointed. Sometimes you find yourself taking care of a person because of who they are and the connections they have in a community”* he added.

Public Sources and Effects of Burnout:

Police practice vs. public good:

Many feel that as public officers, their main duty is to serve the *public, protect them, and provide order* to the community. However, such expectations are often an added burden if the public feels that those expectations are not met. Law enforcement officers in the Appalachian region felt that the public do not believe police are oriented toward their good. One officer noted that *“the most rewarding thing about being in police is keeping people safe.”* Another officer

stated, *“The last thing we want to do is get in a tussle with somebody.”* Police officers are expected to lower the crime rates, maintain efficient case closure, and are held to a constant degree of pandering to the public sense of satisfaction. Police often encounter individuals expecting special treatment, meaning law enforcement is asked to operate outside the bounds of the law. One sheriff claimed:

There's a certain segment of people who think they're above the law and that the police should give them extra or special treatment. Don't call me because you think you're going get out of a ticket or out of an arrest or that I'm going to overlook a crime.

Another officer claimed that *“the plan is to stop the crime or try to stop the crime, you know, but it's just a constant. It's a constant stress. A lot of the public believe that we are not doing our job.”*

Because of these circumstances, officers are pulled in different directions, so they develop a dissonance between their mission and their desire to appease public opinion.

Public Lack of Understanding:

Appalachian police officers felt that the public generally has a negative attitude toward law enforcers and their trustworthiness due to multiple opinions coming from various sources in mass communication. Many respondents felt that their profession was under attack due to the unfounded accusations of the public stemming from their lack of knowledge of police practices and protocols. One officer stated *“You're dealing with other people's problems all the time. I know people hear this a lot, but we never get called to anything good. Right? So that has a big effect on me.”* Another law enforcement official stated, *“I want the public to understand that we truly want to be transparent in the things we do at our agency, and our agency wants to be transparent in the things we do elsewhere.”*

In recent years, the media sensationalized police representation. Raw video footage showing methods of confrontations and practices of detainment are seen as a form of “*power play*” by the public. One respondent stated that “*there's always a negative representation of officers that are simply doing their job. They're trying to maintain peace and safety and enforce laws.*” The public does not understand the general disposition of the police, which is geared toward helping and serving the public. They also felt that the public is ignorant of the struggles police endure versus the expectations that are upheld. Another respondent noted that:

There are some videos that I watch that are of police officers. Sometimes I think, that's not how you do stuff. But then again, it's a split-second decision. So, whenever we're watching those videos, we can sit here and think about how we would handle it. But they're making a split-second decision.

Lack of Public Support

Due to the lack of understanding of police work, the public, in response, does not support police work in the Appalachian region. There is minimal lack of social support for police departments. Officers often report receiving public scrutiny, either online or through legal action, for perceived wrongs. Many of which are felt to be invalid. One official stated that “*this job could lead to you getting sued.*” Another officer put it this way:

The negative perception of law enforcement is based on the use of social media, the false agendas, and the false stories spread by social media, there's an ease to creating false stories or one-sided stories that do not get the whole picture. With social media, these stories are prevalent, people read them and automatically believe it's true without knowing all the facts. This makes it difficult for everybody, especially when it's so easy to spread. You have groups that are out there just to make law enforcement look bad. And then they share or spread false information a lot of times and it just makes it very, very difficult for law enforcement to overcome some of those images.

Respondents felt that no matter what their course of action *“they cannot be perceived as doing anything right.”* Some department chiefs also felt that the relationship between the police and the public has become much more confrontational [now] and disrespectful and causes law enforcement to lose the desire to serve the public, for fear of retaliation, and due to experiences of *“hypervigilance of their safety.”*

Public Harassment vs. cultural change

Partially due to the shifting culture in the perception of police, public individuals have become more combative toward officers through taunting, retaliation, scrutiny, and verbal, and physical harassment. Officers find that the public’s negative stance toward law enforcement makes their job more difficult to do. It exacerbates trauma, emotional distress, emotional exhaustion, stress, fear, and hypervigilance. One respondent expressed *that “unfortunately, we are finding a lot more people willing to challenge law enforcement. It’s just the culture we’re in now.”*

In turn, some police take a more combative approach toward policing due to the public dangers present, which officers find are becoming more prevalent due to current social attitudes toward police. One officer stated that *“the culture we’re raised in now, you know, causes a lot of negative influences down here like retaliation from gangs and other violent people.”*

Media sensationalism fans negative social perceptions of police. Anti-police social movements have caused officers to question their work and their allegiance to public order and safety in their community. One respondent expresses that *“if a law enforcement agency provides the public with body cam footage, they don’t show the whole footage. The excerpt is the image that’s going to sell more airtime and create more dissension or turmoil.”* Another officer claimed *“It’s just not worth it anymore. The distrust of the public that you’re going to get filled with every day,*

there's always somebody with their cell phone camera pointed at you. It's not worth it to live with the blowback aggravation that you're going to get from the public."

Lack of community acceptance:

Police officers expressed a desire for a sense of community - a community which they protect and feel that they are valued. *"Getting with the community and having that community support is probably the most satisfying thing in my job,"* one officer related.

A common theme in the interviews is that they [officers] do not feel valued by the public. They are outcasted socially and lack a sense of belonging to the community they serve. *"There is a national consensus of feelings against law enforcement. It's constant, and it's draining. It's just draining."*

Navigating racial tensions vs. media sensationalism

Recent events such as the George Floyd incident, and the Tyre Nichols caused negative public perceptions of police; that they are in opposition to minorities. Appalachian police expressed that this is certainly not the case. One respondent claimed *"It has always been my opinion that the law is equal. I wish the public would see that, that we're not out to pick and choose to get anybody, we're just out there to do the job."*

Media and social media exacerbation of these incidents only form misunderstanding on the real nature of police work According to the respondents *"the public is afraid in every encounter with law enforcement. They don't want to get hurt. Therefore, they don't cooperate, and it leads to more shootings. It's not racially motivated or anything like that."* The media influences social attitudes, mostly negative, toward police. One respondent expressed *"I think the media is driven by folks with political agendas, that benefit from casting a bad light on law*

enforcement.” Another officer stated that “there’s a general malice from the public. It is, you just get tired because of it.”

The external sources of burnout can be prevented by changing the public’s attitudes and perceptions toward police as well as a positive change in the media’s portrayal of the police. For many respondents, a better public understanding of police responsibilities and disposition is greatly needed. As one officer said *“My career satisfaction is at a nine out of ten when I’m in a good position with a good city. The community we have supports us, unlike a lot of agencies.”*

Discussion and Conclusion

This project reveals that police burnout is highly prevalent in the Appalachian region within the intersection of personal, organizational, and external experiences of police officers. In the personal section, three themes seem to be the largest contributors to personal burnout, life satisfaction, trauma/stress, and identity conflicts. These three themes contain conflicts that cause personal dissatisfaction, poor family relationships and dynamics, a physical toll on officers, the inability of officers to dissociate from the job/uniform, a lack of productivity, and an officer’s decreased ability to perform duties. This leads to feelings of tiredness, emotional exhaustion, stress, hypervigilance, and mental health issues. The significant differences between Appalachian strategies compared with their urban counterparts in mitigating burnouts include faith, social support like family, friends, and colleagues, getting involved with hobbies, cultivating humor, creating boundaries between their jobs and personal life, and recognition of their achievements in their workplace.

Within the organization, data identified three themes that contribute to burnout: departmental logistics, job responsibility, and officers’ heterogeneous perceptions of the organization. These three themes contain conflicts that cause problems in retention, officer

salary, department funding, lack of officers, general responsibilities and overload, job danger, and expectations, technology, police corruption, dissatisfaction with police leadership, lack of professional support, dissatisfaction with outcomes in policing, and dissatisfaction with the criminal justice system.

The external section includes the political nature of appointments and public perception themes. These two themes contain conflicts that cause problems in tension between police, policing methods, and their desire to uphold the public good, public lack of understanding of police work, less public support, harassment of police due to cultural change, media sensationalism on racial issues, and the rise of the anti-police movement. Respondents suggest that positive change in the public's attitudes and perceptions can be enhanced through changes in the media's portrayal of the police along with better public understanding of police responsibilities, and general disposition. Fostering a strong bond with the community can also ameliorate burnout.

In conclusion, this project documents the Appalachian experience of police burnout as indicated in the works of Maslach (Maslach, 1982). The project also affirmed Maslach's prepositions that the psychological syndrome involving emotional exhaustion, depersonalization, and a diminished sense of personal achievement can also occur with law enforcers given their challenging positions. The "live-in" experience with burnout among police officers can be characterized through the intersection of personal, organizational, and external factors. As a consequence, similar to others who experience burnout, Appalachian law enforcers could also result in psychological and health issues. For many professionals, such as in the case of Appalachian police officers, burnout can manifest as a process of successive reduction of

emotional, cognitive, and physical energy, personal detachment, and reduced satisfaction with work, (Rudaleva, et al., 2017).

There are several limitations to this project. Only three states in the Appalachian region were included, namely, West Virginia, Tennessee, and Georgia. To fully grasp the concept of police burnout in Appalachia future research will need to include participants in other states in the region. Another limitation is that only law enforcement organizations at the county and city levels were selected in the sample population. Future research should also include state police departments and policing entities. A quantitative study is also necessary to provide a more nomothetic understanding of the issue. It would greatly benefit the scant literature concerning police burnout.

References

- Arble, E., Daugherty, A. M., & Arnetz, B. B. (2018). Models of first responder coping: Police officers as a unique population. *Stress and Health*, 34(5), 612-621. <https://doi.org/10.1002/smi.2821>
- [Baker, L.D.](#), [Richardson, E.](#), [Fuessel-Herrmann, D.](#), [Ponder, W.](#) and [Smith, A.](#) (2023), "Police burnout and organizational stress: job and rank associations", *Policing: An International Journal*, 46(4), pp. 682-693. <https://doi.org/10.1108/PIJPSM-01-2023-0004>
- Cox T., Kuk G., Leiter M. Burnout, health, work stress, and organizational healthiness. In: Schaufeli W.B., Maslach C., Marek T., editors. *Professional Burnout: Recent Developments in Theory and Research*. Taylor & Francis; Abingdon, UK: 1993. pp. 177–193.
- Edu-Valsania, S., Laguia, A., & Moriano, J.A. (2022). Burnout: A review of theory and measurement. *Int J Environ Res Public Health*, 19(3). Doi: [10.3390/ijerph19031780](https://doi.org/10.3390/ijerph19031780)
- Foley, J., & Massey, K.L.D. (2021). The ‘cost’ of caring in policing: from burnout to PTSD in police officers in England and Wales. *Police Journal*, 93(3), pp. 298-315.
- Freudenberger, H.J. (1974). Staff burn-out. *Journal of Social Issues*, 30(1), pp. 159-165. <https://doi.org/10.1111/j.1540-4560.1974.tb00706.x>
- Gerstner, R., & Narvaez, F., & Leske, S., & Troya, I.M., Analuisa-Aguilar, P., & Spittal, M.J., & Gunnell, D. (2022). Police-reported suicides during the first 16 months of the COVID-19 pandemic in Ecuador: a time-series analysis of trends and risk factors until June 2021. *The Lancet Regional Health- Americas*, 14(1). Doi: 10.1016/j.lana.2022.100324

- Golembiewski R.T., Munzenrider R., Carter D. Phases of progressive burnout and their work site covariants: Critical issues in OD research and praxis. *J. Appl. Behav. Sci.* 1983;19:461–481.
- Jaeyong, C., & Lee, D.R. (2020). Media use habits, negative encounters with the police, and perceptions of the police: the mainstreaming hypothesis versus the resonance hypothesis. *A Critical Journal of Crime, Law and Society*, 34(1).
<https://doi.org/10.1080/1478601X.2020.1736827>
- Kahill, S. (1988). Symptoms of professional burnout: a review of the empirical evidence. *Canadian Psychology*, 29(3), pp. 284-297.
- Kumar, A., & Narula, S. (2021). Quantitative demands, burnout, and allied outcomes for Indian police officers. *FIIB Business Review*, 10(1), pp. 74-85.
- Lambert, E., & Qureshi, H., & Nalla, M.K., & Holbrooke, M.A., & Frank, J. (2022). Organizational trust and job stress: a preliminary study among police officers. *Asian Journal of Criminology*, 17(1), pp. 81-103.
- Manzano G., Ramos F. Enfermería hospitalaria y síndrome de burnout. *Rev. De Psicol. Del Trab. Y De Las Organ.* 2000;16:197–213.
- Manzella, C., & Papazoglou, K. (2014). Training police trainees about ways to manage trauma and loss. *International Journal of Mental Health Promotion*, 16(2), 103-116. <https://doi.org/10.1080/14623730.2014.903609>
- Maria, A., & Wolter, C., & Gusy, B., & Kleiber, D., & Renneberg, D. (2021). Reducing work-related burnout among police officers: the impact of job rewards and health-oriented leadership. *Police Journal*, 94(3), pp.406-421. Doi: 10.1177/0032258X20946805

- Martinussen, M., Richardsen, A. M., & Burke, R. J. (2007). Job demands, job resources, and burnout among police officers. *Journal of Criminal Justice*, 35(3), 239-249. <https://doi.org/10.1016/j.jcrimjus.2007.03.001>
- Maslach, C., & Jackson, S.E., & Leiter, M.P. (1997). Maslach burnout inventory: third edition. In C.P. Zalaquett & R.J. Wood (Eds.), *Evaluating stress: a book of resources* (pp.191-218) *Scarecrow Education*.
- Mohammed, I., & Nauman, A., & Paul, P., & Ganesan, S., & Cehn, K., & Jalil, S., & Jaouni, S.H. ..., (2022). The efficacy and effectiveness of the COVID-19 vaccines, in reducing infection, severity, hospitalization, and mortality: a systematic review. *Hum Vaccin Immunother*, 18(1), 2027160. Doi: 10.1080/21645515.2022.2027160. Epub 2022 Feb 3. PMID: 35113777; PMCID: PMC8862168.
- Padyab, M., Backteman-Erlanson, S., & Brulin, C. (2016). Burnout, coping, stress of conscience and psychosocial work environment among patrolling police officers. *Journal of Police and Criminal Psychology*, 31(4), 229-237. <https://doi.org/10.1007/s11896-015-9189-y>
- Peloquin, O., & Fortin, F., & Paquette, S. (2022). Examining online social reaction to police use of force: the George Floyd and Jacob Blake events. *Canadian Journal of Criminology and Criminal Justice*, 64(1), pp. 53-81. Doi: 10.3138/cjccj.2021-0030
- Pong, H. (2022). The correlation between spiritual well-being and burnout of teachers. *Religions*, 13(8), pp. 1-15. Doi: 10.3390/rel13080760
- Queiros, C., & Passos, F., & Bartolo, A., & Marques, A.J., & Sliva, C.F., & Periera, A. (2020). Burnout and stress measurement in police officers: literature review and a study with the operational police stress questionnaire. *Frontiers in Psychology*, 11(1). Doi: 10.3389/fpsyg.2020.00587

- Rudaleva, I., & Mustafin, A.N. (2017). The impact of stress stability on job satisfaction and the quality of human capital. *Journal of History, Culture & Art Research / Tarih Kültür ve Sanat Arastirmalari Dergis*, 6(5), pp. 333-34. Doi: 10.7596/taksad.v6i5.1252
- Schaufeli, W.B., Maassen, G.H., Bakker, A.B., & Sixma, H.J. (2011). Stability and change in burnout: A 10-year follow-up study among primary care physicians. *J. Occup. Organ. Psychol.* 2011;84:248–267. doi: 10.1111/j.2044-8325.2010.02013.x.
- Shane, J. M. (2010). Organizational stressors and police performance. *Journal of Criminal Justice*, 38(4), 807-818. <https://doi.org/10.1016/j.jcrimjus.2010.05.008>
- Shoji, K., Cieslak, R., Smoktunowicz, E., Rogala, A., Benight, C. C., & Luszczynska, A. (2015). Associations between job burnout and self-efficacy: A meta-analysis. *Anxiety, Stress, & Coping*, 29(4), 367-386. <https://doi.org/10.1080/10615806.2015.1058369>
- Smith, C.J., & Han, Y., & Dupré, K.E., & Sears, G.J. (2021). Perceived organizational support and its interaction with a voice on police officers' organizational cynicism, stress, and emotional exhaustion. *Policing: An International Journal*, 45(2), pp. 200-217. <https://doi.org/10.1108/PIJPSM-07-2021-0093>
- Sprunt, B. (2023). Tyre Nichols' killing revives calls for Congress to address police reform. *NPR Politics Newsletter*. file:///C:/Users/kevin/Zotero/storage/AEI9LY5X/tyre- Nichols-killing-revives-calls-for-congress-to-address-police-reform.html
- Violanti, J. M., Charles, L. E., McCanlies, E., Hartley, T. A., Baughman, P., Andrew, M. E., Fekedulegn, D., Ma, C. C., Mnatsakanova, A., & Burchfiel, C. M. (2017). Police stressors and health: A state-of-the-art review. *Policing: An International Journal of Police Strategies & Management*, 40(4), 642-656. <https://doi.org/10.1108/PIJPSM-06-2016-0097>

Violanti, J. M., Fekedulegn, D., Andrew, M. E., Charles, L. E., Hartley, T. A., Vila, B., & Burchfiel, C. M. (2008). Shift work and the incidence of injury among police officers.

American Journal of Industrial Medicine, 51(3), 217-

227. <https://doi.org/10.1002/ajim.20566>

Violanti, J. M., Mnatsakanova, A., Andrew, M. E., Allison, P., Gu, J. K., & Fekedulegn, D.

(2018). Effort-reward imbalance and burnout among police officers: Does gender matter?

Journal of Police and Criminal Psychology, 33(3), 167-

174. <https://doi.org/10.1007/s11896-017-9242-4>

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Social Media, Christianity, and Gen-Z: The Rise and Influence of Social Media and How Church Leaders Should Engage With It.

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ABSTRACT

Social media, though taking off in 2012, is still a relatively new thing for the world and for Church, and as one of the prominent resources used today to connect with one another, more churches and those a part of the church utilize social media as a platform to share the Gospel but also content on both spiritual formation and discipleship. To stay relevant on social media, content is often short, catchy and holds a lot of information in a small space. With the prominence of social media and continual growth of the Church's presence on it, the question of determining how much of the often brief but loaded content being posted is biblically and theologically grounded; and if what is being posted maintains its original meaning as it is interacted with across platforms. In my research, my three-fold goal is to determine: first, how social media functions and the effects that these mechanism have on both individuals and society; second, the purpose and process influencers utilize to create Christian content and how in which Gen-Z interacts with this content to see to what extent it impacts their life; third, how in which the church should utilize and create content on social media. Holistically, the goal of this research is to gain a glimpse into how much of content on social media is theologically grounded, how theology, social media and Gen-Z seemingly interact, what the responsibility of the church is when posting theological/spiritual content and if/how mainstream church influencers maintain the responsibility they have when sharing theological and biblical information.

Introduction

Social Media is one of the most prominent forms of communication to connect with those closest to you, but also those in the outer edge of one's sphere. Once merely a form of entertainment and connection, the constant growth of social media platforms has shifted it into a source to both be entertained and informed about general and more complex information. Among Gen-Z, over 40% of individuals utilize social media platforms, specifically Tik-Tok or Instagram, as their main source of finding information over that of Google or any other resource.³²³ In other words, people are turning to social media to acquire information whether that be about where the best places are to eat in a city, the latest world news, or which god is real.

In the past the church has been able to utilize the influence of social media as a source of information to keep people who were a part of their church up to date about what was happening at their church, an appealing way to stay relevant to the younger community in their congregation. But with the rise of influencers, the unpredictable nature of how content will spread, and the growing influence that social media is continuing to have, the Church must show a greater consciousness on how it functions on these platforms, especially with the content they post.³²⁴ What you watch or read can have a large influence on what you believe and know, and even with an increasing awareness of the misinformation present on social media, an entire generation is being shaped by the content that they are watching on social media without any medium except themselves to often determine if the content they are watching is true.³²⁵

³²³Sarah Perez, "Google Exec Suggests Instagram and TikTok Are Eating into Google's Core Products, Search and Maps," *TechCrunch*, July 12, 2022, <https://tcrn.ch/3yy6xlt>. At a recent tech conference a Google exec stated that their internal research (yet to be published), shows that at least 40% of individuals 18-24, are more likely to utilize Tik-Tok or Instagram to look up information because it provides personally relevant information due to algorithms, is more immersive and requires less effort in relation to reading or filtering through other information that are required in other search engines, including Google.

³²⁴ Further, the COVID-19 pandemic turned people to social media in a way that the world and the Church never anticipated. The rise of virtual church created a greater platform for the Church to be on social media, but the overarching impact and influence of this is one that we have yet to fully comprehend.

³²⁵ Jennifer Neda John, "Why Generation Z Falls for Online Misinformation," *MIT Technology Review*, June 28, 2022, <https://www.technologyreview.com/2021/06/30/1026338/gen-z-online-misinformation/>. Jacob Liedke and Jeffery Gottfried.

Through the constant engagement of content, social media is shaping people's theology, shaping their doctrine, their worship, who they believe the church to be, which churches they should attend, the books they should read, and the podcasts they should listen to. With anyone having access to post and share their beliefs on these platforms, the question becomes: are influencers who have huge followings posting truth or are they posting content that people want to be true. What is shaping the theology and doctrine found on social media; is it those who post or the platform on which they are posting? How is the most social media rooted generation, Gen-Z, interacting with this content? Is it shaping them to be engaged followers of Christ or engaged followers of content and people related to Christianity, and how should the church use social media to make a beneficial impact on the future generation of the church? These are the questions that the Church needs to be asking itself.

The academic world and the Church have only briefly begun to evaluate the interaction of theology and social media which is especially problematic since most users don't even know how the platform works. So, my first task is to describe the process and shifting mechanisms used by social media platforms to construct identity and community. Second, I will interview Christian influencers to determine how they get their content and what they hope to accomplish with it.³²⁶ Third, in order to evaluate the use and effects of social media with Gen-Z, I will survey individuals 18-21 on how they engage with Christian social media, its impact and if said interactions match the intention of influencers. Finally, I will offer suggestions for ecclesial use of social media.

The Tool of Social-Media: Revolution, Algorithms and Entertainment

"U.S. adults under 30 now trust information from social media almost as much as from national news outlets," *Pew Research Center*, 27 October 2022. <https://www.pewresearch.org/short-reads/2022/10/27/u-s-adults-under-30-now-trust-information-from-social-media-almost-as-much-as-from-national-news-outlets/>.

³²⁶ This will be done through an analysis of interviews of 1-3 influencers and tracing of some influencers leading books compared to the content they post. Section may change may focus on discipleship or something else.

Before determining how the Church, doctrine, theology and Gen-Z interact with social media, one must first understand how social media works at its most fundamental level. Social media falls under the category of a technological tool, meaning that its creation is meant to aid or shift how we go about our day to day lives.³²⁷ Throughout history there have been various understandings of technological tools and how we should view their purpose. On one end of the spectrum is technological determinism, which is the philosophy that technology is autonomous and works to shape and control the lives of the users in such a way that it often leads to humanity being controlled by technology rather than technology controlled by humans.³²⁸ On the other side of the spectrum is technological instrumentalism, which views technological tools as completely neutral so that their purpose and influence are shaped fully by the user and the motivations that they read onto the tool; what humans want the tool to do is what it does and nothing more.³²⁹ A medium of these philosophies, and the way in which I and this paper will understand technological tools including social media, follows what scientist David Schuurman calls the value-laden approach, which understands technology as neither fully autonomous nor neutral. Rather it recognizes that there is a complex relationship within the technology that we make and how we engage and allow that technology shapes our day to day lives.³³⁰ Where the tension between the creativeness of humans and the influence of tools requires awareness that, while technology is not fully autonomous, it does have the power to shape how we approach and see things in our society.³³¹ At the same time this approach recognizes that humans also have the autonomy to control how much influence technology holds in our lives.³³² Equally so, within this

³²⁷ Jacob Shatzer, *Transhumanism, and the Image of God* (Dower Grove, IL: InterVarsity Press, 2019), 15.

³²⁸ Jason Thacker, "Simply a Tool", *Digital Public Square*, (Brentwood, TN: B&H Academic, 2023), 9-11.

³²⁹ Ibid, 8-9.

³³⁰ Ibid, 14-15.

³³¹ Ibid, 18. Jacob Shatzer, *Transhumanism and the Image of God*, 6-7.

³³² Thacker, *Digital Public Square*, 20.

understanding is the notion that every piece of technology has the bias of the creator within its function so that even if the use of the technology is different than what was originally intended, technology is never fully neutral in its creation or effect.³³³ In other words, one must recognize that social media is neither fully autonomous nor completely neutral, but a complexity of both, and it is through this lens of understanding that we are able to understand the effects of social media.³³⁴

The start of social media began in a place more than it began with a person, with the rise of Silicon Valley, CA in the late 60s /early 70s. It quickly became the innovative hub of all technological advancements in relation to the computer, and by the 90s the creation of the internet solidified the Valley as the hub of innovation.³³⁵ With each leap in technological advancements and the creation of the next best technological tool, there also grew a deep-seated belief that the innovations of Silicon Valley would be the heartbeat for revolution, where new societies are not run by the top one percent who held power.³³⁶ The creations and creators of Silicon Valley were going to be world changers and society breakers, by using the internet and social media to empower those often silenced, giving them a means to communicate their beliefs even if they went against the moral and guidelines that society considered correct, a true platform for freedom of speech.³³⁷ It would be this ideology of true freedom and social revolution, paired with the desire to grow in wealth and relevancy, that became the heart behind most new creations that came out of Silicon Valley, social media was no different.

³³³ Thacker, *Digital Public Square*, 15. No matter how much independent control one has over a tool, the tool will still be functioning with the intended purpose that the creator put in it and therefore a component of control is a user's decision concerning the power the tool will have over us. Yet within this is the dichotomy of control we have over the tool to determine the power the tool has over us.

³³⁴ Shatzer, *Transhumanism and the Image of God*, 7.

³³⁵ Max Fisher, *The Chaos Machine* (Hachette Book Group: New York, NY, 2022), 17-20, 47-48.

³³⁶ *Ibid*, 43-47.

³³⁷ *Ibid*, 47, 49.

Yet, as much as there was a desire to make change among the creators of Silicon Valley, there was still an equally deep-seated desire to be a successful business. Within in every business there are different meters utilized to determine whether the business is successful, for some its wealth alone; for the platforms and businesses that came out of Silicon Valley the meter of success is engagement.³³⁸ Ironically, as social beings one of the essential aspects of being human is engagement, through communication and proximity to others.³³⁹ Outside of revolutionizing the world social media creators were seeking to determine “how do we play on people’s human needs to claim as much of their time and consciousness on our product.”³⁴⁰ How we can make our platform the most engaging possible so that in return we make the most money. And so, everything from people’s desires and needs to natural instincts were considered factors that could be utilized on people to be more engaged on their platforms.³⁴¹ From the start of its creation, manipulating people’s physical and mental need to be engaged and social was wrapped up into the overall business model of social media.³⁴²

A Brief Discussion on Algorithms: Who’s in Control

With the main focus of social-media creators being increasing engagement, the introduction of AI was quickly seen as beneficial to facilitate and increase engagement on platforms. As much as one often thinks that the trends of social media are determined by the interest of individuals, it is more so that social media determines the trends and interest of individuals. Social media is run completely by algorithms. Algorithms (or AI) are computer

³³⁸ Ibid, 23.

³³⁹ Ibid. Jessica Martino. “The Connection Prescription: Using the Power of Social Interactions and the Deep Desire for Connectedness to Empower Health and Wellness.” *National Library of Medicine*, 7 October 2015. Studies have shown that engagement and connection to others has various positive direct effects on people physical and mental health.

³⁴⁰ Fisher, *The Chaos Machine*, 25.

³⁴¹ Ibid. Martino, “The Connection Prescription,” n.p., the psychological implications of human connection, imply that it is important factor in determining the self and how one views themselves, the greater connection you have with others, the better you are able to focus on other psychological needs.

³⁴² Ibid, 24.

software that run a series of formulas to determine specific things about interaction or interest, constantly building and learning from the information that they acquire.³⁴³ Programmed by an engineer they are given specific tasks and build and learn from the directions they are initially given so that eventually they are able to do the job on their own.³⁴⁴ In relation to social media, algorithms are programmed to sort information based off of relevancy, over that of the time posted, so that individuals will only see content that will keep them the most engaged on the platform by constantly filtering every like, word and action in the posts that each individual interacts with and seeking to find more that matches the criteria found in the data they are acquiring.³⁴⁵

Early on in the implementation of algorithms, the program quickly determined that engagement happened the most when the content is more controversial or on the more extreme side of what is considered acceptable in society; this is called the conspiracy correlation effect.³⁴⁶ This effect states that if interested in conspiracy or idea A, one will also be interested in conspiracy or idea B, and the more radical these idea or conspiracy are the more engaged an individual will become.³⁴⁷ And so following what it had learned AI began to push content that fit this formula, creating individualized bubbles of content. Thus, the truth or relevancy of the content mattered less than if the content maintained the ideas the individual had.³⁴⁸ This would

³⁴³ Maria Alessandra Golino, "Algorithms in Social Media Platforms," *Institute for Internet and the Just Society*, 24 April 2021. <https://www.internetjustsociety.org/algorithms-in-social-media-platforms>.

³⁴⁴ Ibid.

³⁴⁵ Fisher, *The Chaos Machine*, 121.

³⁴⁶ Ibid, 65.

³⁴⁷ Ibid.

³⁴⁸ Sherry Turkle, *Reclaiming Conversation*, 50. Przemysław Majerczak, and Artur Strzelecki. "Trust, Media Credibility, Social Ties, and the Intention to Share towards Information Verification in an Age of Fake News." *National Library of Medicine: Behavioral Sciences* 12, no. 51. (Feb. 2022) doi:10.3390/bs1202005. A study done by Facebook further demonstrated that the creation of information bubbles was a two-way interaction. While algorithms push content bubbles, for those bubbles to initially be created users must interact and search for content that fits their interests, and continually interact with them after the bubble has been created. Individualized bubbles of content mean that most people will get content related to the field that interest them, for example, content related to Christianity is more likely to go to Christians or those interested in Christianity over that of non-believers.

be extended further as the algorithm found that the more emotional or moral the words are in the content, the more likely people are to engage in it, regardless of if it the content is true.³⁴⁹

This essentially led to algorithms functioning with this formula in mind: the more controversial and emotive the content, the greater the engagement. As the algorithm filters through the mass amount of content available they evaluate the words and actions in the videos interacted with the most, seeking to find content that will lead to more engagement and present it to the individual. The more the individual interacts with the content pushed towards them, the more AI will push that type of content to them, eventually leading AI to recommending or repeating content with the same particular idea. Often, this starts with a curious click, AI shows content that it knows an individual will find intriguing, either because of extreme nature or the interesting idea presented, as you interact with the content, either by rewatching the video, looking at the comments, or looking at the page of the user who made it, the AI begins to find more content related to that video and push it towards the individual to increase engagement.

This repetition of content leads to what psychologists call the illusory truth effect in the brains, which is essentially the brains response to filtering through mass amounts of information.³⁵⁰ When the brain is bombarded with lots of information, such as scrolling through TikTok for hours on end, it makes shortcuts to determine what should be considered true and what is false, based on familiarity.³⁵¹ As our brains continuously see, read or hear something over and over again we will begin to consider it to be true merely because our brains recognize it

³⁴⁹ Fisher, *The Chaos Machine*, 65. Majerczak, "Trust, Media Credibility," 2.2, if the content creates an emotional response, then users are more likely to engage more with it. This would lead to the phenomenon of clickbait, in which users would play on the algorithms tendency to push emotive or sensational content, by making videos that fit the criteria to get more views and interaction.

³⁵⁰ Ibid, 125. Hassan, A., & Barber, S. J. "The effects of repetition frequency on the illusory truth effect," *Cognitive Research: Principles and Implications*, 6, no. 38.

³⁵¹ Fisher, *The Chaos Machine*, 125. Hassen, "The effect of repetition frequency", n.p. Studies have shown that just 2-4times of repetition for our brain to start considering it to be true, as the number increases the greater the perceived truthfulness is engrained in an individual's brain.

as familiar. Since AI is unconcerned in seeking the truth of the content or the effect that false or controversial content may have, it continually pushes individuals to watch or read the same content because it knows that content is engaging. This leads people to confuse what is true with what is familiar even if that familiar thing is completely outrageous.³⁵²

This effect, paired with the creators' understanding that people are more likely to act on or believe/engage in things that they feel are collectively being acted on (meaning that the more people see someone's feed, who they are following, and how many likes they receive a post), creates an internal and external common consensus that the greater the number is the more likely it is to be trusted and followed as true.³⁵³ This effect and the illusory effect create a dangerous manipulation which results in people internalizing content as true when in reality it may be merely familiar, because AI has made it to be.³⁵⁴ And so, while algorithms are increasingly successful at what they do, in so far as engagement on social media has continually grown in influence and use since their implementation, trust in social media, even though false information is being disseminated, is the highest it has ever been in history.³⁵⁵

Engage the Brain

Social Media and Identity, community

Identity

As creators continued to test different techniques to increase engagement on social media they found that the most fundamental aspect to achieve and maintain engagement is identity and

³⁵² Ibid, 125-126

³⁵³ Ibid, this is one of the first discoveries that social media creators found about their creation. With the introduction of the news feed on Facebook people were able to be notified about every person followed, status updated and groups they were enlisted in, and Facebook found that was even those who claimed to not like the platform, were more willing to engage in it, because they saw that others were.

³⁵⁴ Ibid.

³⁵⁵ Jacob Liedke and Jeffery Gottfried. "U.S. adults under 30 now trust information from social media almost as much as from national news outlets," *Pew Research Center*, 27 October 2022. A recent Pew study showed that adults under 30 now trust information from social media almost as much as from national news outlets.

community; specifically, how it is expressed, created and utilized in individuals views of the world.³⁵⁶ In a social setting identity is how one bonds themselves to others, rooted in those they are around and what the group has determined is needed to be accepted.³⁵⁷ Our community shapes how one sees himself/herself and others; when people either fit the mold or threaten the safety of both an identity or community, polarization is the response.³⁵⁸ Social media rather than providing a means to understand others seeks to portray identity in a polarized way, in an “us” vs “them” mode, so that individuals begin to only interact and follow those who think, look and affirm what they believe, taking away room for growth that is found in communities with differentiated thoughts and experiences.³⁵⁹

Outside of social media, identity is shaped by the community that you actively do life with; those who help you determine your beliefs, ideas and attitudes, the people who have your trust or are credible are so, because of collective experiences that have bonded you over time.³⁶⁰ On social media trust is not built on collective experience and affirmation from the community but the identity that they present.³⁶¹ Over 60% of Gen-Z turn to social media platforms to get news and information, yet even if the influencer’s credibility to share information is dubious because they share a mutual identity with the Gen-Z specifically, they are trusted.³⁶² With the loss of collective experience forming credibility, and mere familiarity leading to trust, there is a greater risk of believing misinformation.³⁶³ This leads to identity and community being built

³⁵⁶ Fisher, *The Chaos Machine*, 31-32.

³⁵⁷ Ibid. Uğur Gündüz, “The Effect of Social Media on Identity Construction,” *Mediterranean Journal of Social Sciences* 8, no. 5 (2017): 85–92, <https://doi.org/10.1515/mjss-2017-0026>, 86. Our identity or sense of self is developed through our interaction with other. Psychologically, one cannot establish who they are without others. The contribution of social media shifts how this happens.

³⁵⁸ Ibid.

³⁵⁹ Ibid. Gündüz, “The Effect of Social Media on Identity Construction,” 89.

³⁶⁰ Ibid. Neda-John, “Why Generation Z Falls for Online Misinformation,” n.p.

³⁶¹ Neda-John, “Why Generation Z Falls for Online Misinformation,” n.p.

³⁶² Ibid.

³⁶³ Hassen, “The effect of repetition frequency”, n.p. The illusory effect and how trust is built is discussed in the section above, the combination of mutual identity and repetition of content increase the likelihood that the content shown will be internalized as truth.

around a *sense* of community or identity rather than being in an actual, proximate that works to formulate your identity.³⁶⁴ When we build our communities and identity around those who seem to be like us, we lose the ability to ever truly know them or be known, as there is a complacency that does not call for push-back, leading individuals to be stagnate in who one is and what one believes, as there is nothing ever testing those beliefs. This is the result of constant affirmation.³⁶⁵

By playing on this sense of mutual identity and community, people are more likely to interact with one another because they feel a common sense of self. At the same time by keeping individuals in bubbles of information and then occasionally showing content that goes against it, AI can increase engagement, as people feel the need to defend and follow that which goes against what they have formulated to be true or best. This constant sense of polarization is what leads to more engagement and interaction: the more divided, the greater the engagement, especially when one group is interrupted by an opposing force.

Along with playing on identity to increase engagement, social media calls one to adapt oneself to fit the mold that it says our identity should be rooted in. We adapt ourselves and what we present about ourselves to the rules and understanding that social media says we should have. When we post, the likes and comments we receive seem to confirm that how we are acting or projecting ourselves is being done in a way that the community we are in sees us as socially acceptable.³⁶⁶ It plays on our natural instincts or sociometer, which is our brain's unconscious

³⁶⁴ Turkle, *Reclaiming Conversation*, 173.

³⁶⁵ Ibid. Jay Y. Kim. *Analog Church: Why We Need Real People, Places, and Things in the Digital Age*. (InterVarsity Press: Downers Grove, IL, 2022), 107. One of the most likable aspects of social media is that you make it what you want it to be; in relation to entertainment this is very appealing. When applied to community it means that if you don't like someone or what they post you can easily unfollow or block them. While this is sustainable on social platform, it shifts our understanding of community to something that can be easily customizable when in reality this is not always the case.

³⁶⁶ Fisher, *The Chaos Machine*, 31.

monitor of those around us, and amplifies it in a scalable manner.³⁶⁷ Over time we begin to associate the affirmation that one receives in community with the affirmation that a certain number of likes brings us, more-so we begin to associate those likes as a means to feel happier or better about ourselves.³⁶⁸

Social media exploits the fact the “like” button and the affirmation it brings, sends dopamine to the brain, and this in turn causes the brain to associate social media as the means to receive the feeling of happiness or affirmation, that one would normally find in community.³⁶⁹ This result is reflective of addiction, in as much as regardless if one wants to go back to the source of dopamine they continually return to it out of hope that they will receive a reward for the action, in this case likes and comments.³⁷⁰ As time goes on the ties to social media seemingly only get stronger, increasing the likelihood of returning to the platform to get information about ourselves and others.³⁷¹

As our identity is shaped by social media and its approval, humans’ natural tendencies are to keep shifting themselves to fit into that which gives the most affirmation or that which gives the most likes, through following the latest trends or only presenting aspects of oneself that fit the current mold of acceptance. The problem with this is that we have a numerical meter of approval and connection, through the number of likes, with an unknown medium controlling the distribution.³⁷² While it seems to be a two-party interaction, you, and the community, in reality it is controlled by an automated system, AI, that has no interest in how approval shapes your

³⁶⁷ Ibid, 29.

³⁶⁸ Ibid, 26, 31.

³⁶⁹ Ibid. Kim, *Analog Church*, 134-137. The official terminology for this effect is intermittent variable awards and which is essentially the concept where if one receives rewards after doing an action a certain number of times, they will continually do that action with hopes of receiving the reward again.

³⁷⁰ Shatzer, *Transhumanism and the Image of God*, 22.

³⁷¹ Emily A. Vogles, Risa Gelles-Watnick and Navid Massrat. “Teens, social media and Technology 2022.” *Pew Research Center*, 10 August 2022. 54% of Gen-Z has stated that they would have difficulty decreasing or getting rid of social media, even with the belief that they use it to much.

³⁷² Fisher, *The Chaos Machine*, 31.

identity. Rather it is built to increase engagement so that one day one's post may have thousands of likes and approval and the next it may be distributed to a group that seeks to tear down all that you have shared.³⁷³ The indifference within social media of how the platform affects how an individual sees themselves works to create a greater bond to social media in the individual, as they constantly return with hope that the next time will be one that gives them the dopamine, guidance and approval the individual is seeking.³⁷⁴

Community

Like identity, social media seeks to redefine community so that we are more engaged in the platform. Early on in social media's creation, they came upon a crucial hinderance to their growth, i.e., people were very unlikely to engage with those outside of their natural limits of community. People seemed to be interacting with an average of 150-200 people on social media.³⁷⁵ This reflected the Dunbar's Number, which is the proposed theory that people are only able to have true meaningful relationships with approximately 150 people; anymore and it pushes our cognitive abilities beyond what is natural and places extra stress and mistrust on the individual.³⁷⁶ Essentially, the more people you 'know or are trying to have a meaningful relationship with, the less likely you are to truly know them. The Dunbar Number itself has been heavily debated since it was first proposed in the 90's and in the last ten years there has been more and more evidence that it may not be accurate.³⁷⁷ The main point of contention stems from the different definitions of a relationship; however I will use the definition that Dunbar follows

³⁷³Ibid, 31.

³⁷⁴ Ibid.

³⁷⁵ Ibid, 62-64.

³⁷⁶ Ibid.

³⁷⁷ Jan de Ruiter, Gavin Weston, and Stephen M. Lyon. "Dunbar's Number: Group Size and Brain Physiology in Humans Reexamined." *American Anthropologist* 113, no. 4 (2011): 557-68. <http://www.jstor.org/stable/41407513>. 559. Jan de, et al. suggest that Dunbar's Number has not been researched enough to be taken with such authority and that there are too many other variables that suggest humans are able to be in larger groups than 150.

which is that a relationship can only be defined as a connection to someone strong enough that one would feel comfortable walking up to and starting a conversation with if seen randomly on the streets. It is not merely having an awareness of an individual or superficial relation found of social media, but being truly comfortable to approach individuals and do day to day life with them.³⁷⁸ Further the disputes surrounding the Dunbar limit notwithstanding, the study did demonstrate that, while individuals are capable of having relationships with more than 150, the likelihood of them being wholistically healthy begins to decrease as the number of people increases.³⁷⁹

Because there was an undeniable tendency of people to only have about 150 “friends” on social media, expanding people’s orbit was necessary if the company was going to continue growing in size/revenue.³⁸⁰ Their solution, begin showing people other people that were relevant to them, friends of friends of friends, making conversation groups that were in masse and allowed individuals to converse about their interests even if they had never met. Community was no longer those you interacted with on the daily, but anyone who could have potential connection to you and sometimes even those who had no connection to you except the social media platform you were on. For the first time you could follow and feel a part the of daily aspects of someone’s life- or the aspects that they wanted you to see- without ever having to meet them. You could know everyone, without ever having a meaningful conversation or participating in their daily life except for the stories shown on a screen. Ironically, even with elevated connection depression, anxiety and isolation are the highest they have ever been, especially among Gen-Z.³⁸¹ The main

³⁷⁸ Ibid. Jenny Gross. “Can you have more than 150 friends?” (New York Times: New York, NY, 11 May 2021), n.p.

³⁷⁹ Fisher, *The Chaos Machine*, 63-64.

³⁸⁰ Ibid. Weather this had anything to do with the Dunbar limit it did change the fact that for a brief period of time followers/following on social media plateaued at approximately 150 followers.

³⁸¹ Abby Bowler. “Isolation Among Generation Z in the United States.” *Ballard Brief*. April 2020. www.ballardbrief.org. In a recent study Gen-Z was labeled the loneliest generation ever, while there are other factors other than social media involved in this, it held a significant influence on this suggestion.

reason for this, while social media “connects” people, it does not provide the necessary engagement and community that individuals need; it provides partial aspects of community but seemingly cannot be the source of community in and of itself.

Community Redefined: The 2020 Pandemic and the Rise of the Nondenominational Church Structure

In 2020 the world was disrupted by the global pandemic, Covid-19 shutdown the world and meeting in person was no longer an option, by mandate of the government. Life went at a standstill and engaging in in-person community no longer was viable, so people turned to social media. By 2020 there was already an awareness that social media was not necessarily the healthiest options in terms of social interaction and community, but as the only option, the Church had to begin to use the platform at a capacity they had never used before.³⁸² Church became virtual, live-streamed and people met in groups over zoom. Leading up to the pandemic, there was already a trend in the Church to keep church engaging and interesting; the turn to online church upped the need to be engaging in their services they held, to balance worship, preaching, connection and entertainment.

Churches who had the resources prior to the pandemic were at an advantage and mass growth in following mega churches and charismatic pastors seemingly happened overnight. The churches that thrived the most in the pandemic environment had two main characteristics, being a mega church and being nondenominational. Mega churches seemed to thrive on the social media sphere, purely because they had the resources to do so and the demographic to do it well. As large churches, mega churches both had the means to produce media that was relevant and engaging and also the resources to spread that media across platforms. Further, according to the

³⁸² U.S. Surgeon General’s Advisory. *Social Media and Youth Mental Health*. Washington, D.C.: Office of the Surgeon General, 2023, 8-10.

Hartford Research Institute, between 20-25% of mega churches are young adults/college aged students; in other words, individuals who are well versed in social media and would easily be attracted to church on social media.³⁸³

The Nondenominational mega-church is a growing phenomenon in America and among Gen-Z, with 6 of the top 10 largest church congregations in America being non-denominational.³⁸⁴ In America the nondenominational church is approximately 4% of the US population making it the 3rd largest denomination in the United States outside of the Catholic and Southern Baptist Convention.³⁸⁵ The reasons for growth in the nondenominational church span from more autonomy, especially in leadership, to more racial and economic diversity in the congregation.³⁸⁶ While the structure of the nondenominational mega church can vary significantly, a large majority have similar means to structure themselves and the community they present.

Most non-denominational mega-churches are centered around the lead pastor.³⁸⁷ The pastor will do the majority (if not all) preaching for the church. On the church websites, the first thing that one will often see is the preacher, even before that of the church's beliefs, and on social media the pastor generally has more followers than the church themselves. Within the nondenominational structure is a strong emphasis on community: Sundays are for worship with a little community building, but one's major community should come from the small group they are in.³⁸⁸ These groups will have a variety of names, but their purpose is mostly the same,

³⁸³ Warren Bird and Scott Thumma. "Mega Church Report 2020: The Changing Reality in America's Largest Churches," *Hartford Institute for Religion Research*, 29.

³⁸⁴ Database of Mega Churches in the US, *Hartford Institute for Religion Research*, n.p.

³⁸⁵ Pew Research Center. "Modeling the Future of Religion in America," *Pew Research Center*, 13 September 2022.

³⁸⁶ Warren, *Mega church Report*, 13-15.

³⁸⁷ *Ibid.*

³⁸⁸ *Ibid.*, 8-9.

providing community that cannot be found in large church meetings.³⁸⁹ For some churches these groups even meet online, reflecting the idea that church community is no longer related to one's locational connectedness but can be created from any distance on social media. Community in the church today in its simplest form reflects that of social media, a mass group brought together through engagement and split into groups based off of common identity.

Social Media leader vs the Praxis leader

The growth of the nondenominational mega church has been largely influential on the Church and increasingly relevant on social media. Of the most followed pastors and Christian influencers on social media, more than 50% of them are from a nondenominational mega-church.³⁹⁰ And while not all non-denominational pastors or Church influencers are leaders of large mega churches, their large following function as an expansion of a congregation. While the pastor's role used to be clear in leading, connecting and guiding the congregation, with rise of Christian social media influencers, this role has shifted toward those who may have never stepped foot into or interacted with the church beyond social media. But leadership, like identity, is intricately connected to community. And although leadership has been defined and embodied in a variety of ways within the church, there are few attempts to articulate a model of social media leadership, especially one that focuses on how to engage users of social media engaged participants of the church.

Ironically, the same year (2020) that virtual church grew in prominence and people began to engage with each other extensively on social media, Terry Cross released a book on a theology of Ministry, where in it he discussed five praxis of leadership that he believed are necessary in any church leader to maintain church community and growth, both individually and

³⁸⁹ Ibid, 9.

³⁹⁰ Based off of data I collected.

wholistically.³⁹¹ These five praxes will be the standard I will utilize to determine the beneficial and negative aspects of Christian media influencers, the content they post and the impact of it compared to how Gen-Z utilizes it. One of the main purposes of a leader in the Church is to make room for others to be trained and ministered to in such a way that they can go out and serve the Kingdom of God, do the ministry that they are called to do and engage with Spirit as they do it (122). This creates a community that shares life together, going beyond merely preaching and teaching by being active in the lives of one another. Today's church structure, paired with the structure of social media often creates a clear divide between the leaders and the rest of the church, such that individuals are unable to be ministered and trained so that they can go out and serve the world and one another (124-126).

To rectify this, Cross describes 5 praxes that all ministerial leaders should do, each of which work to create better community, point the church back to the heart and desires of God and make Christ followers who are actively participating in the mission of Christ. The first of these is Interpretive leadership, which focuses on teaching the community to interpret the texts and how to apply it to their lives(144-147).³⁹² This is more than merely teaching the congregation how to read the bible and know what God or the text is teaching, but is meant to create understanding or interpretation that can be used in the context of both a congregation's life as a whole and for the individual(144-147). It is teaching individual Christians to be their own interpreter of the Bible, but in such a way that is truthful and sustainable.

³⁹¹Terry Cross, [*Serving the People of God's Presence*, (Grand Rapids, MI: Baker Academic, 2020)] utilizes pneumatologically/Pentecostal theology in his theology of ministry. While this paper does not advocate any theological perspective, I believe the five praxes are essential to any church and are the most reflective of how leaders should function in the church because it presents a holistic foundation for community centered church. The following pages will be taking information from pages 122-147 of *Serving the People of God's Presence*.

³⁹²Kim, *The Analog Church*, 144, 164-165. This calls for creating space for the Bible to be read and interpreted together beyond just simple preaching and teaching.

Relational leadership calls for curating an active community of believers who are focused on both serving those who are within the community and those who are outside of it in ministry (144,148). This praxis of leadership calls for creating fellowship among all the different relationships within the community and bringing reconciliation (when needed) between persons but also between the community and God (144, 148). The heart of relational leadership is creating a community who does life together, actively and at all times rather than just within the four walls of the church; rather than having a “sense” of community people are actually being “in” community.

Next, Implemental leadership focuses on creating strategies and structures so that the congregation can actively go out and do the mission of the gospel both locally and globally (144-145,147). Implemental leadership represents the concrete working of the movements and actions that happen within relational and interpretive leadership (144-145,147). It is the structure that allows the inward works to be displayed outwardly with wisdom (144-145,147). Implemental leadership often comprises of administrative aspects of leadership, that creates and recognizes the vision of the church and then brings together the people and resources to make it happen (144-145,147).

Spiritual leadership centers around making independent believers by equipping Christians both young and old through mentoring, prayer, reading the bible (both independently and together) and spiritual discipline (144-145,147). Its focus is on making room for God, for calling and gifts to be recognized, and for the believer to hear God/Spirit for themselves, independent of a mediator, so that they can go out and do what they are called to do (144-145,147). Further, within the realm of spiritual leadership is the ability to recognize and foster the spiritual gifts of the community (146).

Lastly, Active-reflective leadership, is the ability to learn and train others not only to think, but to do and then bring those actions back into the church to learn from them (145,148). Leading and teaching others to make room for Spirit in both worship and what happens within the church and the individual, so that it can be taken into the world, is the main theme within active-reflective leadership (145, 148). More-so this sphere of leadership focuses on taking time to recognize that there is more than just going and doing, but that there is also importance in being, in taking time to reflect on what is experienced, to understand the movements and service towards others so that faith is better understood and one's ability to minister to the world as an individual and community centered around Christ is strengthened (146, 148)

These 5 characteristics, work to create true community in the church and building up independent believers engaged in the expansion of the Kingdom of God, reducing the divide between the leader and the congregation. The problem with social media is that it becomes very difficult for all 5 of these characteristics to be maintained because it calls for individuals to be in direct community with one another and to be engaged followers of the Church over engaged followers of a person or platform. Social media may elicit aspects of leadership but not in such a way where these practices flourish because the environment that is called for is not available. It gives knowledge with no room for action or reflection (143).³⁹³ It does not allow for the "holy pause" (as Cross calls it) in which space is given for the Spirit and the Word of God to inspire our movements or even correct them so that we may bear presence of Christ to others faithfully, which can only happen when Christians are together (143).

³⁹³ Nicholas Carr, *The Shallows*, (New York, NY: Norton& Company, 2020). Further, as we discussed the effect of information overload has made it difficult to determine what is true, but also the ability to reflect and think deeply about anything. Shallows by Nicholas Carr expands more deeply on how social media and the internet overall have affected individuals' ability to think deeply.

As Christians there should be a balance between thinking-doing and doing-thinking, of looking inward and upward, and acting outward (143).³⁹⁴ Often we seek to feel God and do things, sperate from ability and gift that we are given from God of thinking about him (150). When the two spheres, doing and thinking, are separated, we lack the ability to fully experience what God desires for us. Social media often is used as a platform where these two spheres are separated when it could be a means to bridge them; where individuals are brought into a space that shares and makes room to learn about God and the community of believers, which leads into spaces that catalyzes thought focused on the Kingdom, which ultimately leads to community being formed around God and the Kingdom and individuals seeking to take what has been learned and actively go out and do what they have been thinking/learning about.³⁹⁵ Instead it is often used as a platform of teaching with no community to necessarily push and question that which is taught. The beauty of true and healthy leadership, community and identity in the Church is that all are able to grow, pursue that which God has called his people to, with accountability to ensure that it happens. When there is a clear divide between pastor and laity or between social media and the real world, this beauty can quickly be lost, as there is no cyclical space for people to engage as the people of God doing the mission of God.³⁹⁶

Social media is a place that was created for engagement, it is oriented around the person and by the content that person produces; therefore, when applied to the church the focus is the leader and influencer rather than the community. For the first time in history a generations identity is not being shaped by the community they are in, the people they are around and the

³⁹⁴ In Carr's book *The Shallows* he discusses how the internet and social media, have made it more difficult for people to think deeply. Social media has trained our minds to be actively distracted, this effect on our brains could be preventative to one's ability to think deeply about God at such a capacity that will allow for deeper communion and growth.

³⁹⁵ Jason Thacker, "Following @Jesus", *Digital Public Square*, Jason Thacker, (Brentwood, TN: B&H Academic, 2023), 313-315. Kim, *The Analog Church*, 20.

³⁹⁶ Cross, *Serving the People of God's Presence*, 143.

experiences they have with them, but by the entire world, by every event nearby and on the other side of the world, by various religions and beliefs, by the likes they receive from people next door and people they have never met. Each one seeking to show what to believe in, such that truth is determined by trends, and the amount of likes a video receives, and even if one is posting information that is correct, the increasing flood of misinformation, makes it difficult to differentiate between what is true and what seems to be.³⁹⁷ For Christian influencers, specifically a world in which content is directly correlated with affirmation, twisting the words one uses or the way in which one communicates an idea is dangerous because there is a semi-cognitive awareness that these shifts will lead to more engagement and affirmation of one's content, leading to unintentional, but also sometimes intentional, sharing of content that is not theological correct and seeking to make followers of themselves over followers of Christ. Yet, because it is approved by the platform they are on, bad theology can be presented and distributed.

Digital Ministry and Discipleship is for the Church

It would be neglectful to write a paper on Christian social media and not briefly discuss digital ministry and discipleship and its functioning presence with many churches. Since the early 2010s, various pastors, academics and authors have published books laying out frameworks to demonstrate the need of churches to participate in digital ministry or discipleship.³⁹⁸ The main idea of “digital ministry” and discipleship is using online platforms to share the gospel, form community and expand the church; the focus of the program models how to do it well, why it is relevant and what it will mean for the church if they do or do not choose to participate. It focuses on how a church on social media should not merely be posting content to simply because

³⁹⁷ Neda-John, “Why Generation Z Falls for Online Misinformation,” n.p.

³⁹⁸ In fact, the idea of digital ministry has grown so significantly over the years that some universities have implemented entire programs that are solely focused on becoming experts in digital ministry, offering courses that work to lead generations to better minister to others through social media platforms, for example Liberty University.

“everyone else is doing it” but that it requires a well thought out process where content is picked with purpose and specific intentions.³⁹⁹ If implemented, good digital media requires full and consistent commitment by the church and a good understanding of the both the theology of the church and of the functioning purpose of social media.⁴⁰⁰

In the early years of its development there was a hopeful optimism surrounding the potential of social media, that it would be one of the greatest and most powerful tools the church had seen in years and would be an uniting force among the church that would enable the Gospel to sustainably reach the ends of the earth.⁴⁰¹ As time has gone on and with greater understanding of what social media entails, how it works and the realistic impact that it can have, that idealism has vanished. Now the focus is on utilizing it as a tool to strength the church in and of itself, a connection to those who cannot be part of the church easily, and a means to bring the already known community together at a greater capacity.⁴⁰²

Many of the tools and methods of digital ministry revolve around using it as a platform to share and inform, to bridge the gap between what’s happening in the church and those who are outside of it, so that social media is used more-so to better a church rather than making church happen solely online.⁴⁰³ If we look at digital ministry as a bridge between the church and the world, then its place within the church as life giving is undeniable. It aligns with the ideas and praxis of leadership as it is working to bring people into the heart of the church, to make it so that individuals are doing life together, both in and outside of the church building an extension of

³⁹⁹ Meredith Gould, *The Social Media Gospel*, (Liturgical Press: Collegeville, MN, 2015), 39-41, 51-53.

⁴⁰⁰ Ibid, 134-135. Carolyn L. Gordon. “The art of Digital ministry the Good the bad and the Ugly.” *Fuller studio* 2023. To an extent many churches have recognized the importance and need for having a presence on social media. Yet while churches may be on social media, for every one church that does it well and with intention, there are 3 more who began to utilize social media and later neglected it, either out lack of commitment or lack of tools and understanding to do it well.

⁴⁰¹ Ibid, n.p.

⁴⁰² Gould, *The Social Media Gospel*, 18, 61.

⁴⁰³ Ibid. During my research I found some sources that suggest ways to bring church fully online; however, the top sources understand digital ministry as an extension of the church over that of being a church in and of itself.

the church community in and of itself. Digital ministry in this aspect, as a greater binding force between the church community and their mission, makes room for the church to go outside of the four walls of the church and take what is happening within the community to those outside of it, to share the movements of God with the world.

When social media is used as a means to inform the church about what is happening in the church community, i.e. events, summarization of previous teachings, giving tools to better be the church, and creating clear content that points back to Jesus and the church, then, whether one is part of the church or not, the beliefs and mission of the church shine through, tethering those outside the church, to the church community that is actively doing life together, that commune together in person rather than a presentation on social media.⁴⁰⁴ Strong digital ministry and discipleship understands the greatest focus should be on bringing people into the church instead of getting “followers” on social media. It understands that true community cannot happen solely online and that there is an undeniable importance of not only being part of the same identifying group, but actively doing life together.⁴⁰⁵ Yet the relevancy of the methods, ideas and implementation of digital ministry are only as great as the amount of people who have the knowledge to implement it well, and we find that much of the Christian content on social media is not coming from churches but independent Christians, creating a clear divide between churches on social media and influencers.

The Rise of the Influencer

The rise of social media influencers, who have a higher than average number of followers and who bring others into their lives and ideas, through pictures, videos and stories is one is one of

⁴⁰⁴ Kim, *The Analog Church*, 108-109. Gould, *The Social Media Gospel*, 51-53. Cross, *Serving the People of God's Presence*, 121. Using social media as the medium for those who are in the community of the church and those who are not allows social media to bridge the community on social media and the community happening within the church.

⁴⁰⁵ Kim, *The Analog Church*, 108-110. Gould, *The Social Media Gospel*, 139-141.

the most undeniable phenomena within social media.⁴⁰⁶ The most powerful of influencers have the ability to set trends and shift people's entire perspectives on situations; they are the trusted sources for world news, what you should be wearing, how you live your daily life and sometimes what truth is.⁴⁰⁷ Within the rise of secular social media influencers, there has also been the rise of Christian influencers, individuals who have made social media a platform to share encouragement, the gospel, devotionals, funny Christian content or how to live a good Christian lifestyle. While some Christian influencers are pastors of churches, many are individuals from the churches who began posting and quickly grew in following because of the relevant and relatable content they post.⁴⁰⁸

They are generally younger individuals who rose to influence overnight through a trending video or post, and the content they share falls into three categories: lifestyle, discipleship, or evangelism, often targeting Gen-Z. Since algorithms are the medium between influencers and individuals, and maintaining engagement is the objective of the algorithm, the focus becomes can Christian influencers provide the guidance that the people of the Church need to navigate and evaluate what AI puts in front of them and do they create content that is true rather than content that will only increase following in themselves? Is the community and teaching of social media sustainable in making strong disciples of Christ? In order to see if there is a disjuncture between social media creators' intentions and Gen-Z's usage, I interviewed a number of social media influencers and surveyed a 140 Gen-Zers. To this data I turn.

⁴⁰⁶ Chris Hazell, "The Rise of the Social Media Influencer," (Viewpoint: Point Lome Nazarene University, 2019). Jihye Kim and Minseong Kim, "Rise of Social Media Influencers as a New Marketing Channel: Focusing on the Roles of Psychological Well-Being and Perceived Social Responsibility among Consumers," *International journal of environmental Research and Public Health* 19, no.4 (February 2022). <https://doi.org/10.3390/ijerph19042362>.

⁴⁰⁷ Neda-John, "Why Generation Z Falls for Online Misinformation," n.p.

⁴⁰⁸ Based off of internal research of content creators, while many are associated to a church, they are not the leader of the church but independent. Equally, so many Christian content creators eventually start their own churches or join programs such as ARC, which is a church ministry established around planting churches with strong influential pastors. For many pastors' social media is a way to share life with their congregants, making them more approachable and relevant within the large churches they lead. Their content directs people off the platform, and into the church body or other relevant content/organizations.

1. Interview Methods.

To gain a better understanding of how in which Christian influencers determine the content they produce and what they hope to accomplish from it, and how they seek to utilize social media to make engaged followers of Christ and the Church we conducted a qualitative semi-structured interview with several Christian influencers and content creators on social media.

1.1. Recruitment

Interviewees were recruited through one main strategy: I used my own general knowledge of social media influencers on Instagram and TikTok and compiled a list of them. From there I utilized key words such as ‘Christian,’ ‘bible,’ ‘sin,’ ‘church,’ ‘God,’ and phrases such as ‘what does the bible say about __,’ to see which influencers were the top hits, as those who show up first are either the most engaged with or have content that the algorithm believed individuals will find engaging. All the key words were based off general church knowledge but were also relatively simple so that the top hits would be reflective of what the algorithm would produce with the simplest theological questions. I then compiled a list of the top hits from these key words and narrowed them down based off most followed individuals, the content they produced and the audience they seemed to be reaching. Then I began recruiting individuals by using various connections that I have within the greater social church network to contact individuals and ask them to complete the interview.

1.2. Participants

Because of the relatively short amount of time I had to complete my research, we choose to do only a few carefully screened yet diverse individuals for interviews so that content would be as broad but accurate as possible. I accumulated interviews from approximately 3 Christian

influencers/content creators (denoted as C1-C3 in findings), all within the U.S., from June 2023-August 2023. Further, each interview was approximately 30-45 minutes. Each of the interviewees either create and produce their own content or have helped manage and produce content for an individual, with accounts on either TikTok, Instagram or both, and have a follower counts that ranges between 50k to 5 million. Interviewees were all asked the same following questions, each of which left room for freedom to elaborate or for more questions to follow as the intention was to keep the interviews as conversational and open as possible.

1. How did you get started in social media? And why did you do it?
2. How do you determine what content you will post? Are you the one who post the content, or do you have other people who help you determine what to share?
3. Do you post more for the intention of sharing the Gospel, or teaching those who are already believers?
4. Do you think that social media is a consistent way for people to receive the spiritual formation/discipleship they need, if yes why, if not how do you try to connect your followers to the church or those who can provide that for them?
5. Do you consider using social media as a form of ministry and why?

Other questions that were asked were related to sources utilized to create content, understanding of community and struggles that they face on social media. For all individuals creating content for social media has been or is their official job. Two interviewees managed, produced or edit content for an influencer's social media (one did this and ran her own media) in an official capacity. The other interviewee runs their own account, which has led to speaking opportunities and other jobs due to their platform. The interviewees audiences within their platform spread across gen-Z in age range, gender, and denominational association. The

differentiation on how they run their platform and the audiences that they interact with allowed me to create a more overarching understanding of the themes that were presented.

1.3. Analysis

The interviews were coded using descriptive, value laden, qualitative thematic coding. The content from the interview were continually analyzed so that the themes and pattern discovered were as accurate as possible. All interviews were recorded and transcribed so that analysis could be done as accurately as possible.

2. Findings

2.1. *Why are Christian Creators on Social- Media*

While the interviewees each had their unique story on how they became Christian content creators, each had two commonalities in their stories: They enjoy the creativeness of social media and wanted or believed that it could be a platform to share/minister to those in and outside of the church. For interviewees C2 and C3, who both act as influencers on social media, they were clear that they had never expected to become as influential as they did, nor did they ever expect that being an influencer would ever become some type of occupation for them. In all instances it was a means to do something they enjoyed while mutually sharing about someone they loved (God).

2.1.1. How do Influencers determine what to post

The process of determining what to post differentiated greatly between those who help influencers make their content, C1-C2, versus influencers that make their content independently, C3. For interviewees who help others determine what to post there is a clear idea of what is going to be shared, the goal of that content and the input by the creator is mostly creative, with little input on the specific content being shared. Comparatively influencers who are running their

own platform determine what to post with two main strategies: Posting based off of what they are personally learning or studying and posting based off of their day to day lives, so that if there is a moment that seems relevant and from God, they share it.

Further, all participants, showed a strong inclination of ensuring that what they are posting is shared with accuracy and knowledge. For C3 and C2, the main way that they ensured that the content that are sharing is truthful, is making sure that some aspect of scripture is in the content they are posting. They believed that the more scripture orientated the content they post is, the less likely it will be taken out of context and the more reflective of the truth it will be. As C2 stated:

- *I always try to push the Bible in some way because the Bible never come back void, you can always be confident of the Truth of the Bible.*

C1 and C2 both indicated the importance of knowing what you are posting about and being knowledgeable in the Christian related topics you are sharing, whether that be incorporating scripture or utilizing the training that one has in official capacity (i.e., education) to share: being deeply knowledgeable of the content you are sharing, more than culturally aware of Christianity and what feels relevant, was important. More-so than other participants C1 emphasized the importance of knowing and sharing how you define different aspects of the church, including doctrine, community, and salvation, as they found that is where the most confusion comes from on Christian social media: lack of clarity in what they are teaching about and how they define what they are teaching about.

2.1.2. What are Christian Influencers Using Social- Media For.

Among the interviewees there was a common consensus that social media can be a platform to teach. For C2 and C3, they believed that social media is an important platform to

share the Gospel, each stating that they find it important that all the content they post points back to the Gospel. As C3 explained.

- *I try to make sure that all the content that I post, even if it's not explicitly sharing the Gospel, points back to Gospel so that even a non-believer or someone who has no Biblical or Christian understanding can get something from content posted.*

C1 and C2, both strongly suggested that social media is a very good platform to teach those who are already believers. C2 explained that they actively do this through focusing on practical aspects of being a Christian, teaching how to evangelize and equip believers, and sharing miracles or works that point and encourage believers and non-believers. As C1 explained, who seemed to have the strongest grasp on the inner working of social media.

- *As much as influencers or creators think their content is going to non-believers, just as much if not more is going to active Christians, so seeking to teach and equip them is just as important and relevant.*

2.2.Social Media, Spiritual Formation, Discipleship, and the Church

When discussing spiritual formation and discipleship and its practicality on social media, each interviewee had a similar understanding that social media is not a place that individuals can wholistically receive spiritual formation or discipleship. All placed a strong emphasis on the need to have church involvement in some capacity. C2 believes that spiritual formation/discipleship can happen on social media, but receiving it all from social media can easily lead to burnout because one does not also have strong church community and mentorship. C1, however, emphasized that people are willing and able to learn on social media, that there are many other areas on social media where influencers go deep on what they know, and people interact and absorb what is being taught. It's the church and Christian influencers who tend to

stay surface level when in reality people/Christians are willing to hear the hard stuff on social media. C1 asserted that, since social media is generally a reflection of reality the lack of depth on Christian social media may reflect a greater lack of depth in the Church itself.

2.2.1. Engaging in the Church

When discussing further what the response should be since social media is not the place to receive full discipleship and spiritual formation, interviewees explained how they seek to connect their followers to the church. C2 and C3, who are independent influencers creating and sharing content, explained how they seek to connect their followers to the church by using their platform to share with others the ministries and churches that they are interacting with and pointing their followers to do so as well. Whether that may be churches they are visiting, conference they attend, connecting individuals to apps or ministries that seek to connect individuals to a local church, or merely being open enough that people will feel comfortable to reach out and ask for direction on how to connect to the church.

All the interviewees held the same view that social media is a strong connection point for individuals to meet and interact with people who may never interact with the church without it. So, utilizing that connection point to be a bridge between the church/community and individuals is essential to their work on social media. As C3 expressed:

- *Especially for Gen-Z, people think that social media is the church and that they can get the same things from social media that they can at church, helping people see the importance of community off social media and seeking to point followers towards the church is so important to what a Christian influencer can do.*

C1, job is to help churches utilize social media well and effectively by leveraging the tool of social media on a strong foundation of understanding of who the church is and what the church is called to do.

2.3. Social-Media as a Ministry.

All the interviewees agreed that social media is undeniably a form of ministry. The exact reasoning for this varied but the common theme was that if social media is used well, you can actively see the fruits of people drawing closer to God and using what they learn to better live their lives with Christ. Another common theme in this response was the importance of being humble on social media, that it calls for constant awareness and inner reflection to discuss if it is being shared for one's own gain, views, and boost of ego or for the Kingdom and as a means to invite people into the church. When used to meet people where they are, Christian social media can look like an extension of sharing life in the church. As C1, however expressed social media as a ministry requires not only a desire to post to just post, but an understanding of social media, of why you are sharing and of the content that you share in and of itself, because if you are teaching but do not have a strong theological foundation, the impact of what you share will be lost.

3. Survey Methods

Considered the social media generation, Gen-Z collects information, interacts with each other, and understands their identity and community through social media.⁴⁰⁹ With the constant shifts, growth, and new developments within social media, it is difficult to maintain consistent and accurate understanding of how Gen-Z understands social media. There has been very little research on the influence that social media has had on Gen-Z, their understanding of the church,

⁴⁰⁹ Neda-John, "Why Generation Z Falls for Online Misinformation," n.p.

God or how impactful it has been to their overall lives. To gain a better conceptualization of how in which Gen-Z interacts with Christian social media, especially in comparison to how influencers understand their platforms, I conducted a structured survey/questionnaire of Gen-Z individuals, with qualitative questions that were then analyzed and translated into quantitative terms.

3.1. Recruitment

For the survey individuals were selected through three main strategies. First, I sent a link of the survey to various individuals that were connected or lead a church ministry; they then shared it with individuals. Secondly, I gave it to individuals who were willing to share it on their own personal social media platform. Lastly, we sent a mass email with the survey to all individuals within our school of ministry and asked them to participate if they fit the necessary criteria. Within each of these strategies we asked individuals to share the survey with other qualified individuals that they may have known. Further, all participants voluntarily participated in the survey.

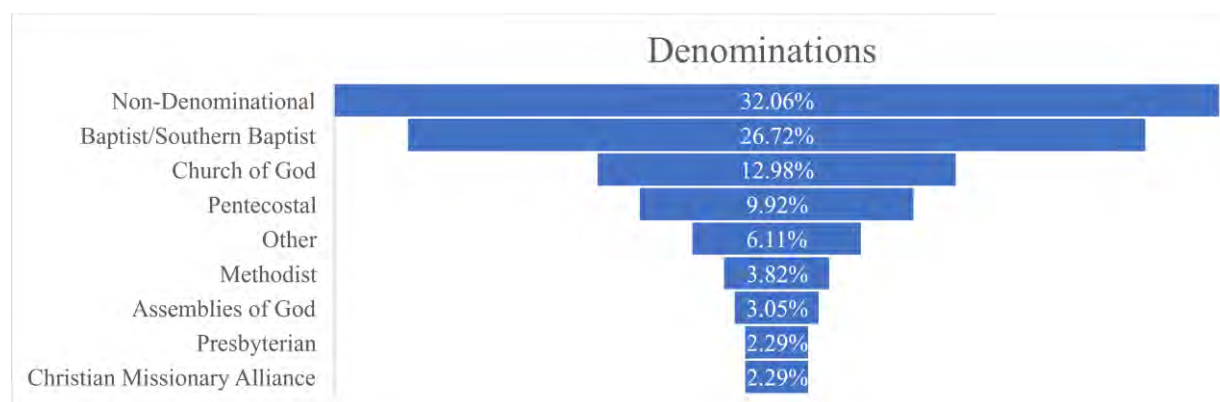
3.2. Participants

Due to time restrictions the survey was open for approximately 2 weeks before closing it to analyze the results. We concluded the survey with approximately 137 participants, a 77% completion rate, and a margin of error of +/-8%. The survey took approximately 5.5 min to complete consisted of 25 questions, which were focused on church participation, involvement with Christian social media, the relevancy of specific types of content produced on social media and the effects that Christian social media has had on their spiritual life.⁴¹⁰ The survey was open to all individuals aged 18-21, though we sought to focus on Christian college aged Gen-Z

⁴¹⁰ Appendix 1.1-23 for specific questions and results.

individuals, as they are the current medium age group within Gen-Z.⁴¹¹ The majority of individuals who participated were church goers, with 85.67%, stating they attend church 1-2 times of week. Of the participants 81.75% were female, and 18.25% were male.⁴¹² Of the participants the top 2 denominations were non-denominational (32.06%) and Southern Baptist/Baptist (26.72%).⁴¹³

Table 1:



3.3. Analysis

The surveys were sent out on an online survey platform, Survey Monkey. SurveyMonkey analyzes and quantifies the results from the survey, so I was able to give it specific parameters of how I wanted the data analyzed. From these results I was able demonstrate themes that were presented and how they compare to some of the data we received within the interviews as well as

⁴¹¹ Gopal P. Mahapatra, Naureen Bhullar and N., and Priyansha Gupta, "Gen Z: An Emerging Phenomenon" *NHRD Network Journal* 15, no. 2 (April 2022): 246–256, SAGE Journals Database <https://doi.org/10.1177/26314541221077137>. Michael Dimock, "Defining generations: Where Millennials end and Generation Z begins" *Pew Research Center*, 19 January 2019, <https://www.pewresearch.org/short-reads/2019/01/17/where-millennials-end-and-generation-z-begins/>. Gen-Z is commonly considered individuals born between 1997 to 2010, making the current medium age group being those aged approximately 18-21, with the lower end being 13-18 and the upper range being 22-26. Some groups argue that the end of Gen-Z is 2012, over 2010.

⁴¹² Which while on the higher end reflects the ration of men to women at Lee University where the majority of participants were from.

⁴¹³ See Table 1 for full denominational break down. Pew Research Center. "Modeling the Future of Religion in America," n.p. Reflective of the data which suggest that outside of Catholicism the top Christian denominations are Southern Baptist(2nd) and Non-denominational(3rd) within the U.S. Higher levels of non-denominationalism may reflection shift where young adults are more likely to identify as non-denominational than other age groups, potentially because of higher exposure to different denominational beliefs and practices through social media.

what these results mean regarding ecclesial application and influence of social media in the church.

4. Findings

4.1. *Christian Gen-Z is on Social-Media.*

Just as with the general Gen-Z population, most Christians aged 18–21 are on a social media platform. In our survey we found that 46% is on only Instagram and 51% are on both Instagram and TikTok, totaling in approximately 97% being on some type of social media platform and only less than 3% stating that they are on neither platform. Of the individuals who use Instagram, 92% watch reels or have watched reels at some time during their use of the platform. Of individuals who attend church between 1 a year to 1-2 times week, 78% follow a Christian Influencer or pastor, 21% see Christian content consistently on their feed, even if they don't follow any influencers and less than 1% never see or watch any Christian content on either of these platforms.

4.1.1. Gen-Z is Engaging with Christian Influencers

Not only are 18–21-year-olds following and watching Christian content on social media, but approximately 2 in every 3 Christian Gen-Z individuals have listened to a podcast or read a book by an influencer that they follow or have seen their content; meaning, the content that they are seeing on social media is being translated into interaction off the platform, indicating that there is a high enough level of trust toward Christian influencers to continual interaction with the teaching they provide. The top podcasts and books listed were not limited to pastors or educated individuals but influencers as well, see Table 2 for top listed podcasts and books they are interacting with.⁴¹⁴ Further, 60% of individuals have interacted with a creator's associated

⁴¹⁴ List is not in any particular order, based off of comment section of survey.

ministries or non-profits in someone way, including interacting with apps, websites, monthly memberships and attending conferences or events given by these individuals. Not only are individuals interacting with the Christian influencers and content, but they are internalizing and sharing what they learn or hear on Christian social media off the platform they are on; with over 80% of individuals stated that they have utilized or shared the content that they hear on Instagram and TikTok, either through text, conversation, reposting content, or any other means that allows one to share content.

Table 2:

PODCASTS	CREATORS/AUTHORS
BIBLE THINKER	Sadie Robertson and Family
AS FOR ME AND MY HOUSE	Jackie and Preston Perry
CHRIST IS THE CURE	YWAM/Circuit Riders/The Send
UNTO DEATH	Elijah Lamb
JESUS TALKS PODCAST	Craig Groeschel
WHOA THAT'S GOOD	John Mark Comer
CAN I SAY THAT?	David Platt
30 MINUTES WITH THE PERRY'S	Bob Goff
GOD IS WITHIN HER	Bethany Hamilton
AMEN PODCAST	Matt Chandler
TRANSFORMATION CHURCH	Rick Wilkerson Jr.
PODCAST	Madi Prewett Troutt
THEOLOGY IN THE RAW	Natasha Bure
ASK N.T. WRIGHT ANYTHING	Chad Veach
RELATABLE WITH ALLIE BETH	Cia
STUCKEY	Yasmin
SAVED NOT SOFT	John Lindell
PEACEING IT BACK TOGETHER	Tony Evans
THAT SOUNDS FUN WITH ANNIE	Schnacky Family
F. DOWNS	Various Worship Artist
FEMINE NOT FEMINIST	Miscellaneous Creators
RED PEN LOGIC	Various Pastors- Celebrity and Individual's Local
GIRLS GONE BIBLE	Church Pastors
CHISELED AND CALLED	
KEEP IT REAL	
RADICAL	
YTH NATION PODCAST	
DEEPEN WITH PASTOR JOBY	
MARTIN	
THE BRYCE CRAWFORD	
PODCAST	
THE PORCH	
RANDOM SERMONS OF	
CHURCHES	

4.2. Gen-Z (18-21), Social-Media and Scripture

4.2.1. Scripture Matters

Having scripture in content that is being utilized well is important to Christians with 86% stating that having scripture in content is important. Some of the main themes found:

- *It provides proof and credibility that what is being shared is true.*
- *The more Biblical it is the easier it is to take what is being told is true.*
- *People can lie, but the Bible is the Truth, so having scripture in content helps to determine if what is being shared is true.*
- *“Yes, because it validates a person’s thoughts. If you provide a scripture in support of what you’re saying, it’ll tell us how God feels about the same thing. Sometimes scripture is taken out of context but even so, by providing the scripture, you get to decide how God feels about it.”*

The credibility of content is seemingly rooted in understanding that scripture is truth, therefore if content uses scripture, it makes content more likely to be true. Thus, making Gen-Z seem to possess a view of scripture and its relevancy within Christianity.

Yet, while having scripture in social media content is important, its presence does not imply that scripture will have a greater impact on an individual when watching/engaging with content. When asked how impactful scripture in content really is to 18–21-year-olds, only 78% stated that it has a significant impact on them, compared to 86% who said that it is important for scripture to be in social media content. The other 22% stated that they have never paid attention to the impact scripture in content seems to have on them or do not care as long as the content sounds right in and of itself.

4.2.2. Scripture Does Not Equal Full Confidence.

While using scripture is important to Gen-Z and determining if influencers and their content is trustworthy, 86% has been concerned that the Christian content that they watch is wrong or untrue; meaning that, although scripture in content increase trust in the influencer and the legitimacy of the content they are sharing, there is still a strong feeling of concern among Gen-Z that content still may be wholistically untrue or fake/misinformation. The main themes found surrounding why individuals are often concerned that content is not true were:

- *People often use scripture out of context or manipulate scripture to fit their own personal agenda.*
- *Scripture is being translated differently than they had heard before or the person sharing doesn't seem to know how to interpret scripture well.*
- *The content is too showy or seems to be being presented only to gain views/followers/personal promotion.*
- *People are sharing merely because they can and because it sounds right or relevant.*
- *Scripture or Christianity are being used for political means.*
- *Using Scripture to be judgmental of other Christians, denominations or devaluing certain aspects of Christianity and saying it is Christian because of their use of scripture.*

So, while the presence of scripture within Christian content seems to immediately increase the assumed integrity, authority, and trust that Christian influencer have with their following, the general awareness that there is misinformation on social media seems to affect the ability for content to have a consistent impact on individuals.

4.3. Gen-Z Wants More.

Is Christian social media affected by the divisive features of AI? All individuals stated that at some point Christian social media has been on some level divisive or surface level. In terms of divisiveness this can be attributed to the already divisive aspects of the Church being portrayed on the social media, which is exemplified by social media algorithms that seek to divide through content bubbles. In terms of surface levelness this indicates a lack of content that individuals desire being created and put on social media.

Are Christian social media influencer providing content that Gen-Z wants or even needs? In relation to Christian social media being surface level, 76% of individuals stated that they believe that influencers and pastors on Christian social media should address more difficult topics. Some of the main topics suggested were:

- *Apologetics, Theology, Doctrine, Christology.*
- *LGBTQIA+, Sex, Identity, how Christian's should approach and interact with real world issues.*
- *Sin, Types of Sin, Effects of Sin, Why People Struggle.*
- *Generally, deeper conversation, especially surrounding the Gospel.*
- *Mental Health and the Church.*
- *Biblical Interpretation.*
- *What it means to a part of the Church/What the Church is.*
- *How to be a Christian, practically, daily, and realistically, that isn't merely motivational.*

On the other side of this question only 13% of individuals stated that it made no difference to them if deeper topics were discussed on social media and 12% stated that they did

not feel that individuals on Christian social media should talk about more difficult topics. Some of the reason stated:

- *It is important for the church to dive into deeper topics, but social media is not the place to do that.*
- *“It depends on the subject. Some topics need to be discussed within a local church (so that the) message can be catered towards that audience. Sometimes social media talks about topics broadly which leads to confusion and more questions.”*
- *“(While) I do believe that Christians and churches in general should 100% talk more about difficult or “un-touched” topics, such as the very prevalent struggles with gender and marriage and sexuality. However, I’m not sure if social media is the place for those conversations because I don’t think it would allow for the same genuine growth, understanding, and healing that “in person” community can (provide).”*

Even those who do not think that Christian influencers and pastors should talk about more difficult topics on social media demonstrated a genuine desire for the Church in and of itself to discuss more difficult or deeper topics. Presenting the idea that it is not merely those on Christian social media who believe that more difficult topics should be discussed, but there is a general sentiment that on or off social media, young Christian’s desire for the church to address the deeper matters of the Church and Christianity.

4.4. Gen-Z and What Christian Social-Media Should Be Used For

How 18–21-year-olds believe Christian social media should be used helps us to better understand the influence that these platforms have on them. In the survey we found that Gen-Z believes that many of the overarching Christian aspects can be done successfully on social media. By asking individuals to rate the practicality of the following 4 Christian aspects:

Discipleship/Spiritual Formation, Community, Sharing the Gospel, and Bible

Teaching/Devotionals, I was able to get a clearer understanding of how Gen-Z views the different practices done on Christian social media. Bible Teaching/Devotionals were considered the most practical with 88% stating that it was practical/very practical to do-so on social media. Immediately following was Sharing the Gospel, with 85% stating that it was practical/very practical to share the Gospel on social media. Discipleship/Spiritual Formation and Community were both split approximately 50/50. For Discipleship/Spiritual Formation, 29% stated that it was very impractical/impractical to be discipled on social media, 21% said it was neither practical or impractical and 50% said it was practical/very practical. Regarding community, 26% said it was very impractical/impractical to have community on social media, 23% said it was neither practical or impractical and the remaining 51% found it to be practical/very practical.

Overall, this indicates that individuals between 18-21 feel that practices related to being informed, i.e., hearing the Gospel and or learning about scripture, are possible on social media and should be done on these platforms. Practices that consistently require in person interaction or engagement i.e., Discipleship/spiritual formation and community are not as supported on social media, and some believe should not be done on the platform.

4.4.1. Gen-Z, Church, and Community

Later in the survey I explored Gen-Z's view of community at a deeper level to help better determine if individuals believe that social media is a relevant form of community, especially in relation to Christian community. I began by expanding the earlier question on the practicality of community and asked if individuals believed that social media can be a sustainable form of community. While only 11.11% stated yes, 44% stated that it could be sustainable sometimes. The remaining 45% stated no it could not be a sustainable form of community, further

demonstrating that there is a divide among Gen-Z on community and its place with Christians on social media. Following this question individuals were then given the option to share commentary on their thoughts regarding social media and community. After analyzing the comments these main themes were presented regarding their view of community on social media:

- *It can be the start of community, but it must eventually be taken offline.*
- *It can be good community but can't be the only community.*
- *People need real human interaction.*
- *It can connect people who may not be able to connect with others easily.*
- *It allows you to be brought closer and stay connected to people with the same beliefs and values as you.*
- *Community on social media is not fully authentic like in person community... it can be the start but for deep community to happen, it must be in person.*

These themes indicate Gen-Z understands the benefit of social media in stimulating community and connecting others, but that it cannot be the only source of community, nor does it ever allow for deep connection that individuals experience when together.

The last question asked in relation to community was if individuals have ever substituted church, quiet time, or community with the content on Christian social media. Approximately 37% said Yes, therefore demonstrating that at 1 out of 3 Christian Gen-Zers have at one point, or another looked to social media to fulfill community, spiritual development and/or the entire practice of attending church itself, making it clear that regardless of how the church may see it, those 18-21 understand and view social-media to be a major factor and influence on their spiritual life.

4.5. Gen-Z, Social-Media, and Spiritual Life

4.5.1. Is it Helping or Hurting?

The perceived positive or negative impact that Christian social media has had on individual's spiritual life allows us to better understand how relevant Christian social media is to the Church. When asked how beneficial or hurtful Christian social media has been to individual's relationship with God, 34% individuals stated that social media has been solely beneficial to their relationship with God, 50% stated that it has been both beneficial and hurtful, 5% stated that it has only been hurtful and 11% stated it has had no effect on their relationship with God. Thus, a majority reported that social media is both helpful and hurtful; and that the content from social media has a significant enough impact that individuals feel that it has had a noticeable positive or negative impact on their spiritual life.

When further asked in which aspects social media has affected their relationship with God the responses were the following: 36% stated it has affected their discipleship, 62% their Spiritual formation, 73% stated it has made them feel comforted or seen, 82% stated that it has made them feel convicted. The high responses of feeling conviction or comforted, suggest that the content on Christian social media generally leads to feelings that question or affirm the actions or identity of individual. Depending on the content that they see and whether it leads to affirmation or condemnation of the individual will determine if the Christian content is seen as harmful or beneficial to an individual's relationship with God. More-so it demonstrates that whether beneficial, harmful or both, content from Christian social media is impactful enough that it can affect one's relationship with God, and thus their theology and understanding of the Church.

4.5.2. Christian Social-Media and Understanding the Church

With social media being one of the main sources to acquire information and understanding on people, places, and specific topics, determining if it has influenced Gen-Zers' view of the church is crucial. Regarding church, theology, and doctrine, 52% of 18–21-year-olds stated that Christian social media has provided individuals a better understanding of Christianity and the church. Some of the main themes presented regarding this were Christian Social-Media has:

- *Expanded their view of the church beyond what they have already seen, especially outside their own church/denomination.*
- *Diversified their view of the church.*
- *Provided different perspectives of church, theology, and God.*
- *Broadened their perspective of God and who God is.*
- *Provided a better overall understanding of Church culture.*
- *Strengthened and/or solidified their reasons for being a Christian.*

Thus, despite the sentiments of distrust, divisiveness, and surface-levelness on Christian social media, Gen-Zers see and get a significant amount of their understanding of the church, doctrine, and God from the content that they watch and read on social media. It would be interesting to see if the broadening of perspective and hearing consistently different theology and doctrine has contributed to the higher number of individuals who consider themselves to be non-denominational.

4.5.3. Gen-Z Goes to Technology First.

Whether social media or Google, 70% of 18–21-year-olds are more likely to use technology to look up a question related to Christianity or the Church prior to asking a church leader for guidance. Further, with what is believed to be a continual increase of reliance on social

media, it is probable that individuals utilize social media to answer Christian related questions just as much as they utilize google or other search engines. Of those who stated that they go to technology first, 54% stated that this has often led to more confusion on the topic they were researching because:

- *It leads to more questions than answers.*
- *Too much information to filter through and difficult to determine which is true and which is not.*
- *Seems to always push them to the more extreme side of the topic.*
- *Provides opinions over fact.*
- *Answers are too vague or too complicated/conflicting.*

So, while Gen-Z often has resources to find answers to the questions, they do not necessarily have to skills or confidence to decipher the content that they find.

5. Discussion

5.1 Limitations of Interviews and Survey

The findings within the interview were very relevant in that they gave a small glimpse into how Christian social media influencers perceive themselves and the content that they post. However, the results of the study only reflect a small pool of influencers in the ever growing and shifting sphere of social media. It also only considers established social media influencers and the content that they post; it does not consider “overnight sensations” or viral content that has no connection to a specific/established user. Future research would seek to interview more individuals, have them participate in a more in-depth interview, ask them to discuss their perception of their own content, including complementary methods such as analysis of content and how the themes within content compare to the themes that were suggested within the

interview. This would allow us to see if influencers' perception of themselves and their intentions for content matches the content that they produce. Further, it would provide better understanding of how influencers seek to engage with their followers and how or if this engagement seeks to point followers to the church or to themselves. While the survey provided some insight on the college age young adults, future research would seek to evaluate the full scope of Gen-Z, 15-26 and see how or if the responses shift significantly, would include more males, ask more clarifying questions regarding ethnicity, denomination, education, and geographical location, all of which could help to determine if perception of Christian social media shifts depending on which parameter that they fit within.

Gen-Z Christian Social-Media, Influencers, and the 5 Praxis of Leadership: Where do we go from here?

It is undeniable that young Christian adults today are engaging and being guided by Christian social media and influencers. In light of this, should influencers not be charged with the same responsibility of leaders in the church? While influencers have some sense that their place on social media is not a substitute for the church, but an aid to it, there is a clear gap between the church, influencers, and young Gen-Z Christians. Independent influencers are held in a higher regard than the church and when a leader is engaged with at a higher level than God and the community of believers the ability for the church to grow and for individuals to step into their calling diminishes as well.⁴¹⁵

Leadership and community will look different on social media, but the purpose should be the same: making engaged disciples of Christ and the Church. On a platform built around profiting from people's desire for engagement, having a strong foundation of leadership that

⁴¹⁵ Cross, *Serving the People of God's Presence*, 133-135.

seeks to make engaged followers of Christ is crucial. The purpose of the 5 praxes of leadership is to make independent believers that are participating in the community of the church, the movement of the Spirit and the overall heart and mission of Christ. By adapting the 5 praxes to the setting of Christian social media influencers and the leadership they provide, I will present an ecclesial foundation for how social media can be utilized to make engaged followers of Christ over engaged followers of other Christians. Thus, demonstrating the influence and impact that social media can have on Gen-Z when social media is used as a tool to leverage the heart and mission of the church rather than deter, lessen, or divide it.

Interpretive Social-Media Leadership

Of all the praxes, interpretive leadership is the one that can be oriented into social media easiest, as it mainly entails providing tools and content that allows for users to better engage with the teachings of God, the Word, and how to both apply it to their lives and utilize it to teach others. For it to be implemented well however, there must first be a shift in the practice of how the church and influencers utilize the Word on social media. Often content on social media is focused on the feel-factor, of making people feel seen, convicted, comforted, or loved, which teaches individuals to read the bible, see God, and Christianity as another source to get approval that one desires. Just as users engage in social media and seek likes/followers to gain approval, engaging with scripture becomes a means to gain approval and comfort in who one is.⁴¹⁶ Scripture, thus becomes a quick-fix inspiration where hearing the bible consistently is conflated with having understanding or being transformed by it.⁴¹⁷ To do interpretive leadership well, a leader must first refrain from utilizing quick fix devotionals by creating content that points to the holistic nature of the Gospel, by engaging in the bigger picture of Christ and his church, creating

⁴¹⁶ Kim, *The Analog Church*, 144-146.

⁴¹⁷ Ibid.

opportunities to go deeper with clarity, and providing content that young Christians are seeking to engage in, over that of a watered-down gospel.⁴¹⁸

Balancing between providing short interpretive videos/post of verses or books of the bible and demonstrating step by step ways for individuals to interpret the Word for themselves is the heart of interpretive leadership on social media. Within this is creating opportunities for followers to engage with the Word through the content being produced; whether this be through comments or inviting individuals to share videos that connect back to the post, making space for individuals to not only hear interpretation but be interpreters of the Word themselves. It is also important that influencers demonstrate that social media should not be the only space where interpretive learning is happening. Rather it should be the initial engagement that points to opportunity for deeper interpretive practice by pointing followers to resources that allow them to learn how to read the Word for themselves, such as books or local churches/ministries or small virtual groups that allow individuals to read and interpret the bible together, so that people move away from only being told how they should understand scripture to becoming mature Christians who know how to understand and share the teachings of the Word themselves. Overall, finding ways to not only teach or inform what is in the Bible but how to engage, read and understand it for oneself, both alone and with others, is the best way for interpretive leadership to flourish on social media as it allows individuals to grow deeper in their faith and see God and Christianity as relational over a vending machine meant to quickly fix one's problems.

Relational Social-Media Leadership

⁴¹⁸ Ibid, 164-168. By remembering that the survey suggested Gen-Z wants content that goes deeper in theology and that most influencers/church followers are Christian, as AI groups people based off content they are engaging in, providing content that relates to a Christian over a non-believer is more impactful as it builds up strong believers, who can then go out and share the gospel.

Relational leadership is focused on creating an engaged community of believers who are doing life together both within in the church and outside of it. As we have seen, it is important to differentiate between community on social media and community that is found in the Church, as community on social media is a platform where individuals are not doing life together as much as they are following the life of the influencer.⁴¹⁹ Community in terms of the church is a group of people who commune together and engage in life together. Being a relational leader on social media can be difficult as it calls for a shift where the goal is not gaining followers for oneself, but followers of Christ.

Shifting community to be relational on social media calls for leadership where the culture of the platform works to bring people together while also pushing them to move off the platform and do life together, by sharing opportunities for individuals to interact with each other on social media and sharing ways for people to engage with their local church or ministries. While an influencer cannot know every person who follows them, the influencer can be an example of doing life with others, as someone who is engaged in the church, sharing what it means to invite the Spirit into daily life, and who encourages one's followers to do the same. Creating a culture that goes beyond merely posting about day-to-day life and events at the church, but rather shares active community that is happening, how it was found, why the church sustains it, invites influencers, churches, and followers to all actively participate in Church. As we saw in the interviews, one can share places to get involved in the church, but it won't work if it's not pushed that the "community" of social media is not enough for a true relational church to happen. Further, Gen-Z doesn't understand social media to be a place of long-term substantial community, but a place to meet those who can become sources of deeper community. Allowing

⁴¹⁹ Ibid, 96, 108-109. Cross, *Serving the People of God's Presence*, 144, 148.

one's platform to be a source to find community or even an extension of community itself, requires both influencers and the church to invite the other into their spheres, and for influencers specifically to push and share against social media's philosophy that community on social media is just as substantial as community in person. With strong relational leaders both on social media and in the church, working together to bring the community on social media off the platform and into life with one another, makes engaged followers of influencers engaged followers/participants in the Church.

Implemental Leadership and Social-Media

The tasks and purpose of implemental leadership are two-fold on social media. The first task is social media leaders need to have an understanding of the structure and mechanisms of the platform they are on and have an awareness of how this effects the content they post and the people they reach. This starts by constantly seeking if one is posting because the desire is to gain followers for oneself or followers for the Kingdom and by determining/understanding one's theology, doctrine, and overarching understanding of Christianity. Through this preparation one can share content well and with the expectation that even if people have never heard what you are talking about or have grown up with a different interpretation of what you are sharing, there is still clarity in what is being presented.

The second task of implemental leadership on social media is determining how one is seeking to move the teachings and followers on social media off the platform and into the life of the active local Church, by planning how those who follow you will not just be engaged followers of an influencer, but active members of the church and followers of Christ. This portion of implemental leadership includes churches working with influencers and influencers working with the churches, to seek strategies that will bridge the gap between the influencer

followed and the church I attend. Thus, implemental leadership requires the influencer to create a plan to invite people into the local church, curate those who already attend, and provide nourishment and teaching, thereby keeping the mission of the church in mind.⁴²⁰

Spiritual leadership on Social- Media

Of all the praxes of leadership, spiritual leadership is one of the more difficult to demonstrate because one key aspects of spiritual leadership is that the leader knows who they are leading.⁴²¹ They understand the person, have a strong relationship and foundation of trust from doing life together, can recognize the gifts of the individual, and push them to grow in them. On social media this kind of relationship is difficult to facilitate because there is no way for people to engage in life so closely that an influencer can foster the gifts of every individual who follows them. In many of my interviews, interviewees suggested that their content is not meant to be a source of discipleship or spiritual formation; within the survey barely 50% of Gen-Z expects this to be the job of an influencer or the church on social media. So how does spiritual leadership function on a social media platform?

Since the goal of Christian social media and leadership is to make engaged followers of Christ, I believe the best way for spiritual leadership to be done on social media is through utilizing it to share about the gifts of those within the community of the church. By celebrating the growth of those in the church, their gifts and how they utilize them for the kingdom, we invite people outside of the church to come and engage in a community that is seeking to build and grow those around them. Thus, calling followers to move off the platform and combating any divisive nature on social media, as it demonstrates to AI that engagement rooted in celebration can be just as powerful as engagement founded in divisiveness. By demonstrating

⁴²⁰ Gould, *The Social Media Gospel*, 39-43, 143.

⁴²¹ Cross, *Serving the People of God's Presence*, 146.

how the church works to push those into their calling and how individuals are being used by God, social media becomes a platform reflective of spiritual growth/leadership and invites others to become a part of it.

Active Reflective Leadership and Social-Media

As we discussed earlier, the main idea of active-reflective leadership is leading a community of believers who not only learn and know about God, but actively go and reflect that in the world, all while continually inviting the Spirit to participate in the life of the believer and the church. On social-media active-reflective leadership can be demonstrated in the following three-fold way. First, leaders in the church and on social media should always be seeking to build up independently engaged followers of Christ who are living out their faith in the world while also having understanding of what the Lord is calling them to do in the World. On social media, teaching, engaging, and inviting followers into the life of the church through the content they make points followers away from oneself and toward Christ.

Secondly, an influencer takes time to faithfully reflect on the work being done, invites the Spirit to guide, move, and engage with those on social media, and works to bring the work happening on the platform back into the Church and heart of Christ, ensures that regardless of the less desirable mechanisms of social media, the work and mission of Lord is being lived out. While being a leader on social media is quickly becoming one of the most effective actions that one can take for the Kingdom, it must be balanced with reflection on how the Lord is working on social media and how Christ desires his followers to work on these platforms.

Lastly, active-reflective leadership on social media calls for leaders to share and reflect on their platform what is happening in the church, by inviting people to participate in the movement of God within the church. Leaders who lead by example, demonstrate what it looks

like when an individual goes out and does the ministry they have learned from the church, and then by sharing it on social media utilize social media as bridge between influencers and the church. In doing so, they give a glimpse to those in the church and outside of it what a community of believers looks like when they are doing life together, when they worship together, invite the Spirit in, and thus serve those outside the four walls of the church.

Conclusion

Christian social media's impact on Gen-Zer's view of God, theology, doctrine, and their own personal spiritual life is undeniable. Many young Christian adults, to some extent, are getting their theology and direction from the content they engage with on social media. With 1/3 of 18–21-year-olds surveyed substituting social media for church, quiet time and/or community, it is clear young adults are beginning to see social media as an extension or proxy for the church and it is unlikely that this practice will fade any time soon. Gen-Z wants and does utilize social media as a source to learn about the church, they allow it to impact their life, and even if they do not see social media as a long-term source of community, they use it to learn about the communities that they want to be in. Essentially, to engage with Gen-Z is to interact with them on social media.

Although the ins-outs of social media are complex, constantly changing and can be easily overlooked when not fully understood, the foundations of social media have shifted the way many go about their day to day lives. With the next generation of leaders being led by social media, the church stands in a position to build the foundation of what leadership looks like on social media. Building up leaders and communities of believers who are seeking to utilize social media as a reflection or extension of the church, to make engaged followers of the Christ over engaged followers of the world, is essential to the church and will work to bridge the gap between communities based on commonalities and communities who engage and do life together

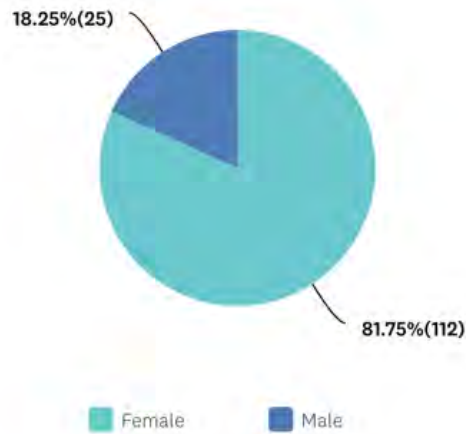
while seeking to build the Kingdom as the church was called to do. Seeking to understand the mechanisms of social media and be strong stewards of platforms, so that content is posted with intention and clarity that teaches individuals to become independent believers participating in the church, is one the most crucial things that both the Church and the rising mass of Christian social media influencers can do today.

Appendix of Questions and Visual Results of Survey

1.1

Are you male or female?

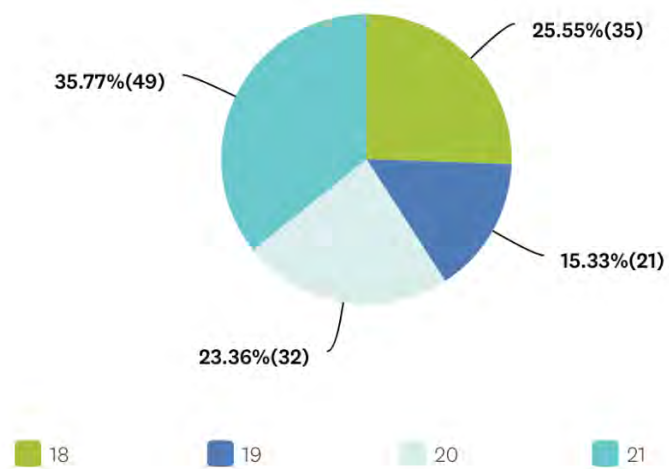
Answered: 137 Skipped: 0



1.2

How old are you?

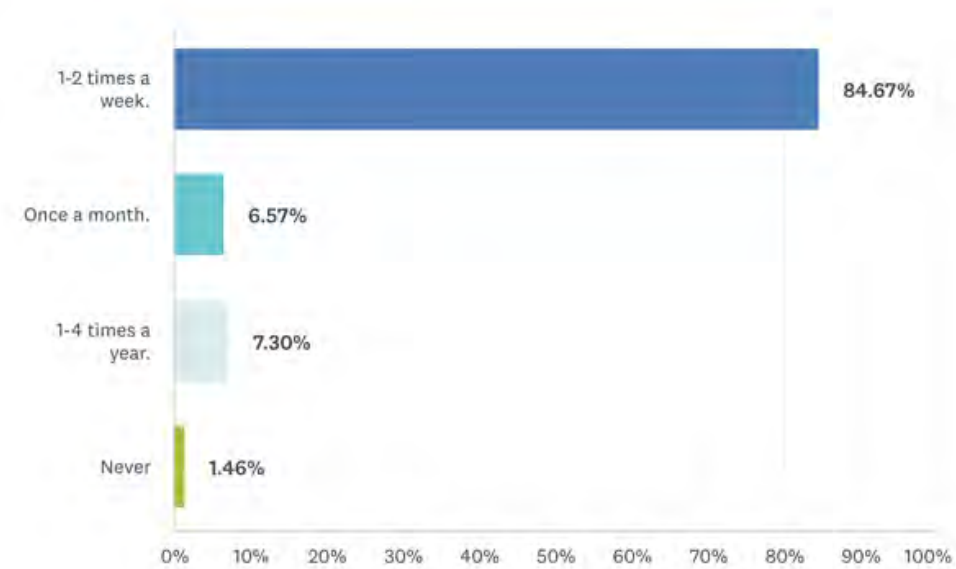
Answered: 137 Skipped: 0



1.3

Do you attend church consistently?

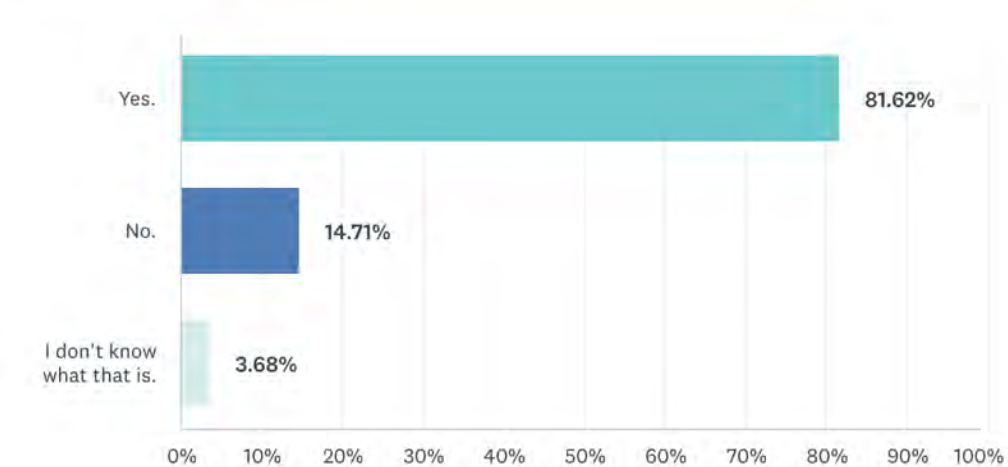
Answered: 137 Skipped: 0



1.4

If yes, do you know or have you ever read their statement of beliefs?

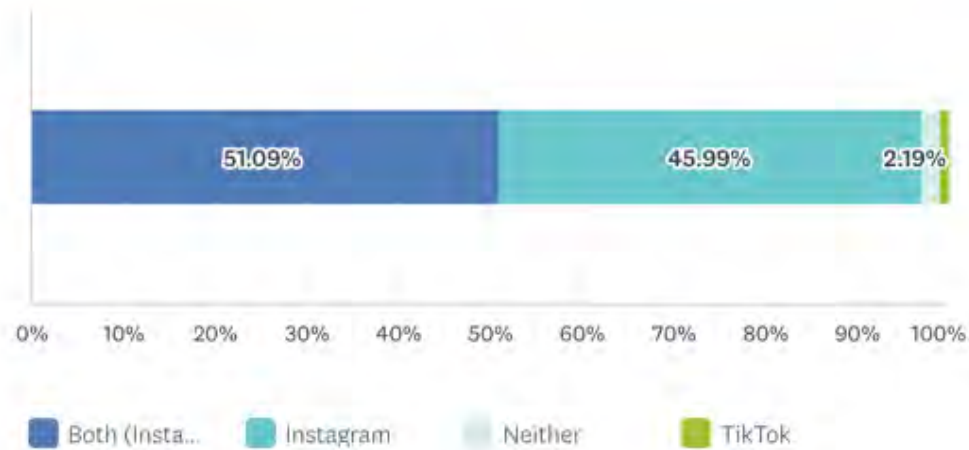
Answered: 136 Skipped: 1



1.5

Do you use Instagram or TikTok?

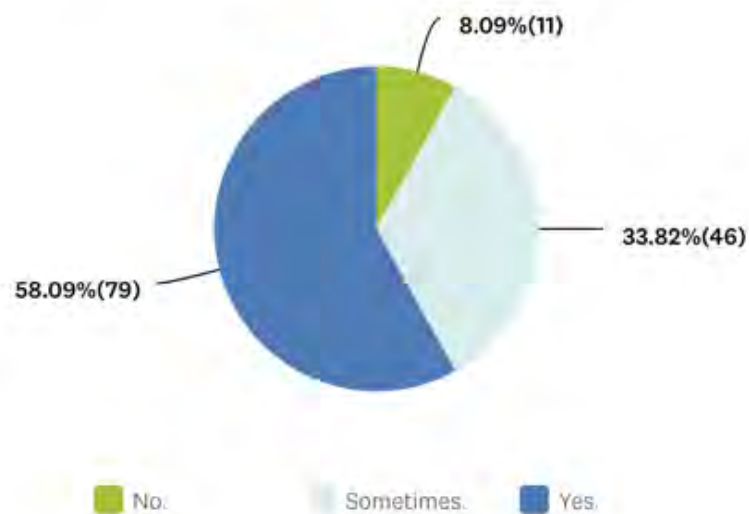
Answered: 137 Skipped: 0



1.6

If Instagram do you watch reels?

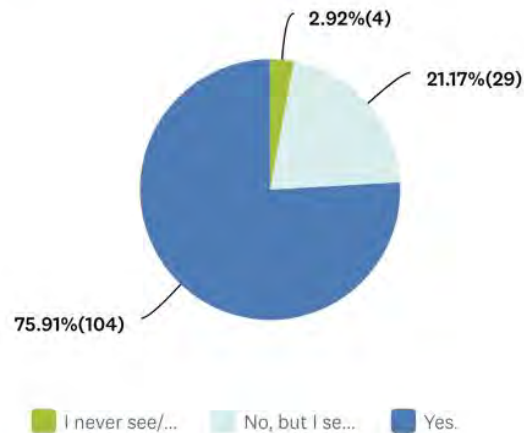
Answered: 136 Skipped: 1



1.7

Do you follow any Christian influencers/pastors on either of these platforms?

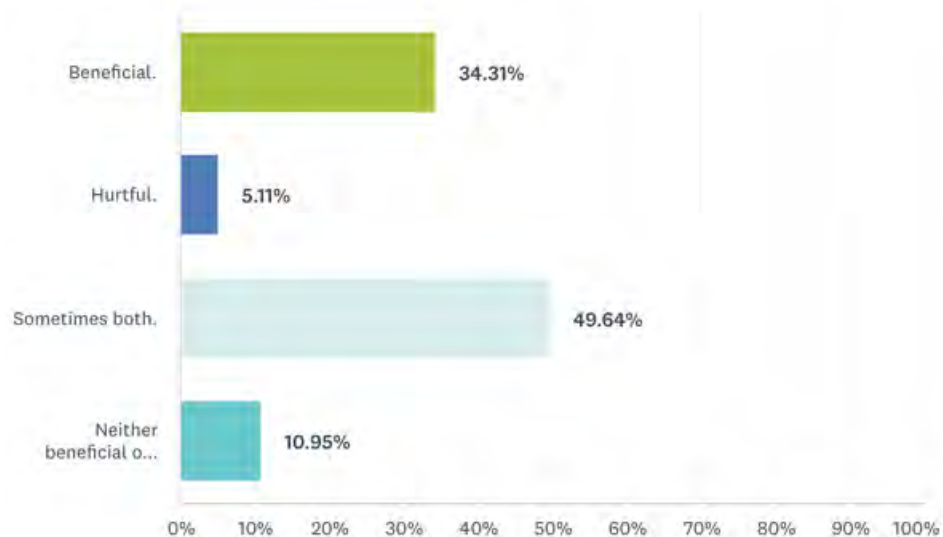
Answered: 137 Skipped: 0



1.8

Has Christian TikTok and Instagram ever been beneficial or hurtful to your relationship with God?

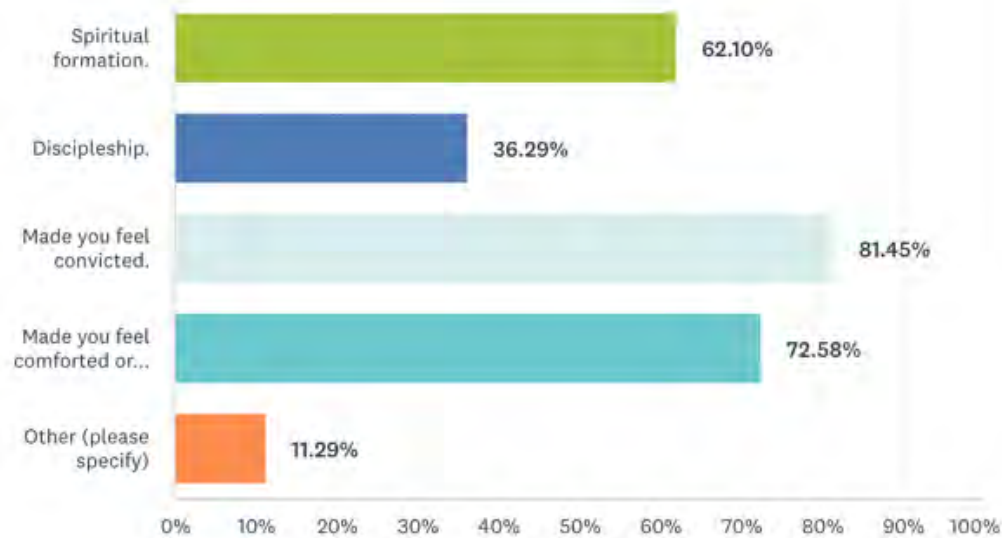
Answered: 137 Skipped: 0



1.9

How so? Check all that apply.

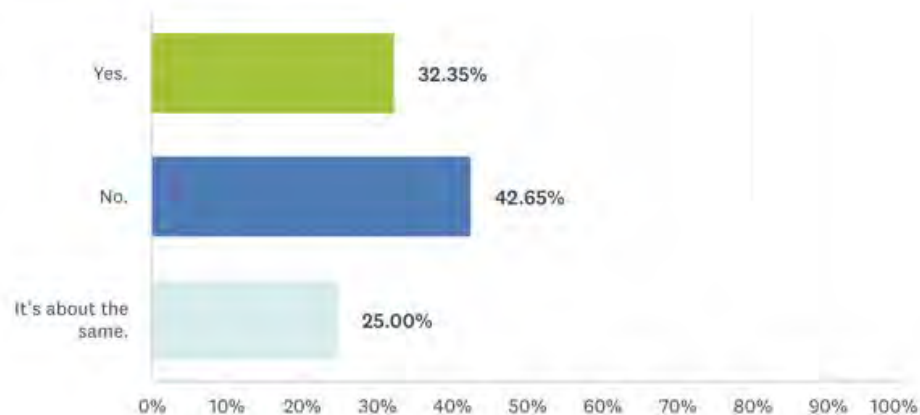
Answered: 124 Skipped: 13



1.10

Do you feel you have a stronger relationship with God because of social media?

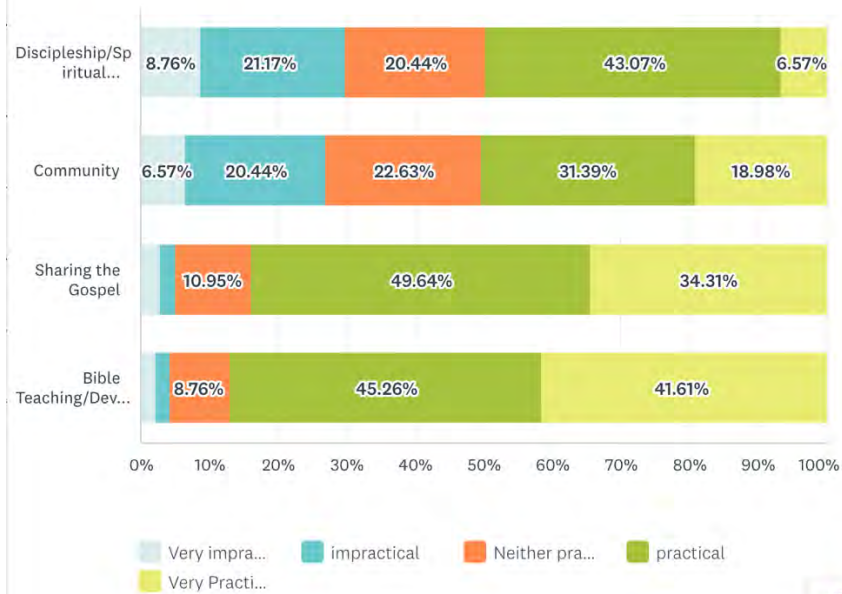
Answered: 136 Skipped: 1



1.11

How practical do you believe any of the following can be/are on social media?

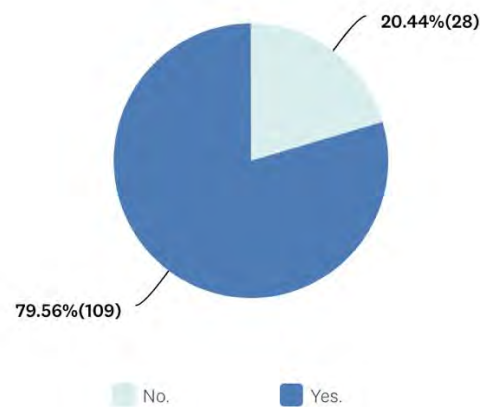
Answered: 137 Skipped: 0



1.12

Have you ever shared or utilized the information that you learned from creators on or outside of Instagram and TikTok? i.e., Through text, posting of stories, etc.

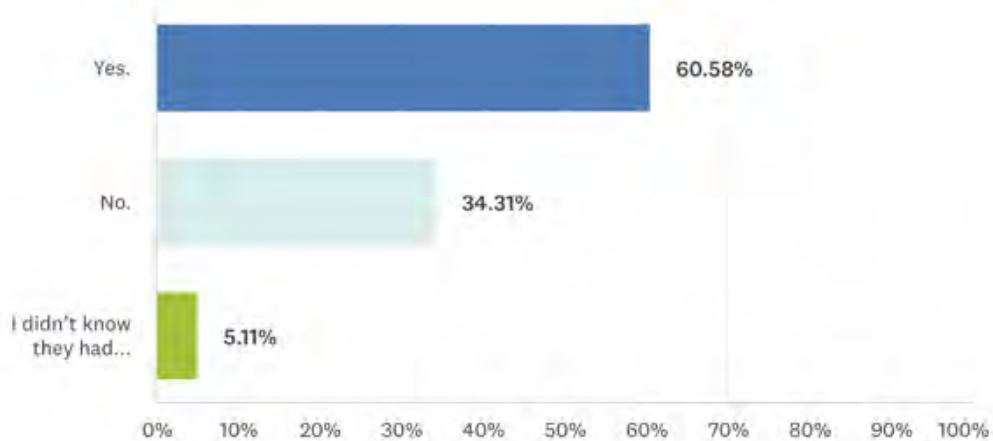
Answered: 137 Skipped: 0



1.13

Have you ever listened to a podcast or read a book by an influencer you follow?

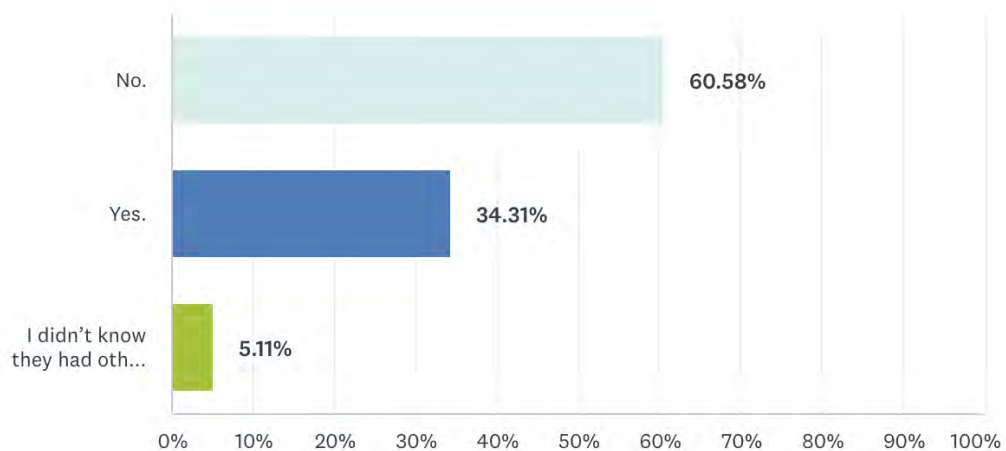
Answered: 137 Skipped: 0



1.14

Have you ever interacted with a creator's other ministries or organizations? i.e., apps, websites, non-profits, ect.

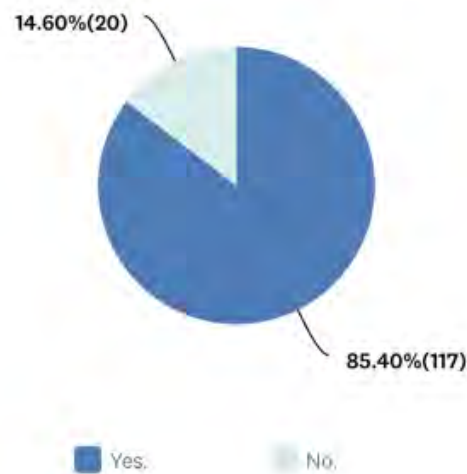
Answered: 137 Skipped: 0



1.15

Is the use of scripture important to the content you watch/read?

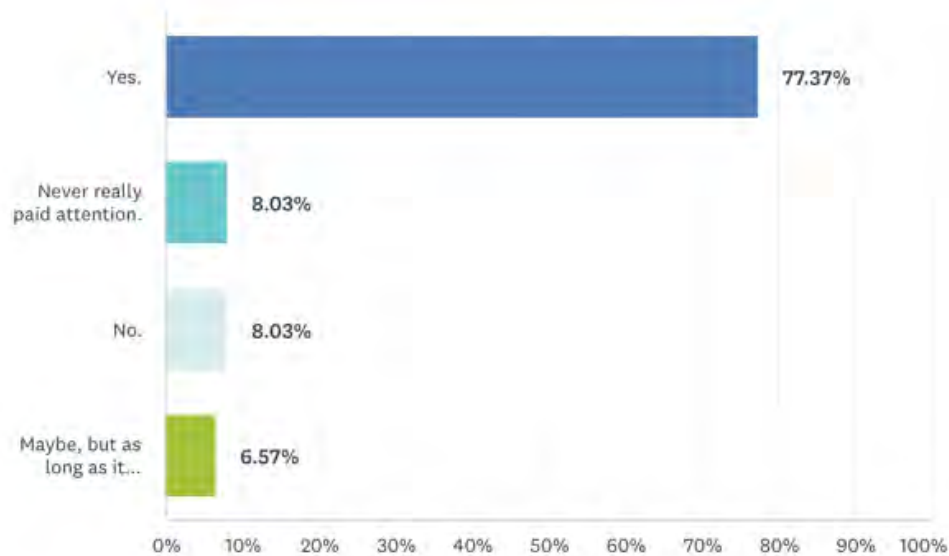
Answered: 137 Skipped: 0



1.16

Do you feel more impacted when influencers use scripture in their content?

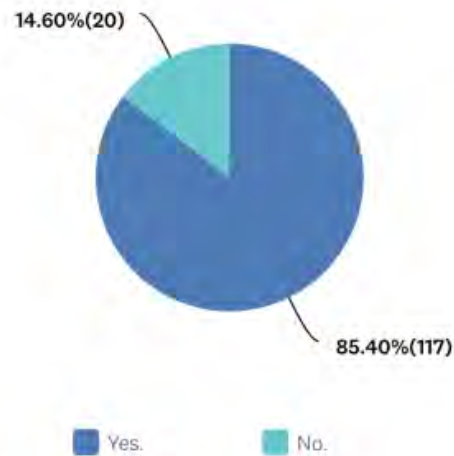
Answered: 137 Skipped: 0



1.17

Have you ever been concerned that the Christian content you watch is wrong or untrue?

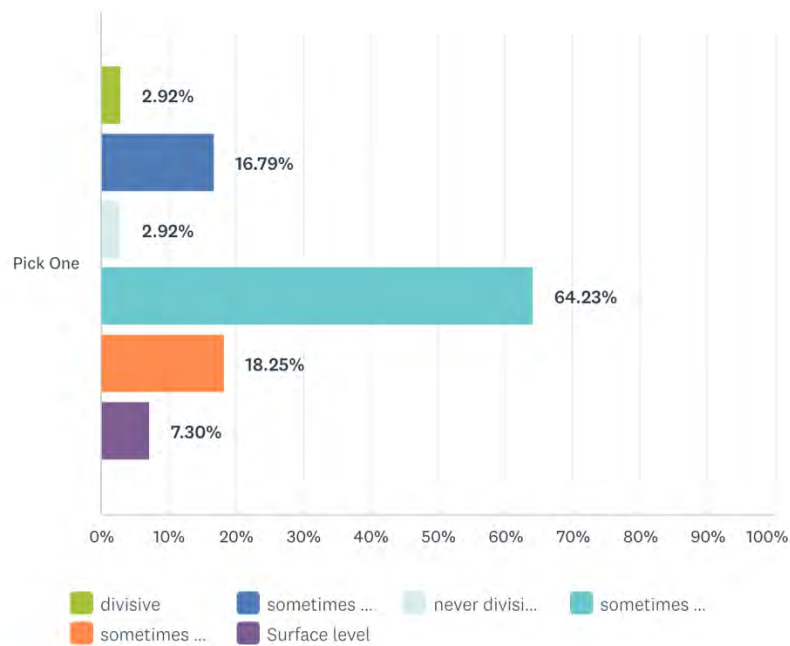
Answered: 137 Skipped: 0



1.18

Has Christian social media ever felt surface level or divisive to you?

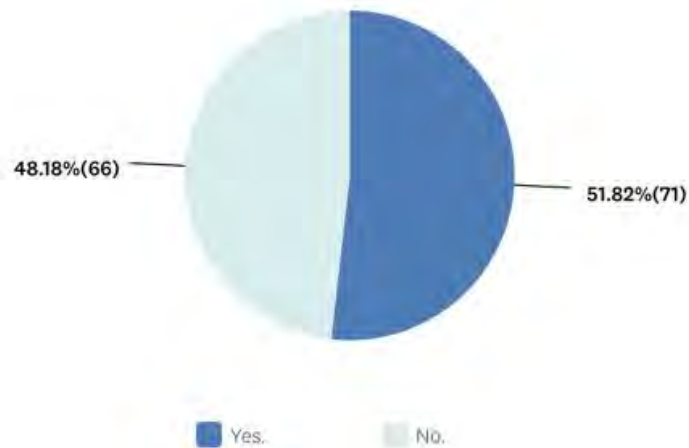
Answered: 137 Skipped: 0



1.19

Do you think that social media has provided you with a better understanding of Christianity and the Church?

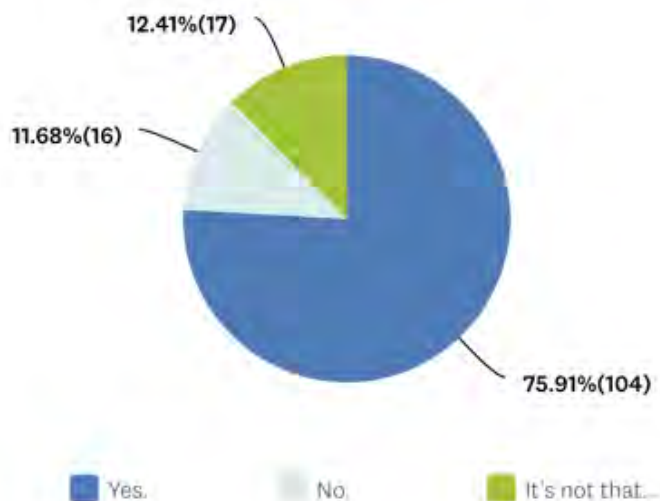
Answered: 137 Skipped: 0



1.20

Do you think that Christian social media should talk about more difficult topics?

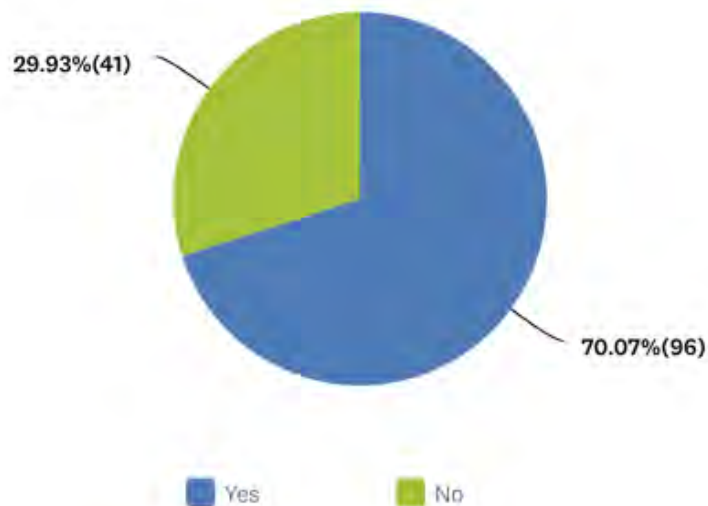
Answered: 137 Skipped: 0



1.21

Are you more likely to use technology to look up a church question, prior to asking a Christian leader?

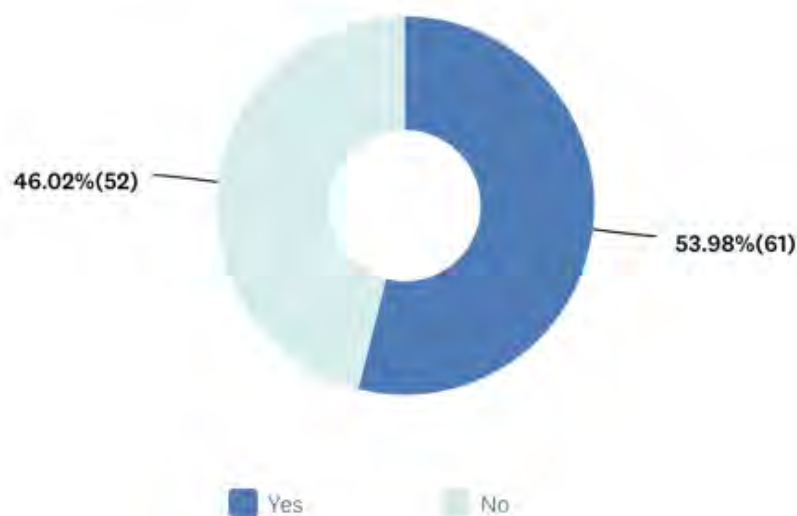
Answered: 137 Skipped: 0



1.22

If yes, has this ever led to more confusion on the topic?

Answered: 113 Skipped: 24



1.23

Have you ever substituted going to church, quiet time or community with the content on social media?

Answered: 137 Skipped: 0



BIBLIOGRAPHY

- Bird, Warren, and Scott Thumma. *Mega Church Report 2020: The Changing Reality in America's Largest Churches* (Hartford, CT: Hartford Institute for Religion Research, 2020), PDF eBook. http://hirr.hartsem.edu/megachurch/2020_Megachurch_Report.pdf.
- Bourgeois, David. "I luv u. Will mrry me?" *Biola Magazine*, 29 May 2013. <https://www.biola.edu/blogs/biola-magazine/2013/i-luv-u-will-u-mrry-me>.
- Carr, Nicholas. *The Shallows: What the Internet is Doing to Our Brains*. New York, NY: W.W. Norton & Company, 2020.
- Cross, Terry L. *Serving the People of God's Presence*. Grand Rapids, MI: Baker Academic, 2020.
- Dimock, Michael. "Defining generations: Where Millennials end, and Generation Z begins." *Pew Research Center*, 19 January 2019. <https://www.pewresearch.org/short-reads/2019/01/17/where-millennials-end-and-generation-z-begins/>.
- Durante, Massimo. "The Online Construction of Personal Identity Through Trust and Privacy." *MDPI Information* 2, no. 4 (October 2011): 594-620. <https://doi.org/10.3390/info2040594>.
- Eagle, David E. "Chapter 2 The Growth of the Megachurch". In *Handbook of Megachurches*. Leiden, Netherlands: Brill, 2020. doi: https://doi.org/10.1163/9789004412927_004
- Fisher, Max. *The Chaos Machine*. New York, NY: Hachette Book Group, 2022.
- Golino, Maria Alessandra. "Algorithms in Social Media Platforms." *Institute for Internet & Just Society*. 24 April 2021. <https://www.internetjustsociety.org/algorithms-in-social-media-platforms>.
- Gould, Meredith. *The Social Media Gospel*. Collegeville, MN: Liturgical Press, 2015.
- Gross, Jenny. "Can you have more than 150 Friends?" *The New York Times*. 11 May 2021. <https://www.nytimes.com/2021/05/11/science/dunbars-number-debunked.html>.
- Gündüz, Uğur. "The Effect of Social Media on Identity Construction," *Mediterranean Journal of Social Sciences* 8, no. 5 (September 2017): 85-92. <http://archive.sciendo.com/MJSS/mjss.2017.8.issue-5/mjss-2017-0026/mjss-2017-0026.pdf>.
- Gordon, Carolyn L., "The Art of Digital Ministry: The Good, the Bad and the Uncertain" *Fuller Studio: Theology, News and Notes*, Spring 2012. <https://fullerstudio.fuller.edu/the-art-of-digital-ministry-the-good-the-bad-and-the-uncertain/>.

- Hartford Institute for Religious Research, *Database of Megachurches in the U.S.* Hartford, CT: Hartford Institute for Religion Research, 2010-present.
<http://hrr.hartsem.edu/megachurch/database.html>.
- Hassan, Aumyo, and Sarah J. Barber. "The effects of repetition frequency on the illusory truth effect." *Cognitive Research: Principles and Implications* 6, no. 38 (May 2021),
<https://doi.org/10.1186/s41235-021-00301-5>.
- Hazell, Chris. "The Rise of the Social Media Influencer," *Viewpoint Point Loma Nazarene University*, 2 August 2019. <https://viewpoint.pointloma.edu/the-rise-of-the-social-media-influencer/>
- Kelley, Peter. "God as a Drug: The Rise of American Megachurches." *UW News*. 20 August 2012.
<https://www.washington.edu/news/2012/08/20/god-as-a-drug-the-rise-of-american-megachurches/>.
- Kim, Jay Y. *Analog Church: Why We Need Real People, Places, and Things in the Digital Age*. Downers Grove, IL: InterVarsity Press, 2020.
- Kim, Jihye and Minseong Kim. "Rise of Social Media Influencers as a New Marketing Channel: Focusing on the Roles of Psychological Well-Being and Perceived Social Responsibility among Consumers" *International Journal of Environmental Research and Public Health* 19, no. 4 (18 February 2022). https://uknowledge.uky.edu/isc_facpub/1.
- Kramer, Stephanie. "Modeling the Future of Religion in America," *Pew Research Center* (September 2022), <https://www.pewresearch.org/religion/2022/09/13/modeling-the-future-of-religion-in-america/>.
- Lindenfors, Patrik, Andreas Wartel, and Johan Lind. "'Dunbar's number' deconstructed." *National Library of Medicine: Biology Letters* 17, no. 5 (May 2021),
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8103230/>.
- Liedke, Jacob and Jeffery Gottfried. "U.S. adults under 30 now trust information from social media almost as much as from national news outlets," *Pew Research Center* (27 October 2022),
<https://www.pewresearch.org/short-reads/2022/10/27/u-s-adults-under-30-now-trust-information-from-social-media-almost-as-much-as-from-national-news-outlets/>.
- Majerczak, Przemysław, and Artur Strzelecki. "Trust, Media Credibility, Social Ties, and the Intention to Share towards Information Verification in an Age of Fake News." *National Library of Medicine: Behavioral Sciences* 12, no. 51 (16 February 2022),
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8869166/>.
- Mahapatra, Gopal P., Naureen Bhullar and N., and Priyansha Gupta, "Gen Z: An Emerging Phenomenon" *NHRD Network Journal* 15, no. 2 (April 2022): 246–256. SAGE Journals Database <https://doi.org/10.1177/26314541221077137>.

- Maritn, Michelle. "24 Gen Z Statistics that Matter to Marketers in 2023." *Hootsuite*(blog). 20 June 2023. https://blog.hootsuite.com/gen-z-statistics/#Gen_Z_and_social_media_statistics.
- Martino, Jessica, Jennifer Pegg and Elizabeth Pegg Frates. "The Connection Prescription: Using the Power of Social Interactions and the Deep Desire for Connectedness to Empower Health and Wellness." *American Journal of Lifestyle Medicine* 11, no.6 (Oct. 2015): 466-475. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6125010/>.
- Neda-John, Jennifer. "Why Generation Z Falls for Online Misinformation." *MIT Technology Review*, 30 July 2021. <https://www.technologyreview.com/2021/06/30/1026338/gen-z-online-misinformation/>.
- Perez, Sarah. "Google Exec Suggests Instagram and TikTok are Eating into Google's Core Products, Search and Maps." *TechCrunch*. 12 July 2022. <https://tcrn.ch/3yy6xlt>.
- Pew Research Center. "Modeling the Future of Religion in America," *Pew Research Center* (13 September 2022). <https://www.pewresearch.org/religion/2022/09/13/how-u-s-religious-composition-has-changed-in-recent-decades/>.
- Pew Research Center. "Religious Landscape Study," *Pew Research Center* (2007-2014). <https://www.pewresearch.org/religion/religious-landscape-study/>.
- Ruiter, Jan de, Gavin Weston, and Stephen M. Lyon. "Dunbar's Number: Group Size and Brain Physiology in Humans Reexamined." *American Anthropologist* 113, no. 4 (December 2011): 557–68. <http://www.jstor.org/stable/41407513>.
- Shatzer, Jacob. *Transhumanism and the Image of God*. Dower Grove, IL: InterVarsity Press, 2019.
- Smith, Gregory. "America Changing Religious Landscape," *Pew Research Center* (May 2015). <https://www.pewresearch.org/religion/2015/05/12/americas-changing-religious-landscape/>.
- Thacker, Jason, ed. *The Digital Public Square*. Brentwood, TN: B&H Academic, 2023.
- Thumma, Scott. *Twenty Years of Congregational Change: The 2020 Faith Communities Today Overview* (Hartford, CT: Hartford Institute for Religion Research, 2021), PDF eBook. <https://faithcommunitiestoday.org/wp-content/uploads/2021/10/Faith-Communities-Today-2020-Summary-Report.pdf>.
- Turkle, Sherry. *Reclaiming Conversation: The Power of Talk in a Digital Age*. New York, NY: Penguin Books, 2016.
- U.S. Surgeon General's Advisory. *Social Media and Youth Mental Health*. Washington, D.C.: Office of the Surgeon General, 2023. <https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-advisory.pdf>.

Workman, Michael. "An Empirical Study of Social Media Exchanges about a Controversial Topic: Confirmation Bias and Participant Characteristics," *The Journal of Social Media in Society*, no. 1 (Spring 2018): 381-400. <https://thejsms.org/index.php/JSMS/article/view/355/171>.

Vogels, Emily A., Risa Gelles-Watnick and Navid Massrat. "Teens, Social Media and Technology 2022." *Pew Research Center* (10 August 2022) <https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/>.

Volume 6

Article 16

Summer 2023

The Use of Dissonance in Cait Nishimura's Golden Hour

Destiny Peace

Lee University

Under the guidance of Austin Patty, Ph.D.

Abstract

Analysis of *Golden Hour for trumpet and piano* by Cait Nishimura reveals that quartal/quintal harmony (chords built out of intervals of fourths and fifths), rather than more traditional, tertian harmony (built out of thirds), is foundational to the sound of the piece and accounts for much of its dissonance. Extended tertian harmony also occurs, but it is usually built from quartal/quintal elements found within individual layers of the composition. Dissonance in the trumpet melody will be shown to originate in either the harmonies to which its notes belong or as the result of embellishments added to the harmony. As the music intensifies in preparation for a climax, embellishing dissonance is the primary dissonance. At moments of climax, the note in the trumpet part tends to be a chordal dissonance, a note that belongs to the chord but is dissonant.

Overview

Cait Nishimura is a Japanese Canadian composer who is known for her nature-inspired program music. She has established herself in the concert band world through clinics and conferences in Canada and the United States. These events allow for her music to be heard by educators and brought to local schools. *Golden Hour for trumpet and piano*, one of her well-known works, was written in 2020-21. It was inspired by the last hour of light before sunset in two events. One event occurred on a drive she took from NYC to Toronto, allowing her to see the “golden light just pouring over the area.”⁴²² The second event that inspired *Golden Hour* was her drive to the lookout at Glacier Point as she raced against time to view the fiery sky fading into the night. She states in her notes that “both of these memorable sunset experiences” inspired *Golden Hour*.

⁴²² Cait Nishimura, *Golden Hour for trumpet and piano*, composer’s notes in preface to the score (no page number).

Golden Hour implements dissonance in various ways. The trumpet part uses two types of dissonance: embellishing dissonance, where the dissonant note is not part of the chord, but rather embellishes notes of a chord, and chordal dissonance, in which the dissonant note is part of a chord. In the context of triadic, or “tertian” harmonies, these take the form of extensions beyond the triad, such as sevenths, ninths, and thirteenth. In common practice, extensions beyond the triad are tendency tones, notes that tend to find resolution. Chordal dissonance typically resolves down by step in the following chord. The piano part uses two types of harmonies, each of which includes dissonance. The primary harmony used in *Golden Hour* is quartal/quintal harmony. Stacks of fourths and fifths create intervals such as seconds and sevenths with the bass, and dissonance is inherent to this kind of harmony. When the quartal/quintal harmony is used in *Golden Hour*, the dissonances are generally unresolved. Tertian harmony also occurs in *Golden Hour* with many extensions such as sevenths and ninths, which are dissonant with the root. In contrast to common practice, the dissonance used in the tertian harmonies are generally left unresolved.

In this paper, extended tertian harmony will sometimes be interpreted as growing from quartal/quintal harmony, which often serves as the underlying foundation for the harmonies. Quartal/quintal harmony’s presence may be a reason why the traditional tendencies of extensions are not realized. As mentioned, *Golden Hour* strays from common practice by leaving dissonance unresolved. The dissonances form part of the quartal/quintal foundation, in which dissonance is integral to the sound. Such dissonances contribute to a consistent background soundscape and do not produce the feeling that something is left unfinished, even though the dissonances are left unresolved. Nevertheless, some dissonances are prominent within the trumpet melody. The dissonances in the melody might be chordal (quartal/quintal or tertian) or

might embellish those chords. I want to examine how dissonance is used in *Golden Hour* because, as a performer on the trumpet, I want to highlight the prominent dissonances and fashion an interpretation of the piece that maximizes the expressive potential of those dissonances.

I want to explore how tertian and quartal/quintal harmony interact throughout the piece. In order to explore how these harmonies arise, I will present three scenarios, three ways in which the layers of the pianist's left hand, the pianist's right hand, and the trumpet melody interact with one another. In scenario 1, the harmony is essentially quintal with tertian elements overlayed by the trumpet on top of a quintal foundation. In scenario 2, quintal/quartal elements occur in each of the pianist's hands, but thirds arise from the relationship between the hands. Nevertheless, tertian harmony in this scenario gives way to quintal harmony as the relationship between the hands changes later in the harmonic progression. In scenario 3, the harmony is purely tertian. This occurs in one section only, the bridge (section E).

Melodically, there are moments of intensification in which embellishing dissonance contributes to the growing tension. These moments of intensification grow into climaxes which sometimes feature chordal dissonance. While a primary reason for the tension during the intensification within climactic passages is embellishing dissonance, two things may occur during the climax itself: the main climactic note creates a perfect interval or, most commonly, creates a chordal dissonance. When the melody features chordal dissonance, the dissonant note may belong to either tertian harmony (as an extension) or quartal/quintal harmony, but quartal/quintal harmony is most common at climaxes. The climactic melody note, when part a quartal/quintal harmony, may be either dissonant or consonant with the bass.

I will begin with a review of literature on quartal and quintal harmony. Then I will show how the harmonic dissonance in *Golden Hour* is represented in three different scenarios. In those scenarios I will provide examples of chordal dissonance and how it is used. Then I will discuss the melodic dissonance used in *Golden Hour* and how there are two different kinds of dissonances in the melody: chordal and embellishing dissonance. In the discussion of melodic dissonance, I will provide examples of chordal and embellishing dissonance and show how the melodic dissonance can be used for expressive purposes. I will sum up my findings in a conclusion.

Literature Review

Several authors present the concept of quartal and quintal harmonies, harmonies that play a prominent role in *Golden Hour*. Stefan Koska, in *Materials and Techniques of Twentieth-Century Music* describes quartal chords as stacks of 4ths that contain three or more pitch classes.⁴²³ He describes how quintal chords, built of stacks of 5ths, have a more open and stable sound. My labeling system for quartal/quintal chords is based on Koska's way of labeling these harmonic. Koska writes, "A convenient way to describe quartal and quintal chords is to use numbers, ex: 3x4 on B. The 3 would be how many notes on top of B and 4 would represent quartal (3 includes B itself)."⁴²⁴ My way of labeling quartal and quintal chords differs in that I place the bass note first in the label and then provide the numbers.

⁴²³ Stefan Kostka, *Materials and Techniques of Twentieth-Century Music*, 2nd ed. (Prentice-Hall, INC, 1999), 55-60.

⁴²⁴ Kosta, *Materials and Techniques*, 55-60.

Miguel A. Roig-Francolí, in his book, *Understanding Post-tonal Music*, treats quartal and quintal harmony in a way similar to Koska, but relates quartal and quintal harmony to interval cycles, the use of the same interval from note to note within chords or melodies.⁴²⁵ The use of a 5-cycles creates quartal harmony; the use of 7-cycles creates quintal harmony.

Another presentation of quartal/quintal harmony is in *Techniques and Materials of Music: From the Common Practice Period Through the Twentieth Century* by Michael Horvit, Robert Nelson, and Thomas Benjamin.⁴²⁶ Unlike the authors above, Horvit, Nelson, and Benjamin mention the idea of inverting quartal chords. Though the term “inversion” does not apply in a traditional sense, it still alters the bass of the chord.

The most extensive treatment of quartal harmony to date is the dissertation, “Quartal Harmony: An Analysis of Twelve Piano Compositions by Twentieth Century Composers,” by Kathryn Mary George Deimler.⁴²⁷ Deimler discusses twelve piano pieces and how they implement quartal harmony. Some of the pieces discussed by the author use techniques not found in *Golden Hour*. The most important pieces reviewed in the dissertation that apply to *Golden Hour* are “Bagatelle No.11” by Bartók, “No. III, Meditation, a Albery Roussel” by Satie, “No. IV, To Vivian Fine” by Sessions, and “No. 1,” from Three Score Set by Schuman. The review of Bartók’s work mentions the use of dual harmonic qualities: tertian and quartal harmony. This is similar to what is seen in *Golden Hour* when its underlying quartal framework can be interpreted as a quartal chord or tertian when the trumpet introduces the chordal third. Deimler’s analysis of Satie’s piece highlights the division of the music into a bass part with a right-hand ostinato. As

⁴²⁵ Miguel A. Roig-Francolí, *Understanding Post-tonal Music* (Routledge, 2008), 18, 69-75.

⁴²⁶ Michael Horvit, Robert Nelson, and Thomas Benjamin, *Techniques and Materials of Music: From the Common Practice Period Through the Twentieth Century*, 7th ed. (Thomas-Schirmer, 2008) 206-208.

⁴²⁷ Kathryn Mary George Deimler, “Quartal Harmony: An Analysis of Twelve Piano Compositions by Twentieth Century Composers” (PhD diss., New York University, 1981), 70-204.

we shall see, this division also occurs in *Golden Hour*. Deimler discusses the use of quartal inversions in Sessions' work. The quartal inversions are similar to those seen in *Golden Hour* where the bass note does not reflect the chord above. Lastly, the review of Schuman's piece is similar to that of Sessions where it talks about inversions, but specifically first inversion quartal chords. Although it isn't used in a traditional sense, it still uses the second note of the chord as the bass. The literature works reviewed aided in the analysis of *Golden Hour* by Cait Nishimura and provided background information for the harmonic structures used.

Analysis

Figure 1. Form Diagram for Cait Nishimura's *Golden Hour*

Section:	A	B	C	D
Measures	mm. 1-18	mm. 19-72	mm. 73-91	mm. 92-105
Key	In E-flat	In E-flat	In A-flat	In A-flat
Accompaniment Pattern	a b	c c ¹	c c ²	d e
Measures	1-9 10-18	19-64 65-72	73-80 81-91	92-100 101-105

Section:	E	F	G	H	I
Measures	mm. 106-128	mm. 129-144	mm. 145-160	mm. 161-169	mm. 170-185
Key	In F minor	In B-flat	In B-flat	In B-flat	In B-flat
Accompaniment Pattern	f	g	d ¹	d ²	c
Measures	mm. 106-128	mm. 129-144	mm. 145-160	mm. 161-169	mm. 170-185

Harmonic Dissonance

Quartal and quintal harmony are fundamental to *Golden Hour*, as they make up almost the entire piece. Quartal/Quintal harmony provide a foundation for *Golden Hour*, creating quartal/quintal chords and quartal/quintal chords with tertian overlays.

The dissonance in *Golden Hour* tends to be a part of quartal/quintal harmony or extended tertian harmony. When quartal/quintal harmony occurs, the dissonance becomes a part of the foundation, an essential part of the sound, and is left unresolved. Although the tertian harmonies used have tendency tones, these are also left unresolved, with the chordal seventh, for example, remaining unchanged throughout the following chord. The accompaniment provides underlying quintal harmonies throughout most of the piece. The inclusion of a third above the bass sometimes produces extended tertian harmony on top of a quintal foundation. The underlying quintal component can be considered the source of the extensions in these extended tertian chords.

As mentioned, quartal and quintal harmony are fundamental to *Golden Hour*.

Quartal/quintal harmony is present throughout the piece with fewer instances of tertian harmony. Tertian harmony arises either because of a 3rd added to a more persistent quintal harmony or because there is a more significant 3rd formed between the pianist's two hands. To explore the relationships between quartal/quintal harmony and tertian harmony, I will examine in detail how these harmonies arise due to the left hand, and the trumpet melody.

There are three scenarios, three ways in which the material in pianist's hands change or remain constant and thus create chord changes. I will note the contribution of the trumpet, but the scenarios are based on the layers within the piano part. In scenario one, the most common scenario, there is a quintal ostinato in the right hand while the left hand presents a bass line and notes moving in parallel fifths with that bass line. Most often the quintal/quartal ostinato in the right hand and the fifths in the left hand combine to form quintal harmonies.

The moments in which scenario one occurs can either be entirely quintal or else there is quintal harmony with tertian overlays. The trumpet melody can briefly supply a third above the bass. Although the result can be considered tertian, a quartal/quintal harmony forms the heart of the chord. Quartal/quintal harmony persists and is foundational to the passage as a whole.

In scenario 2 there is still a quintal/quartal ostinato in the right hand and fifths in the left hand, as in scenario 1; however, the hands form a third between them and tertian harmony results. Nevertheless, subsequent chords in the progression are quintal as new notes appear in the bass.

In scenario three, a rare scenario, quartal/quintal harmony is not present, and the harmony is entirely tertian. This scenario happens only during the bridge of the piece, thus providing contrast to the other sections.

The three scenarios account for the entirety of the piece. Every passage of the piece falls into one of the scenarios. The passages that fall into scenario 1 are: section A (mm. 1-18), section B (mm. 19-34; 43-50; 65-72), section C (mm. 73-91), section F (mm. 129-144), section G (mm. 145-155), section H (mm. 161-169), and section I (mm. 170-185). The sections that fall into Scenario 2 are: section B (mm. 35-42; 51-64), section D (mm. 92-105), and section G (mm. 156-160). The only section that falls into Scenario 3 is section E.

Scenarios of Harmonic Change

Scenario 1: Downward Bass Motion with Ostinato-Like Pattern in Pianist's Right-Hand

In the accompaniment, the left-hand pattern changes [often down by step; often down by fifth; occasionally up by a third] while the right hand repeats a pattern.

Example 1: Quintal Harmonies with an Overlay of Tertian Harmony in *Golden Hour*, section A, mm. 1-8.

gentle and expansive $\text{♩} = 80$

Flugelhorn / Trumpet
(Opt. flugel m1-18)

Piano

5

Flug. / Tpt.

Pno.

The very opening of the work will serve to illustrate scenario 1, in which the bass moves downward while the right-hand piano part remains essentially unchanged. In this passage, Example 1, the bass moves down by fifth (E-flat to A-flat). This motion strengthens the underlying, foundational role of quintal harmony in the work, even though the opening harmony is tertian. In Example 1, measures 1-8, the left-hand piano part moves back and forth between E-flat and A-flat every two measures. While the bass changes, the right-hand pattern remains

essentially the same. Although measures 3-4 and 7-8 look different in the right-hand, the only slight difference is the placement of the note F. It was previously a part of the quartal stack, but it is now delayed until the last beat and positioned under the note B-flat. Measure 1 is an E-flat major (9) with a foundation of quintal harmony: E-flat – B-flat – F. The chord can be interpreted as essentially E-flat 3x5 (3-note stack of fifths), but the G played by the trumpet supplies a third from the bass and makes the chord tertian. The trumpet, by supplying the chordal third, creates a tertian sound in what would otherwise be an unambiguously quintal context. Nevertheless, the E-flat 3x5 can be considered the underlying harmonic framework in this first section of the piece since the chords in the piano part are quintal. The trumpet only occasionally supplies a chordal third and creates a tertian sound. By adding the chordal third the tertian harmony grows from the quintal foundation. The foundation introduces dissonance both when purely quintal and when a part of the extended tertian harmony. If mm. 1-2 were considered E-flat 3x5 which contains a 9th above the bass, then when the third is added the chord becomes tertian with the quintal construct supplying the extension of a 9th to the E-flat major (9) (as seen in Example 1).

In measure 3 another quintal chord occurs. The E-flat 3x5 of measures 1-2 is extended downward into measure 3 creating A-flat 4x5. Although the right-hand piano part stays the same, the left hand brings in scale degree $\hat{4}$, thus creating a quintal chord built on A-flat. The trumpet does not supply a third above the A-flat, and the harmony changes from tertian to quintal.

There is a D in measures 1-4, found in the piano part's right-hand ostinato (on beat 2), that can be considered an IN. It can also be considered the chordal seventh in the E-flat major (9) chord, if the tertian chord is present, in measures 1-2. This D is part of a motive, marked as motive x in measure 1, and recurs many times in this work.

Example 2: Quintal Harmonies with an Overlay of Some Tertian Harmony in *Golden Hour*, section B, mm. 19-33.

A joyful, with ease $\text{♩} = 144$

Tpt in Bb

quartal/quintal

Pno. *mf*

23

Tpt in Bb

Pno.

27

Tpt in Bb *mf*

Pno. *mp*

GOLDEN HOUR

3

31

Tpt in Bb

31

Pno.

mp

harmonic movement

The trumpet in section B introduces the chordal third into an otherwise quintal passage. The harmonies presented in Example 2 are like those in Example 1. Both examples use the harmonies of E-flat 3x5 and A-flat 4x5 and use the technique of extending the quintal stack downward by placing scale degree $\hat{4}$ in E-flat major in the bass. In this example, however, quintal harmony changes to tertian harmony. Again, it is the trumpet that injects the third above the bass and creates a tertian sound on the piano's quintal foundation. Throughout measures 19-33, the bass line goes from two measures of E-flat to two measures of A-flat, each with a fifth above it in the left hand. While the left hand continues this pattern, the right-hand repeats a pattern of quartal stacks with a few additional embellishing tones. (The right-hand makes minor adjustments that do not affect the analysis of the harmonic qualities of each measure. Most of the adjustments are embellishments.) Measures 19-26 repeat the chords E-flat 3x5 and A-flat 4x5.

The addition of the trumpet in measures 27-33 changes what was previously quintal harmony to tertian harmony. Although this section appears to be the same as measures 19-26 by containing the exact same accompaniment, the trumpet supplies the chordal third, implying tertian harmony in Example 2, measure 27. This section is comparable to Example 1, where omission of the trumpet would produce quintal harmony. Because of the composer's choice to give the trumpet the chordal third, we can hear tertian harmony emerge from underlying quintal framework. Measure 27 becomes E-flat major (9) rather than E-flat 3x5 because of the trumpet melody.

In the context of the E-flat major (9) chord, the notes D and F are extensions of the tertian harmony. Before, in a quintal context, D was an IN and F was part of the quintal sound. It is important to hear how the pattern E-flat – D – B-flat, marked as motive x in Example 2, measure 19, is repeated throughout most of Section B (refer to Figure 1) until measure 65. Although the D is considered an IN in all but 10 measures (where it is the chordal seventh of E-flat major (7), as

As shown in Example 3, section C begins in measures 81-84 with quintal harmony but then transitions to tertian harmony in mm. 85-88. The section ends in mm. 89-90 with quintal harmony. The bass line alternates between two measures of A-flat and two measures of D-flat. Meanwhile, the right-hand repeats pattern x, marked in m. 81, in each measure of sections C and D (refer to Figure 1). The combination of left-and and right-hand patterns continues throughout measures 81-87. Measure 88 serves as a link, breaking this pattern. Measures 89-90 restore the pattern, but down the octave (as seen in Example 3).

The first four bar unit, measures 81-84 (in Ex. 3), uses the technique previously discussed in Examples 1 and 2, where scale degree $\hat{4}$ in A-flat major, is placed in the bass to extend the quintal harmony. Measures 81-82 are A-flat 3x5 which, and quintal harmony extended downward in mm. 83-84 by the D-flat in the bass, creating D-flat 4x5. While the bass changes, the right-hand continues its repetitive pattern in measures 81-87. The quintal harmony transitions to tertian harmony in measures 85-88 because of the trumpet. As the bass goes back to A-flat, the trumpet plays the chordal third of A-flat major (7).

The trumpet in this section provides primarily chord tones for both quintal and tertian harmonies. In measures 81-82 and 84 the trumpet supplies E-flat, one of the notes associated with the quintal chords A-flat 3x5 and D-flat 4x5. The trumpet then provides the choral third for A-flat major (7) and D-flat (add 2 and 6) in mm. 85-88, creating tertian harmony that grows from a quintal foundation. If the trumpet melody were omitted, then the quintal harmony would have been the same in mm. 85-88 as it was in mm. 81-84.

Scenario 2: Downward Bass Motion with Ostinato-Like Pattern in Pianist's Right-Hand with an Adjustment

In the accompaniment, the left-hand pattern changes [often down by step; often down by fifth; occasionally up by a third] while the right-hand repeats a pattern, but with an adjustment that creates a change from quintal to tertian harmony or vice versa. In contrast to scenario 1 the shift between different types of harmony is not just the addition of the trumpet, but rather the adjustments performed by the right-hand.

Example 4: Quintal Harmonies that transition to Tertian Harmonies in *Golden Hour*, section D, mm. 92-99.

D dreamy and distant

Handwritten: $1^{\text{st}} 3 \times 5$

Tpt in Bb

mp

Handwritten: A^b

Pno.

p

8va

GOLDEN HOUR

Handwritten: C^-

Handwritten: $8^{\text{th}} (13^{\text{th}})$

Tpt in Bb

Handwritten: $8^{\text{th}} (13^{\text{th}})$

Handwritten: C^+

Pno.

measure 96 returns the right-hand to the original pattern with the E-flat. The adjustment and tertian harmony return in measure 99 with the same bass support of B-flat.

The bass line in this section is vital, as it instigates the harmonic changes. New notes in the bass line cause the right-hand notes to have new interpretations. For example, A-flat and E-flat in the right-hand part in mm. 92-93 are chord tones within a D-flat 3x5 chord, while the G in the right-hand is an IN. In measure 94, the right-hand gets new interpretations as the bass changes from D-flat to C. The A-flat is no longer a chord tone, but rather an IN. The change in the left-hand also causes the G, which was previously an IN, to become a chord tone. The status of the E-flat also changes. Once was a part of the quintal sound in the D-flat 3x5 chord in measures 92-93, it is now the chordal third of C minor (7) (as highlighted in Example 4).

The second change occurs in measures 94-95, when the bass shifts down a step, as seen in Example 4. Now that the bass is B-flat, the right-hand notes have new qualities once again. All the notes in measure 95 (A-flat – G – D) are considered chord tones (with A-flat and G as extensions). The new adjustment that the right-hand makes, shifting from E-flat to D, is the right-hand adapting to the bass line. As we have seen, this change illustrates scenario 2. The right hand's adjustment creates tertian harmony in measure 95 as it produces the chordal third for B-flat (7)(13). Because of the right-hand's adjustment to the D the harmony continues to be tertian rather than turning to possible quartal/quintal harmony. The same thing is seen in measures 98-99 in Example 4.

The trumpet's melody may cause one to question the analysis of measure 93. Although the chord is heard as D-flat 3x5, one may consider the harmony in this measure as tertian because of the trumpet supplying what could be the chordal third of D-flat. However, the F can best be heard as neighboring to the E-flat in Example 4. Not only is the quintal harmony

supported by the emphasis of the E-flat in the trumpet part, but the neighboring motion can also be heard in terms of scale degrees (in A-flat: $\hat{5} \rightarrow \hat{6} \rightarrow \hat{5}$).

Example 5: Tertian Harmonies that transition to Quintal Harmonies in *Golden Hour*, section B, mm. 35-42.

The image displays a musical score for two staves: Tpt in Bb (Trumpet in B-flat) and Pno. (Piano). The score is divided into two systems, each covering measures 35-42. The top system (measures 35-42) shows the Tpt in Bb staff with notes and chords, and the Pno. staff with chords and bass lines. The bottom system (measures 39-42) shows the Tpt in Bb staff with notes and chords, and the Pno. staff with chords and bass lines. The score includes various annotations: a blue box labeled 'quartal/quintal harmony' is placed over the Pno. staff in measures 35-37; orange handwritten notes 'C-7', 'A-flat', 'B-flat', and 'A-flat' are placed above the Tpt in Bb staff; red handwritten notes 'ATN' and 'ATN' are placed above the Pno. staff in measures 36 and 41; and yellow handwritten notes 'P3x5' and 'P3x5' are placed above the Pno. staff in measures 36 and 41. The score also includes dynamic markings 'f' and 'mp'.

As shown in Example 5, Section B illustrates a change from tertian to quintal harmony. It shows how the minor adjustments made in the right-hand in combination with changes in the left-hand can not only sustain, but also create new harmonic implications. The bass line in Example 5 is C- D- A-flat. Each bass note lasts one measure except for A-flat, which lasts for two measures. Changes to the pattern in the right-hand piano part in measures 35-37 create the

change from tertian harmony to quintal harmony. The harmony in measure 35 is C minor (7) with the right hand containing the notes G- B-flat- E-flat. The extended tertian harmony creates dissonance as it grows from the quartal/quintal foundation (which supplies the 7th of the C minor (7) chord in m.35, Example 5). In measure 36, G moves down a step to F. Because of this adjustment, the quartal foundation is emphasized and allows for one to hear an emphasis on the chordal fifth of B-flat (add 4) chord in measure 36. Though the foundation in measure 36 is quartal, the introduction of the note D in the right hand causes the harmony to remain tertian. In measure 37, F goes down a step to E-flat, creating octaves between the soprano and tenor voice in the accompaniment. This adjustment causes the harmony to change from tertian to quintal and emphasizes A-flat 3x5 by establishing an open 5th between E-flat and B-flat. This four-bar unit ends with the note E-flat moving back to F, causing measure 38 to have quintal harmony, emphasizing the underlying foundation once again and continuing the quintal harmony from measure 37. Overall, the harmonic changes are influenced by the bass line and the line moving in parallel fifths descending by step. The notes in the right-hand that change double a note in the left-hand that moves in parallel with the bass (i.e. the C in the bass and the G in the tenor voice in m.35 change to B-flat in the bass and F in the tenor voice in m.36). As the third formed between the bass note and the uppermost piano note, E, in m.35 changes to a fourth and then a fifth in mm.36 and 37, thirds are replaced with intervals conducive to quartal/quintal harmonies.

Though the harmony does not change in m. 38, the bass line climbs by step. It mirrors the trumpet by moving in parallel octaves with it, as highlighted in Example 5. While the trumpet climbs, the right-hand reiterates the quintal chord. The emphasis on quintal harmony, supported by the right and left hands' patterns, cause the change from quintal to tertian harmony to become more significant through mm. 35-38, just before the motion in m. 38 pushes toward the C minor

(7) that returns in measure 39. The harmonies in mm. 35-38 are then repeated in the next four bars (measures 39-42) except for new developments in measure 42. Measure 42 has a time signature change, causing the left-hand to add in notes for the extra two beats and the right-hand notes to stay the same while playing a new rhythmic pattern. This change to measure 42 creates harmonic and melodic movement that pushes into the following measure.

During the two four-bar units in Example 5, the pattern E-flat – D – B-flat in the right-hand is marked as motive x. This motive is the one we noted in Example 1 and 2. Although the right-hand adjusts throughout measures 35-42, this motive is kept intact (except for measures 38 and 42 which create momentum into the following measure).

Scenario 3: Downward Bass Motion with No Set Pattern in Pianist's Right-Hand

In the accompaniment, the left-hand changes [often down by step; often down by fifth; occasionally up by a third] while the right hand does not have an ostinato or ostinato-like pattern.

Example 6: Tertian Harmonies in *Golden Hour*, section E, mm. 106-128.

The image displays a musical score for two staves: Tpt in Bb and Pno. The score is divided into two systems, each covering four measures (measures 106-109 and 110-113). The key signature is B-flat major (two flats). The time signature is 3/4. The score includes dynamic markings such as *mf*, *f*, and *mp*. Handwritten annotations in orange and red ink are present, including the word "expressive" and a tempo marking "♩ = c. 100". The Pno part features tertian harmonies, with the right hand playing chords and the left hand playing a descending bass line. The Tpt part plays a melodic line. The score is marked with measure numbers 106, 109, 110, and 113.

114

Tpt in Bb

Pharo

P47

P47

f

AP

AP

114

Pno.

mf

f

AP

AP

GOLDEN HOUR

9

122 accel. $\text{♩} = 144$

Tpt in Bb

Pno.

ff

ff

Ad.

VII. IV. I. I.

126 127 128

Tpt in Bb

Pno.

mf *mp*

Section D, the bridge of the piece, illustrates scenario 3, a rare occurrence in the piece. Example 6 is the only instance of scenario 3 in the piece, and this is fitting because section D is a contrasting section. Beginning in measures 106-107, the bass changes while the right-hand has no ostinato pattern. Here, the right-hand moves in parallel thirds with the bass and thus provides the chordal third to each measure. This section is entirely tertian with zero implications of quartal/quintal harmony until measures 125-128 where the chord is B-flat 3x5. This section is the first time the piece breaks away from the framework of quartal/quintal harmony and has solely tertian harmony. Because there are no quartal/quintal implications, the dissonance in the accompaniment comes in the form of passing tones, neighbor tones, anticipations, and triadic extensions, as shown in Example 6.

The bridge has no set accompaniment pattern or time signature; however, there seems to be a harmonic pattern. The harmonic pattern is F minor – E-flat – B-flat minor – D-flat major (9). This pattern is seen at the beginning of the bridge (mm. 106-109) and repeated in measures 110-113 and 117-120. Measure 121 appears as though it is going to initiate another statement of this harmonic progression, but new chords occur in measures 123-124: B-flat major and F major. These chord changes prepare for the key change about to occur in measure 125, seen in Example 6.

The trumpet's role in the bridge is primarily to supply chord tones with very little dissonance, which take the form of passing tones and two incomplete neighbors. Throughout this section, the trumpet provides a dramatic interlude for the powerful ending that follows. The mood displayed in the bridge is peaceful as the trumpet maintains a moderate dynamic and overshadows the harmony with its expressivity. In contrast, the energetic mood displayed in

sections G-I apply dynamic contrasts and has the trumpet play with a brilliant and triumphant sound as the powerful sound of the harmony is played in combination.

Melodic Dissonance

I want to explore whether Cait Nishimura uses chordal dissonance, from either tertian or quartal/quintal harmonies, or if she uses primarily embellishing tones (non-chord tones) in the melody. *Golden Hour* by Cait Nishimura incorporates melodic dissonance in order to highlight climaxes. The trumpet provides two types of dissonance: chordal and embellishing. When chordal dissonance is used, it is either in the form of an extension or a dissonance within a quintal harmony. When embellishing dissonance is used, it is commonly an incomplete neighbor, passing, or neighbor tone. Both chordal and embellishing dissonances are typically left unresolved. As mentioned, extensions would typically resolve down (the chordal seventh would resolve to the chordal sixth); in this piece, however, they are left unresolved. The embellishments would traditionally resolve a step up or down (or by the law of recovery for incomplete neighbors), most of them are left unresolved as well.

Melodic dissonance has expressive purposes as we will see in the following examples. Most commonly the dissonance intensifies and pushes towards a climactic moment as seen in Examples 7-9. However, there are moments where dissonance is highlighted as either the climax alone (Example 10) or the resolution (Example 11). The moments of dissonance throughout the piece are able to be highlighted by the performer as they may choose to add articulation or dynamics to specific measures in order to exemplify the importance of the dissonance.

Example 7: Embellishing motion that leads to a climax in *Golden Hour*, section A, mm.

9-18

Flug. / Tpt.

Pno.

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2

GOLDEN HOUR

Flug. / Tpt.

Pno.

© CAIT NISHIMURA MUSIC 2020-21

Section A illustrates how embellishing motion can create intensification which drives to a climactic moment of a leap to an incomplete neighbor followed by a half step up in mm. 9-18,

Example 7. Measures 9 and 11 illustrate dissonance in the melody with passing (P) and incomplete neighbor (IN) tones as seen in Example 7. The push to the end of the section begins in measure 12 as the melody provides several embellishments in an upwards eighth note pattern of D – E-flat – G – A-flat, leading towards the B-flat (the 7th of the C minor (9) chord) in m. 13. The melody continues to grow as the last two beats of measure 12 have a downward-moving eighth-note pattern that leads to a leap of a fifth, landing on C, in measure 14. This pattern is repeated, with different notes, but this time leaping a seventh, landing on D, in m.14. The leap to D in mm. 14-15 is an IN, a dissonance that needs resolution. However, the D (which would typically follow the law of recovery by resolving downward after an upward leap) does not resolve, rather, it goes up a half-step to E-flat. The E-flat is the peak of the section as it is the highest note in the section and is highlighted as it dissolves into Section B (seen at the end of Example 7). The E-flat mm.15-16 is a chord tone of A-flat 4x5. The E-flat, a fifth above the bass, is not dissonant, but finds a sense of home as it becomes the root of the last chord of the section, E-flat 3x5.

Throughout measures 9-15 the only dynamic marked is *mp*. However, the performer in this section may choose to take expressive liberties by adding dynamics and articulations of their own to highlight the high point to come. Beginning in measure 12, beat 3, on D, the performer may choose to implement a crescendo in mm. 12-13 to *mf*. The *mf* will then crescendo to *f* as the trumpet leaps to C (a chord tone) in measure 14. The last final push will come as the trumpet crescendos from *f* to *ff* in measures 14-15. The performer, aware of the strong dissonance brought by the D as a IN in measure 15, may choose to highlight the dissonance by adding a *fp* to the E-flat, followed by a crescendo throughout the measure. By allowing the dissonance to lean into the climax of the section through the *fp*, the E-flat would be highlighted as it soars in measure 15

and half of measure 16. The performer would then follow the dynamics as written, diminishing to nothing as seen in Example 7, mm. 16-18. This dramatization of the ending of the section allows for section B to be a joyful surprise, as the composer describes it as “joyful, with ease.”

Example 8: Embellishing motion that leads to a climax in *Golden Hour*, section F, mm. 137-145.

The image displays a musical score for Example 8, showing measures 137-145 of section F in *Golden Hour*. The score is arranged in three systems, each featuring a Tpt in Bb staff and a Pno. staff. Handwritten annotations in orange and red are present throughout the score.

System 1 (Measures 137-138):

- Measure 137:** Tpt in Bb has a handwritten orange "G 4x4" above the staff. The Pno. staff has a red triangle and a red arrow pointing to a note.
- Measure 138:** Tpt in Bb has a handwritten orange "F 4x5" above the staff. The Pno. staff has a red triangle and a red arrow pointing to a note.

System 2 (Measures 141-142):

- Measure 141:** Tpt in Bb has a handwritten orange "G 4x4" above the staff. The Pno. staff has a red triangle and a red arrow pointing to a note.
- Measure 142:** Tpt in Bb has a handwritten orange "F 5x5" above the staff. The Pno. staff has a red triangle and a red arrow pointing to a note.

System 3 (Measures 143-144):

- Measure 143:** Tpt in Bb has a handwritten orange "G 4x4" above the staff. The Pno. staff has a red triangle and a red arrow pointing to a note.
- Measure 144:** Tpt in Bb has a handwritten orange "F 5x5" above the staff. The Pno. staff has a red triangle and a red arrow pointing to a note.

The score includes various musical notations such as notes, rests, and dynamic markings (mf, f). Red triangles and arrows highlight specific notes and movements within the piano accompaniment.

The image shows a musical score for a trumpet (Tpt in Bb) and piano (Pno.) ensemble. The trumpet part is in the upper staff, and the piano part is in the lower staff. The score is divided into two systems. The first system covers measures 144 and 145. In measure 144, the trumpet has a G note (labeled 'G' in a box) and the piano has a G note. In measure 145, the trumpet has a G note (labeled 'G' in a box) and the piano has a G note. The score includes dynamic markings *f* and *mf*, and various annotations like 'E° SXS' and 'G'.

This passage demonstrates how an incomplete neighbor, followed by an upward leap, precedes the chord tone (a chordal dissonance) that forms the melodic highpoint in m. 139 of Example 8. Measures 137-145 use chordal and embellishing dissonance in combination to create a climactic moment. Measure 137 illustrates the use of an anticipation (ANT), as the A is repeated in measure 138. The instability created using dissonance in mm.137-138, contributes to a drive to the F (the peak) in mm. 139. Embellishing dissonance is repeated as the B-flat in m.138 is an incomplete neighbor (IN). The B-flat in measure 138 goes up a fifth, to the F in measure 139, the peak of this 4-bar unit. Before, in mm. 137-138, the dissonance was driving to the peak in m.139, but the dissonance in measure 140 is used to highlight and reiterate the dissonance of the F from m.139 making it more prominent in m.140. Measure 140 uses both chordal and embellishing dissonance. While the notes D and A are embellishments, F is a chord tone because of its continued presence within the piano part as seen in Example 8. The embellishments also create powerful intervallic dissonance between the melody and bass as the D creates a 7th and the A creates a tritone. The melodic dissonance is primarily left unresolved in mm.137-140 because they are primarily escape tones that do not follow traditional resolution techniques. A new 4-bar unit is introduced in measure 141 as the G (the root of the G 4x4 chord) in the trumpet part propels towards the finish line of the

phrase. These four bars, once again, use embellishing dissonance to push towards the beginning of section G, where the race to the end of the piece begins.

Measure 140 highlights the idea of metrical dissonance. The metrical dissonance takes the form of 2 versus 3 (six quarter notes on top of 12 eighth notes). Metrical dissonance can be seen in several places in the piece, but this is one of the most notable moments. The trumpet can highlight the melodic dissonance and the metrical dissonance that occur simultaneously. The performer may choose to highlight this moment of metrical dissonance by accenting each note in measure 140. The accents would allow the listener to not only hear the emphasis of the chordal and embellishing dissonance but the 2v3 that is also occurring. The added articulation to measure 140 would also allow for the overall mood to change for measures 137-144, as one would hear a powerful and energetic sound displayed by the performer.

Example 9: Embellishing motion that leads to a climax in *Golden Hour*, section G, mm. 145-153.

The image displays a musical score for the piece "Golden Hour", specifically section G, measures 145-153. The score is written for two staves: a trumpet part (Tpt in Bb) and a piano part (Pno). The trumpet part begins with a box labeled 'G' and a key signature change to Bb. The piano part features a complex rhythmic pattern with accents and a key signature change to Bb. The score is titled "GOLDEN HOUR" and is page 11.

The image shows a musical score for a trumpet in B-flat and piano. The score is divided into two systems. The first system starts at measure 150 and the second at measure 152. The trumpet part has handwritten annotations: "B flat" in orange above measure 150, "F (4th 2nd)" in orange above measure 151, and "G" in orange above measure 152. The piano part has a red circle around a note in measure 151 and another red circle around a note in measure 152. Dynamics include "mp" and "f". The key signature has two flats.

Section G demonstrates how incomplete neighbors and passing tones can create tension as the melodic line drives towards the climax in measure 149 and deceptive motion in measure 153 in Example 9. Example 9 is like Example 8 in the way it uses dissonance to push toward a climax. Measure 145 begins with an F, the fifth of B-flat major (7), at *f* demonstrating a high point of the section. The F continues into measure 146 and begins to decrescendo. The decrescendo fades to nothing and allows the trumpet to rest in measure 147. Measure 148 begins a sense of building intensity as it uses embellishments to create instability and drives towards the F, the arrival point in measure 149. The A in m. 148 is an incomplete neighbor, similar to the B-flat in m. 138, Example 8, and both leap to F in their following measures. Measure 150 creates another highpoint, as the melody climbs to A, but this highpoint lacks the same emphasis seen in m.149 with the F. The A, being the chordal seventh of B-flat major (7), finds resolution as the

melody descends to the chordal third of E-flat (G) found at the beginning of m.151 (see Example 9). The sense of instability and drive created by embellishing dissonance is repeated in mm. 151-152. Here, the drive is represented by the eighth note pattern which tends to contain one note then two repeated notes (i.e. G-A-A, where the G is the chordal third and the As are passing tones, as seen in Example 9). This pattern is repeated throughout mm. 151-152 as the sound intensifies towards m.153. The pitches also begin to climb in measure 151 as the melody begins with G and arrives at C on the “a” of beat 2 and is repeated on beat 3 in m. 152. Though the listener is led to believe that the pattern will continue to climb, the pattern takes a turn on the fourth beat of measure 152 and drops down to D, an IN. Instead of repeating notes, like the previous patterns, the D moves up a half step to E-flat which then leaps up a third to G. The G, the root of the G minor (9) chord, in measure 153 is anti-climactic as it sounds deceptive. The listener is waiting for another climax, like the F seen in measure 149, but is given a deceptive notion instead.

With the composer’s articulation and dynamic markings considered, the performer may choose to highlight important dissonances seen in measures 145-153. Beginning in measure 148, the trumpet contains the first notes of embellishing dissonance in the phrase thus far. Because of this occurrence, the performer may choose to lean into the dissonance created by the two as emphasized in m.148. The performer may choose to illustrate a “pushing and pulling” motion as the dissonance creates tension and the consonance becomes a tension-release, creating a swaying notion as the measure drives into the F in measure 149, the climax of the section. Though the A in measure 151 is not as emphasized as the climax in measure 149 it remains important. The A, the chordal seventh of B-flat major (7), may be highlighted through the marked tenuto and a slight use of rubato. The performer may wish to emphasize the A by taking a little of time away from the eighth notes that follow and create a lasting chordal dissonance which waits to resolve

until measure 151. The written crescendo in mm.151-152 is a perfect way to highlight the embellishments and create a bigger push towards the deceptive ending of the section (seen in Example 9).

Example 10: Chordal Dissonance leads to a climax in *Golden Hour*, section H, mm. 161-169.

H triumphant $B^{\circ} 2 \times 5$

ff

ff

GOLDEN HOUR 13

162 $B^{\circ} 2 \times 5$ $B^{\circ} 3 \times 5$

Tpt in Bb

Pno.

(Red.)

164 $B^{\circ} 3 \times 5$ G^{-9}

Tpt in Bb

Pno.

(Red.)

f

f

The image displays a musical score for measures 165 through 168. The top staff is for the Tpt in Bb (Trumpet in B-flat) and the bottom staff is for the Pno. (Piano). The score is written in 2/4 time. Measures 165 and 166 are marked with a 'rit.' (ritardando) and a '2x5' annotation. The piano part features a complex harmonic structure with many notes, while the trumpet part has fewer notes, often marked with red 'x' symbols. The score is annotated with red and orange markings, including 'rit.' and '2x5', which likely refer to specific musical features or performance instructions.

Section H exhibits how the emphasis of extensions and embellishments can highlight the climax of the piece as seen in measures 165-168 in Example 10. Though the melody primarily supplies consonance there are a few measures where dissonance is prominent. Measures 161-164 supply only consonance as the melody provides solely chord tones (specifically the F in B-flat 2x5, first seen in m. 161, and the B-flat in E-flat 3x5, first seen in m.163). Dissonance is first introduced in measure 165 as the melody implements a passing tone (the C) and emphasizes chordal dissonance (the A and F) on beats 3 and 4. The A and F, the 9th and 7th of G minor (9), respectively, are highlighted as they are the longest notes in the measure. The composer even goes as far as to mark the A as tenuto to ensure a longer emphasis in comparison to the previous notes in m.165. Measure 166 begins with B-flat, the chordal 4th of F, which brings a soft

dissonance. The B-flat then leaps to D (same as m.165), but this time the D is not the chordal fifth, but rather an incomplete neighbor (IN). As measure 166 continues, chordal dissonance is repeated as the trumpet frequently plays B-flat. The B-flat (the chordal 4th of F) begins to create intervals of a 7th as the bass moves from F-C on beat 2 of m.166. The C in the melodic line, on beat 4 of measure 166, creates a minor 7th rather than an octave because of the bass' adjustment from C-D as seen in Example 10. The melody in measure 167 repeats measure 165. Though the notes are the same, their meanings have changed. The B-flat jumps to D, as in mm.165-166, but this time, in m.167, the D is highlighted as the 7th of E-flat major (9) rather than the chordal fifth of G minor (9) in m. 165. Measure 167 continues to contain embellishments and contains F on beat 4 (the 9th of the E-major (9) chord) finishing the measure with chordal dissonance. The F in m. 167 lacks resolution like the dissonance seen in mm. 165-166. Measure 168 contains only one embellishment as the melody primarily provides chord tones. The trumpet then fades as the accompaniment takes the melody in measure 169. Though *Golden Hour* provides dissonance throughout, the composer deliberately chooses the moments of dissonance for Section H as she chooses to invert chords to either create soft dissonance or none.

Section H is the climax of the piece and requires the performer to highlight it. Throughout the piece the composer has illustrated images of peacefulness while searching for the “golden hour” but highlighted in Example 10 is the end of the “golden hour”. This is the trumpet’s last few moments to shine as the “golden hour” is in its final moments before fading into the night. The trumpet takes over, sailing with high notes, and establishes a triumphant melody. Measure 165 represents the peak of the sunset as the trumpet highlights moments of dissonance. The sun has risen across the sky and has set it a flame with its beauty. As the section only lasts nine measures, so does the “golden hour”, which begins to fade away in mm. 168-169,

Example 10. To highlight the primary image of the “golden hour”, mm. 165-167, the performer may choose to ignore the *f* and play *ff* instead. This would highlight the melody and allow for the “golden hour” to be shown across the audience. The performer may also choose to add in articulations such as accents to the 1st, 2nd, 5th, and 6th notes of mm. 165 and 167 to emphasize the triumphant melody. Measure 166 may contain accents on the 1st and 2nd notes, but not the following notes in order to establish the rhythmic change between mm. 165-166. As the “golden hour” begins to fade in m. 168, the accents should be taken out and the articulation should be tenuto as the trumpet begins to play rubato softly.

Example 11: Chordal dissonance supported by Quintal Harmonies in *Golden Hour*, section G, mm. 170-185.

[illegible]

The ending of the piece, Section I, illustrates how chordal dissonance can create a sense of calm and dissolution as the piece comes to a close. Measures 170-171 begin only with harmony, establishing the right-hand ostinato and the moving bass line (seen in Example 11). When the trumpet is introduced in measure 172, it provides A (an added note to the E-flat 3x5). The A creates an augmented 4th, a tritone, between the melody and the bass, but is considered a chord tone because of its prominence throughout the section seen in Example 11. However, what would be a strong dissonance is overpowered and softened by the ostinato in the right-hand. In measure 173 the melody moves to F, the third chord tone of E-flat 3x5. Measures 174-175 introduce D in the melody, the chordal third of B-flat major (7) which brings a sense of home to mm. 172-173 as they resolve to B-flat major (7) (the tonic of the ending key). This pattern of A-F, one measure each, to two measures of D repeats in mm. 176-179. The pattern repeats once more in mm. 180-185 with a change to the length of D, this time lasting for four measures as seen in Example 11. Overall, the melodic pattern appears to outline a d minor chord while the harmony implements a changing quintal foundation.

Section I represents the fading of the “golden hour”. In H, the peak was reached, and the sun lit up the sky, but now it has come to an end as the day turns into night. To illustrate the fading of the sun, the composer has the performer slowly decrescendo throughout the section. The performer, with vibrato, may choose to test their range of volume to see how softly they can play. By adding in a range of volume and illustrating *ppp* which diminishes to nothing (mm. 182-185, Example 11) the image of the light carrying into the night will shine throughout the ending section.

Conclusions

As demonstrated in the analysis of *Golden Hour* above, harmonic and melodic dissonance play an important role in the piece. The harmonic dissonance, seen in quartal/quintal harmony (which naturally brings dissonance) and tertian harmony in the form of extensions. Chord changes in the piece fall in three scenarios. Scenario 1 features a changing bass while the right hand maintains an ostinato. Scenario 2 features a changing bass while the right hand maintained an ostinato until broken by an adjustment. Scenario 3 features a changing bass while the right hand had no pattern. Analysis of passages that qualify as scenarios 1 and 2 revealed that an underlying framework of quartal/quintal harmony is present throughout the passages exemplifying scenarios 1 and 2. Some of the examples were heard as tertian, but with a quartal/quintal foundation. The tertian harmony grew, most often, because of a chordal 3rd supplied by the trumpet and added to an underlying framework of quartal/quintal harmony. Whenever an extended triadic sound initiated a progression, harmonic change introduced quintal chords. The bridge of the piece, as seen in scenario 3, is the single instance in which a quartal/quintal foundation is abandoned and the harmony was completely tertian.

The study of harmony laid the foundation for examination of dissonance in the melody, with is chordal dissonance and embellishing, non-harmonic tones. Each example of melodic dissonance, whether chord tones or embellishments, provides moments of expression for the trumpet, which is able to highlight the dissonance written by the composer. The analysis of the piece shows how the performer can identify melodic peaks where dissonance is present and lean into the dissonances before and at a climax.

This study has shown that quartal/quintal harmony plays a prominent role in *Golden Hour*. More research is needed to ascertain whether quartal/quintal harmony is prominent in other pieces by Nishimura. Future research might reveal that Nishimura's technique of combining layers of quartal/quintal content to form both quartal/quintal and extended tertian harmonies is not unique to her; it may be used by other composers, as well.

Bibliography

- Deimler, Kathryn Mary George. "Quartal Harmony: An Analysis of Twelve Piano Compositions by Twentieth Century Composers." PhD diss., New York University, 1981.
- Horvit, Michael, Robert Nelson, and Thomas Benjamin. *Techniques and Materials of Music: From the Common Practice Period Through the Twentieth Century*. Seventh ed. Thomas-Schirmer, 2008.
- Kostka, Stefan. *Materials and Techniques of Twentieth-Century Music*. Second ed. Prentice-Hall, Inc, 1999.
- Nishimura, Cait. *Golden Hour for trumpet and piano*. <https://caitnishimura.com/pages/golden-hour>
- Roig-Francolí, Miguel A. *Understanding post-tonal music*. Routledge, 2008.
- Stein, Erwin. "Structural Functions of Harmony." Review of *Structural Functions of Harmony*, by Arnold Schoenberg. *Tempo*, no. 36 (1955): 29–31. <http://www.jstor.org/stable/944033>.

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The Experience of Technology Integration in Middle and High School Education and Mental Health in Young Adulthood

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Abstract

Young adults between the ages of 18-25 are familiar with the usage of smartphones, laptops, and other technology in the classroom. The sample for this study includes young adults who are one of the first cohorts to participate in extensive integration of technology in the classroom beginning in middle school. Participants reported both positive and negative learning experiences. Furthermore, participants reported that the integration of technology in the classroom may contribute to their mental health and well-being. The current article utilized grounded theory methodology to examine how technology influenced the learning experience in both beneficial and disadvantageous ways. More specifically, the researchers sought to better understand how the participants experienced the integration of technology in middle and high school, and how it impacted their mental health and well-being in young adulthood. The categories that emerged were arranged into a model depicting both positive (organizing and learning) and negative (finding answers, unreliable, and distracting) experiences stemming from the use of technology in middle and high school. The model also highlights how the integration of technology into middle and high school education impacted mental health and well-being for many of the participants. Participants shared positive outcomes of integrating technology in middle and high school including being more sociable, increased self-awareness, increased situational awareness, and open-mindedness. However, the model also highlights negative effects on mental health and well-being. Many of the participants in this study reported currently experiencing a pessimistic attitude, depression, low self-esteem, low motivation, and dependence on technology.

Keywords: Technology, education, integration, mental health, well-being, grounded theory

Literature Review

Introduction

Digital technology has become more prominent and has advanced, especially in recent years. It has brought many changes to how we function as a society and has led the world to adopt policies to integrate technology into daily lives, including in education. Many students can study, complete and submit their assignments, take tests or exams, and view their grades online (Timotheou, 2022).

The amount of time that youth spend on digital technology is concerning. In 2013, 71% of the US population ages 3 and up used some form of digital technology (Harell & Bynum, 2018). According to one study, children under the age of 6 spent an average of 1.58 hours a day on some form of digital technology, played outside for 2.01 hours, and spent 39 minutes on reading (Mustafaoğlu, 2018). Other research posits that children between the ages of 7-12 spend an average of 4 and a half hours a day on technology. Furthermore, American teenagers, ages 13-17 years old, spend an average of 6 and a half hours on technology (Joshi et al. 2019). For most youth, the use of digital technology extends beyond home to educational settings. In 2011, a national survey was conducted that consisted of schools that incorporated technology into their curriculum. Findings from this study suggested that 52.9% of these schools required their students to have a laptop for class (Eiland, 2019). According to the McGraw Hill Education Digital Study Trends (2017), 63% of students used laptops, and 55% used cell phones in the classroom to complete their assignments and exams. Interestingly, 73% of students indicated that they prefer to use technology in the classroom to complete coursework. Although the integration of technology into education may be preferred by many students, it is interesting to note that this

educational trend correlates with a decline in mental health and well-being for this cohort of students. Since 2010, adolescents and young adults have experienced a decline in happiness, life satisfaction, and flourishing, with increases in loneliness, anxiety, depression, and hospital admission for self-harm (Twenge, 2020).

Technology's Integration into Education

Previous literature highlights the benefits of integrating technology in an educational setting. Findings suggest that digital technology in an elementary, middle, or high school setting may positively impact students' knowledge, skills, emotions, and attitudes. It allows students to work with one another and share ideas and experiences (Küçük, 2023). Additionally, technology provides support that can make academics easier. For example, technology provides indicators to inform the user when a mistake has been made, so the errors can be corrected (Küçük, 2023). The use of digital technology has also increased communication skills, teamwork, and attitudes toward learning (Haidt, Allen, 2020). According to Timotheou et al. (2023), technology has helped students gain access to digital course content and information effectively and efficiently, which supports self-directed learning, as well as creates a more open learning environment that promotes critical thinking. Additionally, Pan et al. (2022) examined the role that learning games play in fostering mathematics education in a K-12 setting. Their findings suggest that integrating gameplay improved students' performance and increased learning gains.

Integrating technology into education undoubtedly provides many benefits but may present challenges as well. For example, computers may impede academic success due to a lack of attention, disorganization, and low concentration (Palmer, 2015). Due to the ubiquitous nature of technology, it is difficult to differentiate when technology is used for educational or personal purposes within the school setting. For example, although smartphones can be used for

educational purposes (McGraw Hill Education Digital Study Trends, 2017)), they may negatively affect students' and classmates' attention during school hours (Mustafaoğlu, 2018). Furthermore, smartphone use is associated with passive aggressiveness, obsession, addiction, and anxiety (Mustafaoğlu, 2018).

Although the integration of technology into education may present concerns, how technology is integrated may be a key factor. A study conducted by Schwarz and Zhu (2015) found that student engagement does not increase solely by incorporating technology into the classroom and at home. Teachers and parents must develop and set a list of high expectations and boundaries. This process may facilitate a level of satisfaction, courage, and motivation for students.

Digital technology used outside the classroom may indirectly impact child development, essential for learning. For example, watching an excessive amount of television, especially for children under age 10, may contribute to behavioral disturbances and language development (Mustafaoğlu, 2018). Additionally, excessive exposure to video games may prevent healthy social skills necessary for social connections within an educational setting. Previous research illuminates a strong link between video games, specifically violent games, and real-life violence. Furthermore, video games may lead to social isolation, and lack of communication (Mustafaoğlu, 2018).

Technology and Mental Health

Previous research suggests that digital technology can have negative and positive effects on mental health (Haidt, Allen, 2020). According to Usmani et al. (2022), digital technology such as virtual reality (VR) and augmented reality (AR) can be employed as treatment tools for various mental health disorders. For example, AR and VR are commonly used for attention

deficit hyperactivity disorder (ADHD), eating disorders, anxiety, phobias, post-traumatic stress disorder (PTSD), autism, Alzheimer's, pain management, and schizophrenia. Altering the reality of someone with these mental health issues can improve compliance, social skills, and irritability, and cause a distraction for people in pain or experiencing delusions (Usmani et al. 2022).

Previous research also highlights how technology can contribute to poor mental health. Mahmoodi et al. (2018) conducted a three-section questionnaire for over 1,000 young adults to ascertain the relationship between technology addiction, general health, and sociodemographic information. The findings suggest that overuse of technology correlates with poor mental health. Furthermore, overuse of technology can cause withdrawal, which results in feelings of anger or depression (Mahmoodi et al. 2018). Furthermore, according to Saunders & Vallance (2017), screen time is negatively associated with self-esteem, academic achievement, social behavior, and psychological well-being.

There is limited research examining how the integration of technology in education may impact mental health and well-being. However, the Covid-19 pandemic provided a unique opportunity for increased integration of technology in education, and the opportunity to study this phenomenon. During the Covid -19 pandemic, students were required to spend most of their time in front of screens for class or schoolwork. Research suggests that this negatively impacted their social communications and interactions with others (Strom, 2021). Since families were quarantined during the Covid-19 pandemic, parents had the opportunity to observe first-hand how their children responded to online school. According to one study surveying 15,000 mothers during the Covid pandemic, 60.2% noticed behavioral changes in their children. The most frequent symptoms they observed in their children included restlessness (69.1%), aggressiveness (33.3%), and anxiety (34.2%) (Scarpellini, et al. 2021). Although confounding

factors during the pandemic most likely contributed to these changes in behavior as well, the increased use of technology may have played a role.

Purpose of this Study

Previous research identifies both benefits and challenges of integrating technology into education. However, since the integration of technology into middle and high school is a fairly new phenomenon, more research is needed to better understand how this impacts student learning experiences. Additionally, previous research highlights how technology can benefit and impede mental health and well-being. Although there is much research examining the relationship between technology and mental health, research is needed to examine how the integration of technology in middle and high school may influence mental health and well-being in young adulthood.

Method

Systematic Grounded Theory

The purpose of grounded theory methodology is to explain a phenomenon of interest through the process of collecting data and engaging in data analysis to generate categories (Chong & Yeo, 2015). Since the purpose of this study is to better understand the experience of using technology for educational purposes in middle and high school, and how the integration of technology in education may have influenced mental health and well-being in young adulthood, grounded theory methodology was utilized. Creswell (2012) viewed grounded theory as a powerful resource and tool when a researcher is seeking to explain a natural phenomenon or needs a broad theory. Grounded theory methods are utilized to hypothesize theories through a repetitive process of going back and forth between data. Rather than developing a theory from

preexisting ideas and theories, it allows researchers to develop theories that are grounded in the data (Charmaz, 2014; Creswell, 2012).

Researcher Reflexivity

The constructivist grounded theory methodology provides an understanding of the potential influence of the researcher on the research process (Charmaz, 2014). Researcher reflexivity obligates researchers to notice any relationships to the studied topic or biases that may influence the research process (Charmaz, 2014). The primary author of this study is an undergraduate psychology student, who has also experienced the integration of technology into the classroom during their middle and high school years. The second author is a university professor and a licensed marriage and family therapist who has implemented technology in the classroom for several years. These authors' understanding of the research process is influenced by their training and provides a specific lens for understanding the iterative process of data collecting and analysis (Charmaz, 2014). Through the research process, the primary author has remained aware of any conflicts, potential biases, and personal interests and has committed to a meticulous process of analysis that aimed to remain just and true to the voices and experiences of the participants. The first author documented thoughts and ideas about the data, reflections, and potential connections within their experiences. The first author also discussed emerging codes with the second author to prevent forcing the analysis to fit any preconceived ideas.

Sampling and Participants

The target population was young adults between the ages of 18 - 25, who have experienced using technology in middle and/or high school to complete assignments and tests. A recruitment poster on social media invited participants to join this study. A total of 13

participants responded. A Google Form link to a survey with open-ended questions was provided for the research participants. The survey and the data were then coded to identify recurring trends and themes.

Ethical Considerations

This study was approved by a university institutional review board. Research participants signed an informed consent before taking the survey. The survey was provided electronically, and all identifying information was removed. Therefore, it was considered an exempt study. Furthermore, the informed consent reminded participants that the survey was voluntary and that they could stop completing the survey at any time.

Analytic Process

For this study, constructivist grounded theory methodology was utilized as described by Charmaz (2014). A qualitative coding software, Atlas. ti was utilized to complete the analysis. The software has artificial intelligence integrated into it to assist with identifying themes (Atlas. ti, 2019). There were several stages to complete this analysis: initial coding, focused coding, theoretical coding, and categorization. A repetitive process comparing all responses was implemented throughout the analytic stages to develop a substantial grounded theory (Charmaz, 2014). First, the primary author implemented initial coding. Initial coding involved using line-by-line analysis to analyze participants' responses. The primary and secondary authors discussed and revised the initial codes to determine what best reflected the data. Following the consensus on initial coding, focused coding was executed to identify themes and patterns amongst the participants' responses. Again, the primary and secondary authors identified and discussed prominent themes that emerged from the focused codes. Throughout this process, the data was

revisited to clarify the emerging themes. In the final stage, the categorization process clarified which themes emerged from the data. The authors thoroughly discussed the emerging themes as focused codes were separated into groups and subgroups. Coding continued in a repetitive process until all interviews and analyses were completed. Based on the code groups, subgroups, and prevailing themes, a model was created to depict participants' retrospective reflection of their educational experience with the integration of technology in middle and high school, and how they feel this has impacted their current mental health and well-being as young adults.

Results

The results suggest that technology may have benefits and disadvantages in education and learning. Furthermore, research participants reported experiencing both positive and negative effects on their mental health and well-being due to technology's integration into their education. These findings are displayed in Fig. 1 and are described below.

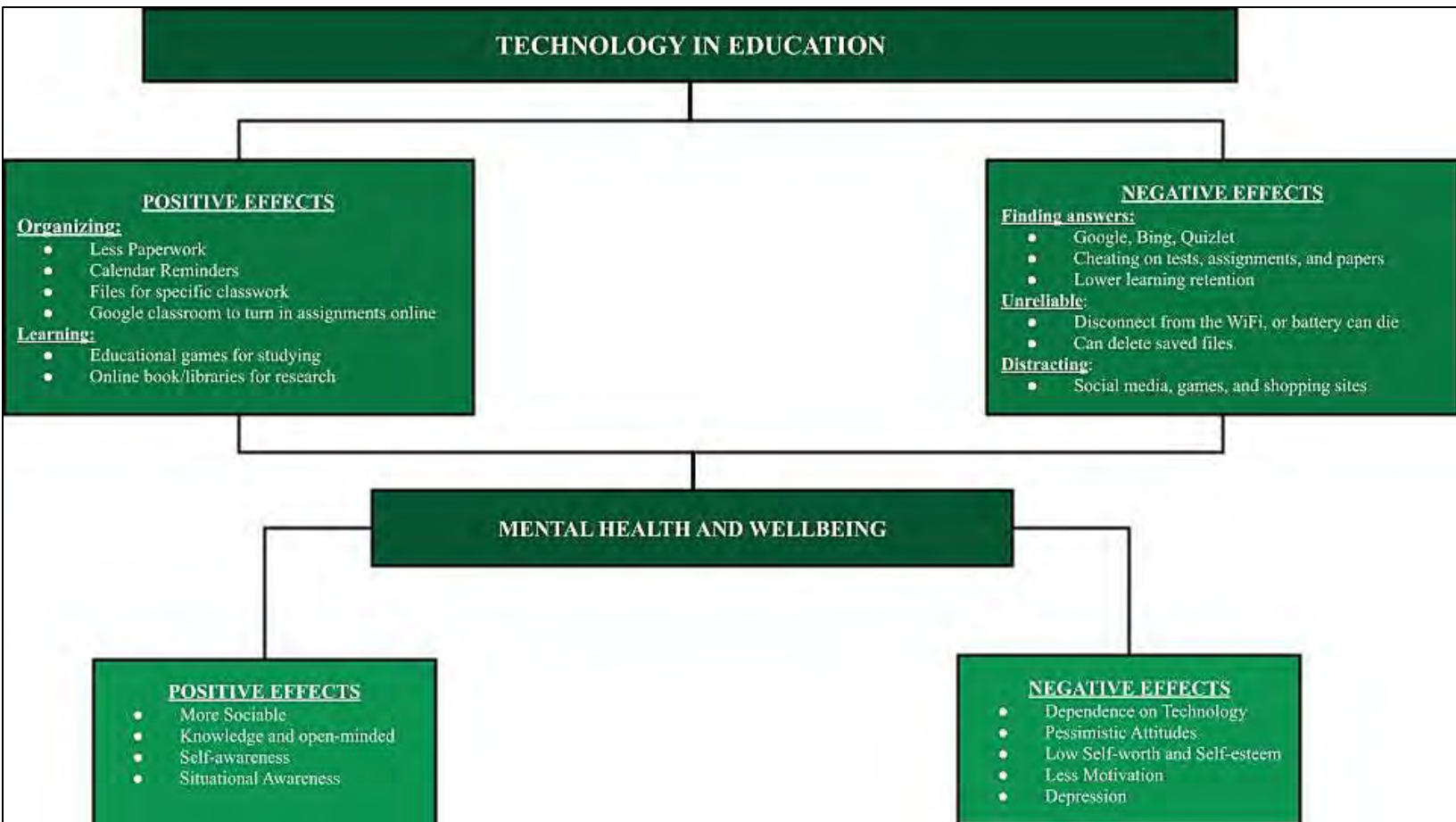


Fig. 1 Effects due to the use of technology in education

The Positive Effects of Technology on Education

Participants highlighted two primary positive experiences stemming from the integration of technology in education: 1) organizing assignments, and 2) enhanced learning. These experiences seemed to magnify their educational experience.

Organization

Participants in this study reported that technology integration into their educational experience made organizing easier. Some participants reported technology allowed them to have

less paperwork. For example, one participant said: “I would say that I view school and learning before technology was introduced as messy. Too much paperwork. Almost everything assignment can be done on a computer, so I feel like there is far less paperwork involved.”

Technology was also beneficial because it allowed students to set *calendar reminders* to remember tasks that needed to be completed. One individual said: “I can remember things that need to be done because of my phone calendar.” Additionally, assignments and papers were able to be *files for specific classwork*. Another participant stated: “It [technology] made things easier, and I was able to keep better track of my work having it in folders on a computer, instead of having multiple papers in a big binder.” Another participant explained that keeping files and having *Google Classroom to turn in assignments online* made it easier:

It’s easier to store things and keep files so you don’t have to worry if they crinkle. I also enjoyed being able to turn assignments in online. I didn’t have to worry about keeping up with multiple papers for different classes.

Learning

Several participants reported that studying became more fun due to *educational games*. One participant reported: “I thought it was super cool to be able to learn how to type, try new software like google slides, and play educational games.” Another participant stated: “I remember playing Kahoot [educational game] and other open discussion educational games in class. I always really enjoyed them.”

Participants also stated that technology made it effortless to find *online books and libraries for research*. It was more time efficient to be able to type in a page number, and type notes, rather than flipping and having to mark notes in the books. One individual stated:

I think technology is super beneficial in school as a college student. It makes reading writing papers, researching, and taking notes super easy. I was happy because I was able to do my homework and do research on that homework if needed on one computer of having to look for multiple books. It's all online.

Another participant stated: "I'm more organized, and my homework has been done more efficiently. I don't have to go to a library to find books, etc."

The Negative Effects of Technology on Education

Although some participants described ways technology was beneficial in education, disadvantages were highlighted as well. Participants shared detrimental aspects of integrating technology in education including finding answers to assignments, the unreliableness of technology, and distracting qualities of technology.

Finding answers

Many participants reported that they would find answers to their assignments online just by typing them into the search box. They would use websites like *Google, Quizlet, or Bing*. One participant stated:

It was hard for me personally to do math and science on the internet without writing it out and solving the problem. Instead, it was more of a copy-paste situation from Google or Photo Math. I feel like I didn't learn as much because the internet had the answers.

Participants also reported that they were regrettably *cheating on tests, assignments, and papers*.

One participant described a time when multiple classmates got caught cheating:

I vividly remember when Quizlet came out. Everyone in our school was cheating and getting good grades, the teachers and admin caught on. Some got suspended, but they blocked the website from our Chromebooks. I felt as if technology would be a problem in our ethics from that day forward.

Some admitted to not remembering or learning the curriculum that was being taught because of cheating or plagiarizing, resulting in *lower learning retention*. One participant explained:

I had to write an essay in an English class on a book and I did not read this book. I googled an essay on Great Gatsby, and I scrolled down and found something that someone else wrote, copied, pasted, and turned in. I got an 80 something on that paper that the teacher gave us 3 weeks to write. It was a big chunk of our final grade. It took me 3 minutes to do it. I lied and cheated and took the easy way out which is not good. I didn't use any of the lessons the teacher had taught for weeks. Unfortunately, it was a waste of time on the teacher's part.

Unreliable

Participants also stated that technology can be unreliable. Due to its capacity to die without warning, it can *disconnect from the Wi-Fi*, or *the battery can die*. One participant stated: "If my battery is dead or I don't have Wi-Fi, I can't access my things that I need for class." This action *can delete saved files* or not being saved to the device. Another individual said: "Always back up your things twice, and for important things, copy them and store them in a safe place. I've lost my work because my Wi-Fi will shut down."

Distracting

Participants acknowledged that technology was also distracting to them during class time or during times that should be dedicated to studying. Many reported that they would get distracted by *social media, games, and shopping sites*. One participant noted: “I have been distracted by shopping and games on my laptop during class. I like to look at things I might want to buy even though I probably won’t.” Another participant explained the method they would use not to get caught off-topic:

I would catch myself getting off task and looking at something completely different than what the teacher was talking about because all I had to do was open another tab. Then, I would switch back and forth depending on where the teacher was in the room.

Social media has contributed to *distractions* within schools. Many participants explained they played games during class time because they didn’t care about the lesson. One participant stated:

I had access to computers at home so I knew they could be used to play games. I would play games during class all the time. Especially, if I didn’t care for what we were learning. I can get a quick answer to pretty much.

Positive Effects on Mental Health due to Technology usage in Education

Participants explain how technology affected their mental health and/or their well-being positively. For example, they reported that technology made them more sociable, knowledgeable, open-minded, self-aware, and situationally aware of the world around them.

More Sociable

Many participants explained that they could meet new people, stay in touch with friends, and talk with long-distance relatives. One participant stated:

I can communicate with all my loved ones all over the globe, which is what I've liked the most about it [technology]. Technology has made it easier for everyone to communicate without having to spend money to fly or drive.

Knowledge and open-minded

Based on the participants' responses, *knowledge, and open-mindedness* are other positive effects of the integration of technology. They felt that they were able to gain skills due to technology being at their disposal. One participant stated: "I became more carefree, curious, spontaneous, and more knowledgeable due to having technology at my disposal. "Another participant said: "I gained a lot of knowledge and skills through heavy use of technology. I would watch a video of someone cooking a recipe and want to cook it for myself."

Self-awareness

A few of the participants also explained that they have become more *self-aware* of their thoughts, feelings, and emotions after technology was introduced. Technology was able to give answers to things that they have always had questions about. For example, one participant said:

I believe I've shaped myself mostly through heavy self-awareness and self-reflection over time. Though, I can't say that technology didn't have some kind of role in that too. Having access to the internet for answers to my countless 'whys' and 'hows', I feel I've learned many things. I'm a better person now than I was back then and have a stronger worldview.

Situational Awareness

Many participants reported that digital technology helped them become more *situationally aware* of the world around them. One participant stated: “It [technology] has better helped me understand a lot of things not only about myself, but the human race as a whole.” Another participant explained how technology has changed their perception of themselves and others online:

I'm more confident today. I've realized that technology makes everything, and everyone seems and looks perfect, but I had to remember that everyone is still human. They have flaws just like I do, Technology can help them hide whether it is physical, mental, or emotional.

Negative Effects on Mental Health due to Technology usage in Education

The individuals in this study also acknowledged the negative impact that technology has had on their current mental health. Participants explained that technology contributed to a sense of dependence on technology, a pessimistic attitude, lower self-worth and esteem, less motivation, and depression.

Dependence on Technology

For some participants, the integration of technology into education led to a *dependence on technology* resulting from the ease of quickly accessing information. One participant said: “I gained a lot of knowledge and skills through heavy use of technology. I could quickly find information for any questions I had during school. It’s so helpful.” For many participants, this was true not only in an educational setting but also in other facets of life. For example, some participants described how dependence on technology became the norm for entertainment, shopping, social media, etc. One participant explained: “It’s become something I rely too heavily

on and developed some behavioral patterns because of that. Such as extended screen time, using it for entertainment a lot more, and browsing websites that could lead to purchases.” For some, dependence on technology extended to even minute details of daily living. One participant described his usage of technology in everyday life:

I’m very dependent on technology for everything. If I have a question about anything, I first pick up my phone and ask Google. I depend on it to get me places. Remind me of things I need to do. I probably couldn’t function as well without it.

Pessimistic Attitudes

Some of the participants noted that they have a more pessimistic outlook on life due to technology. They explained that they used to be more positive, but due to the information they accessed through technology, their perception of the world changed. One participant stated: “I’ve become more pessimistic and existential due to having access to websites for any answers to my deep thoughts.” For other participants, social media contributed to a changed perception of the world. Another participant noted:

Social media has made me more negative over the years. I watched the news, which was usually bad news. I saw people talking and criticizing others all the time. It made me feel the need to be perfect and I couldn't be myself without judgment.

Low Self-worth and Self-esteem

Participants also noted they had *lower self-esteem and self-worth* after the introduction of technology into education. Many felt the need to appear and behave in a certain manner. For example, one participant stated: “After the technology was introduced, I became more stressed, my self-esteem plummeted, and I was less motivated. I felt I had to uphold a certain image and it

was draining.” Cyberbullying was noticed by the participants as well, and they did not want to be a victim of bullying. One participant explained:

Technology brought social media which has had a negative effect on most people by inviting more toxic environments where people do not have to take accountability for their actions. So, I tried to surf social media, but I posted less.

Many participants stated that they knew of someone who was bullied, or they were bullied themselves online. Inappropriate content was also noted in the data from the participants. They would somehow scroll and bump into the content or the content was spread maliciously. One participant explained:

I remember in 10th grade; a girl sent a sexually explicit photo and video to someone she thought would be her boyfriend. It began to float around the school until it got back to her. 2 guys got suspended and almost charged. and she put restraining orders on them for what they did.

Less Motivation

Several participants reported they *struggled with motivation* or laziness due to technology making it easier to accomplish things from home including clothes shopping, ordering food, socializing, etc. One participant explained:

I personally got a bit lazier because the answers that teachers were asking were off the internet most of the time. Then it kind of just followed me as an adult. It’s something I’m trying to change but getting that motivation/drive is hard.

Another participant stated:

I would describe myself as lazy after digital technology was introduced. I barely want to do anything. If I have my phone in my hand I could be laying down all day long because it's so much to do with a phone.

Depression

A few of the participants reported they experienced a period of *depression* due to technology, social media, and cyberbullying, whether they were personally bullied or knew someone who was. For example, one participant said: "I had a moment of depression because of my self-worth and esteem. There was a lot of cyberbullying at my school while school was in session and outside of school." Another participant stated:

I also became depressed. I was bullied at school and then I would return home for it to continue online. I was bullied by people I knew and strangers who would join in on the 'fun'.

Discussion

These results suggest that the integration of technology into education is complex, contributing to both positive and negative learning experiences. Furthermore, participants identified that experiencing technology in an educational setting during middle and/or high school contributed to both positive and negative mental health and well-being in young adulthood. Since the sample in this study is comprised of one of the first student cohorts experiencing a higher degree of technology integration in middle and high school, this model identifies some challenges and benefits emerging from this new frontier.

One positive aspect that emerged from the data is that participants described becoming intrigued with learning as educational games (e.g., Kahoot!) were integrated into their classroom

experience. Previous research supports this finding. Educational games, especially in mathematics and language learning, have increased participation and willingness to learn (Pan et al. 2022). Another emerging theme from the data is that educational games have effectively provided digital course content. Previous research supports this finding stating that having online course content provides a sense of independence, which then assists with creating an environment for critical thinking and self-directed learning (Timotheou, 2022).

One concerning finding that emerged from the data is how technology made it easier for students to cheat on assignments. This is not surprising, especially since previous research suggests that technology enables students to cheat on assignments during class time (Haidt, Allen, 2022). Some participants in this study admitted to using side tabs to switch back and forth between the assignment and the answer key. Additionally, many participants reported using Google, Bing, and Quizlet to find answers for their schoolwork. These findings are supported by previous research suggesting that students are more likely to cheat due to the proliferation of digital tools such as smartphones, tablets, and computers since they can readily obtain the information they desire. Cheating is problematic not only on an ethical level, but also because it can affect learning retention. It is also alarming because research suggests that the prevalence of cheating is increasing (Küçük, 2023).

Another concerning finding that emerged from the data is that several participants reported experiencing depression. Research participants reported that technological integration into middle and high school learning may contribute to their poor mental health. This finding is supported by previous research suggesting that students who experience a high level of internet usage tend to have higher levels of depression, low self-esteem, and anger (Saunders & Vallance (2017). Several factors may contribute to this process. Many participants explained that

technology made them feel dependent on it and due to this, they continuously perform everyday tasks with it. Previous research suggests that dependence on technology may contribute to higher levels of depression (Saunders & Vallance, 2017). Additionally, social media may contribute to the participants' experience with depression due to increasing exposure to toxic environments. Previous research suggests that students who have higher levels of depression tended to have a higher level of internet usage, especially in activities such as watching movies, listening to music, or checking social media (Wang et al, 2022). It may be difficult to ascertain if high usage of technology contributes to depression or if depression results from high technology usage. Previous research suggests that high technology usage may be a tool for social comfort and a distraction from depression, leading to a vicious cycle of struggling with mental health (Wang et al, 2022). Although this finding reflects previous literature, this study expanded on previous research findings by highlighting specific accounts of individuals and their experiences, including how technology integration in education affected their mental health and well-being. These findings propose questions about the degree of people's awareness of how technology can affect them.

Clinical Implications

Adolescents and young adults experience technology regularly, so it is important for teachers, parents, and mental health professionals to be aware of technology and its negative effects. Mental health professionals serving middle and high-school-age clients may benefit from awareness of both positive and negative effects resulting from technology integration in school. It may also be beneficial for clinicians to invite middle and high-school-age clients to discuss and process their emotions surrounding technology, which may allow them to be more self-aware. Additionally, clinicians can help their patients gain a sense of mastery over emotions and

actions. Furthermore, clinicians can encourage patients who have struggled with mental health due to technology to advocate for others. This can help patients find a purpose and possibly socialize in a world without technology.

Limitations

One limitation of this study is the utilization of open-ended questions to collect personal accounts of young adults' experiences with technology. Open-ended questions provide space for all kinds of answers; therefore, participants could answer as vague and as detailed as they want. Open-ended questions are also time-consuming for participants, and they could stop answering questions at any point, limiting the data. However, open-ended questions can provide crucial information and details when answered thoroughly. Singer & Couper (2017) argue that open-ended questions should be implemented for multiple fields of application: Testing methodological theories and hypotheses; encouraging more truthful answers; and serving as an indicator of response quality.

Another limitation of this study is that biases and perspectives can influence the analytic process. As a researcher, it is important to acknowledge that individual paradigms influence data interpretation. As discussed previously, several steps were followed to help check biases, and to allow participants' voices to be heard.

Finally, this study's sample size is ($N=13$), which is relatively small. Although saturation was reached for this study, a larger sample size would have provided more diversity. It is crucial to note that the sample of this study lacked diversity. Therefore, these findings should not be generalized to the larger public, which is often the case for grounded theory methodology

(Charmaz, 2014). Despite these limitations, this model may be beneficial for better understanding technology's effects on young adults.

Future Research

Future research can benefit from examining the effects of technology in education and on young adults' mental health and well-being on a larger scale using quantitative research to explore a more diverse population. Furthermore, researchers can explore what boundaries and measures can be taken to alter the degree technology is used by adolescents and young adults. This may potentially lower the risk of mental health issues linked to technology use. Researchers can also explore the best ways to raise awareness appropriately and efficiently, which may encourage individuals who have experienced poor mental health and well-being to cope with life outside of technology.

Conclusion

The effects of integrating technology in education have been outlined by two positive subcategories and three negative subcategories. The subcategories of positive effects consist of *organizing* and *learning*. The subcategories of negative effects consist of *finding answers*, *unreliable*, and *distracting*. Participants also highlighted how technology integration in middle and high school may impact mental health later in young adulthood. The model highlights positive and negative effects on mental health. The positive effects consist of more *sociability*, *knowledge* and *open-mindedness*, *self-awareness*, and *situational awareness*. The negative effects consist of a *dependence on technology*, a *pessimistic attitude*, *low self-worth* and *esteem*, *less motivation*, and *depression*. This model may contribute to a better understanding of how the integration of technology in school impacts learning, and how technology may influence the

mental health and well-being of young adults later in life. Information from this model may provide a helpful resource for researchers and clinicians aiming to improve the well-being of adolescents and young adults. This model may help to raise awareness of the benefits and challenges of integrating technology in school, and its long-term effects on mental health and well-being.

References

“Atlas.ti.” Atlas.ti, 2019, atlasti.com/.

Charmaz, K. (2014). *Constructing grounded theory: A practical guide through qualitative analysis* (2nd ed.). Thousand Oaks, CA: Sage.

<https://doi.org/10.7748/nr.13.4.84.s4>

Chong, C. H., & Yeo, K. J. (2015). An overview of grounded theory design in educational research. *Asian Social Science*, 11(12), 258. <https://doi.org/10.4102/hts.v73i3.4589>

Cloete, A.L., 2017, ‘Technology and education: Challenges and opportunities’, HTS Teologiese Studies/ Theological Studies 73(4), a4589.

<https://doi.org/10.4102/hts.v73i4.4589>

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Upper Saddle River, NJ: Pearson

Eiland, Lea S., and Timothy J. Todd. “Considerations When Incorporating Technology into Classroom and Experiential Teaching.” *The Journal of Pediatric Pharmacology and Therapeutics*, vol. 24, no. 4, July 2019, pp. 270–275,

www.ncbi.nlm.nih.gov/pmc/articles/PMC6633276/, <https://doi.org/10.5863/1551-6776-24.4.270>.

Haidt, Jonathan, and Nick Allen. “Scrutinizing the Effects of Digital Technology on Mental Health.” *Nature*, vol. 578, no. 7794, 10 Feb. 2020, pp. 226–227,

www.nature.com/articles/d41586-020-00296-x, <https://doi.org/10.1038/d41586-020-00296-x>.

Harrell, S., & Bynum, Y. (2018). Factors affecting technology integration in the classroom.

Alabama Journal of Educational Leadership, 5, 12-18.

Jean, Twenge M. “Increases in Depression, Self-Harm, and Suicide among U.S. Adolescents

after 2012 and Links to Technology Use: Possible Mechanisms.” *Psychiatric*

Research and Clinic Practices, 27 Mar. 2020, prcp.psychiatryonline.org.

<https://doi.org/10.1176/appi.prcp.20190015>

Joshi, Shashank V., et al. “The Use of Technology by Youth: Implications for Psychiatric

Educators.” *Academic Psychiatry*, vol. 43, no. 1, 16 Nov. 2018, pp. 101–109,

www.ncbi.nlm.nih.gov/pmc/articles/PMC6394428/, [https://doi.org/10.1007/s40596-018-](https://doi.org/10.1007/s40596-018-1007-2)

1007-2.

Küçük, T. (2023). Technology Integrated Teaching and Its Positive and Negative Impacts on

Education. *International Journal of Social Sciences and Educational Studies*, 10(1),

46-55. <https://doi.org/10.23918/ijsses.v10i1p46>

Mahmoodi, H., Nadrian, H., Shaghaghi, A., Jafarabadi, M. A., Ahmadi, A., & Saqqezi, G.

S. (2018). Factors associated with mental health among high school students in iran:

does mobile phone overuse associate with poor mental health? *Journal of Child and*

Adolescent Psychiatric Nursing, 31(1), 6–13. <https://doi.org/10.1111/jcap.12202>

Mustafaoğlu, R., Zirek, E., Yasacı, Z., & Razak Özdinçler, A. (2018). The negative effects of

digital technology usage on children’s development and health. *Addicta: The*

Turkish Journal on Addictions. Advance online publication.

<http://dx.doi.org/10.15805/addicta.2018.5.2.0051>

Palmer, S. (2015). Toxic childhood: How the modern world is damaging our children

and what we can do about it. Los Angeles, CA: Orion

Pan, Y., Ke, F., & Xu, X. (2022). A systematic review of the role of learning games in fostering mathematics education in K-12 settings. *Educational Research Review*, 36, 100448. <https://doi.org/10.1016/j.edurev.2022.100448>

Saunders, T. J., & Vallance, J. K. (2017). Screen time and health indicators among children and youth: current evidence, limitations and future directions. *Applied Health Economics and Health Policy*, 15(3), 323–331.

<https://doi.org/10.1007/s40258-016-0289-3>

Singer, E., & Couper, M. P. (2017). Some methodological uses of responses to open questions and other verbatim comments in quantitative surveys. *Methods, data, analyses: a journal for quantitative methods and survey methodology (mda)*, 11(2), 115-134. <https://doi.org/10.12758/mda.2017.01>

Strom, Amanda. The Negative Effects of Technology for Students and Educators . 2021, nwcommons.nwciowa.edu/cgi/viewcontent.cgi?article=1322&context=education_masters.

Tabroni, Imam, et al. “Impact of Technological Advancements on the Establishment of Characteristics of Children.” *East Asian Journal of Multidisciplinary Research*, vol. 1, no. 1, 16 Apr. 2022, pp. 27–32, journal.formosapublisher.org/index.php/eajmr/article/view/41/32.

Timotheou, Stella, et al. “Impacts of Digital Technologies on Education and Factors Influencing Schools’ Digital Capacity and Transformation: A Literature Review.”

Education and Information Technologies, 21 Nov. 2022,

<https://doi.org/10.1007/s10639-022-11431-8>.

Usmani, Sadia Suhail, et al. "Future of Mental Health in the Metaverse." *General Psychiatry*, vol. 35, no. 4, 22 July 2022, p. e100825, <https://doi.org/10.1136/gpsych-2022-100825>

Wang, C.-H., Salisbury-Glennon, J. D., Dai, Y., Lee, S., & Dong, J. (2022). Empowering College Students to Decrease Digital Distraction Through the Use of Self-Regulated Learning Strategies. *Contemporary Educational Technology*, 14(3), epXXX.
<https://doi.org/10.30935/cedtech/12456>

Volume 6

Article 18

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Examining the differences in bat community composition between temperate forest habitats and farmlands.

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Introduction

Bats play an essential role in temperate forest ecosystems; their insectivorous diet makes bats a key player in keeping insect populations in check (Federico, et al. 2008). Through this, bats have been shown to be able to help prevent defoliation in forests by reducing the top-down pressure placed on plants by herbivorous insects, (Beilke & O'Keefe, 2022). Unfortunately, bats are facing unprecedented threats from both environmental and man-made factors. These include things such as the wind-power industry (Arnett, *et al.* 2008; Arnett *et al.* 2016), habitat loss (deforestation or human development) (Park, 2014), the white-nose syndrome fungal infection (Minnis and Linder 2013), and global warming (NABat, 2016). Given the essential role of bats in our temperate forest ecosystems, it is imperative that biologists research the effect of these factors on bat communities.

Most bat species hibernate in large colonies during the winter (Marin, et al. 2021). However, many species will form smaller aggregated roosts during the summertime or roost singly (Holliday, 2023; Meier *et al.*, 2022). The availability of suitable habitat is key for bats in the active season, especially for roosting. As bats move to summer roost sites, they may enter different habitat types for foraging as well as roosting. It is also possible that bats will forage in habitats different than those in which they roost in summer.

Many of our local species, including the big brown bat, *Eptesicus fuscus*, roost in tree cavities where pups are nursed during the summer. Additionally, during the mating season, males can roost together or in single roosts as they look for a mate (Agosta 2002). There has not been much research into the direct effects of agricultural development or forest management on bat community composition, especially not in the southeastern U.S. Many bat species have suffered

population declines since the 20th century, and foraging habitat loss and roost unavailability due to agriculture are thought to be factors (Park, 2014). Thus, it is essential that we understand the habitat needs of our local species when choosing where to agriculturally develop. We surveyed the foraging bat community in forest and farmland habitats to compare community composition. This information could help inform decision-making regarding agricultural development in areas with important bat populations, allowing us to better protect and conserve these important keystone predators. With this information, we are surveying bat communities to determine whether there is any difference in the community composition of foraging bats between the two habitat types.

As this project is continuing through the fall of 2023, we have not yet collected enough data to confidently determine the composition of the forest and farmland bat communities. between the forest and farmland bat communities. We have collected five nights' worth of data for about 9 miles of transects in each habitat type. Our target sample size is 15-18 nights of data in both habitats from 20 miles of transects (Moreno & Halffter, 2000). However, the preliminary data presented here already provides valuable information about the community composition of the two habitats.

Methods

Study location and recording methods

We sampled the Cherokee National Forest and the farmland located three miles away in Benton, Tennessee. We then decided which stretches of road would be our research sites. There are several qualities we looked for when deciding on our road transects; first, we wanted our transects to be isolated enough that we could safely and properly collect data without interference from heavy vehicle traffic; second, we wanted our transects to be similar in length;

finally, we wanted the two transects to be relatively close, limiting any distance effects other than habitat type. Our road transect for the forest was 9.3 miles long, while our farm transect was nine miles in length. There has been equal sampling effort put forward for both habitat types; as of this report, the number of sampling days for both transects is equal. Figure 1 is a picture of our forest transect on a typical day of sampling.



Figure 1: Photograph of our forest transect road.

We then drove along each of these transects with a Titley Scientific Chorus bat detector suction mounted on top of a passenger vehicle. This is the most efficient way to obtain many recordings in a single transect route in mobile bat detection surveys, (Whitby et al. 2014). Our Chorus was fitted with an ultrasonic mic, which allowed it to record bat foraging calls. We set

the chorus to break our recordings into 10-second clips, which simplified analysis. By t at a constant speed of 15-25 miles per hour, we mitigated the risk of recording the same bat twice. Recording began 20 minutes before sundown each night. To control potential effects of time relative to sunset on bat activity, the order of transect sampling was alternated each night of sampling. This data collection was repeated on 4 nights where both transects were driven, due to weather interruptions, one additional night only the forest transect was sampled, and another night only the farmland transect was sampled. Overall, we collected 150 total identified bat calls between the two habitats. Data collection was cut short in July due to equipment failure and will resume once the equipment repairs are finalized. We anticipate a final sample size of near 500 bat detections by the conclusion of the data collection in September 2023.

Sonogram analysis and species identification

When hunting, bats emit ultrasonic (high frequency) sound waves to echolocate their prey; there are differences in frequency levels and the length of calls depending on the species of bat that emitted that call (Stathopoulos, 2017). If one compares things like the frequency and patterns of different species' calls, it is possible to identify what species of bat emitted that call (Stathopoulos, 2017). To visualize and identify calls, we used Kaleidoscope, an application that allowed us to graph our data on a sonogram. Figure 2 is an example of a sonogram containing a bat foraging call belonging to a seminole bat (*Lasiuris seminolus*). Kaleidoscope also has a North American bat automatic identification feature, which allowed us to identify which species we found in each habitat type once we had filtered out all species not known to be present in our county of study or adjacent counties. This list of species present in each county was based on distribution maps provided by the Tennessee Bat Working Group at www.TNBWG.org.

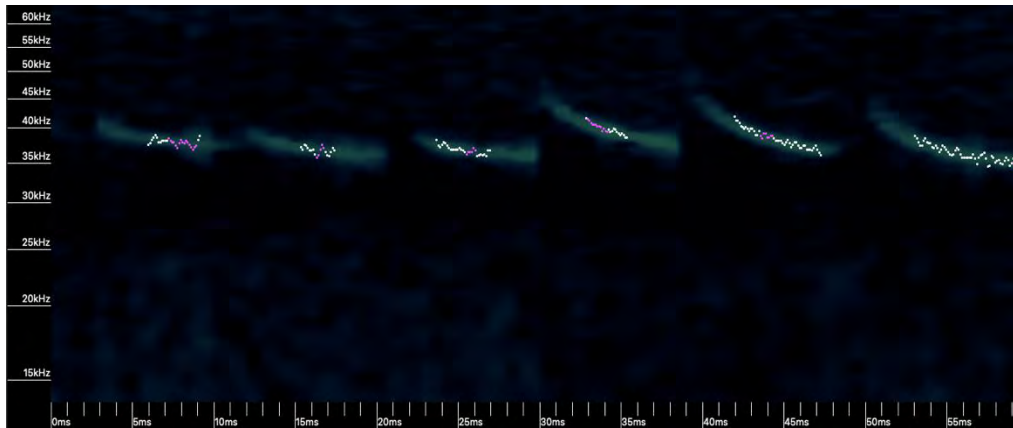


Figure 2: Sonogram depicting the call of *L. seminolus*.

While Kaleidoscope's Auto-ID is a powerful tool for our data analysis, it requires manual verification and about 16.5% of recordings were not automatically identified. We manually identified as many of these as possible resulting in 6.6% of all individuals remaining unidentified. Manual identification began with a cluster analysis that grouped acoustically similar recordings together. We used this tool to answer three questions about each recording with no identified bat: 1) whether there was actually a bat call in the recording, 2) whether the calls in the recording were similar to any species that we had collected in the same habitat, and 3) if the call matches the description of any of the species known to live in our area.

Data analysis

Once we had identified the species of each recorded bat, we compiled counts of individuals of each species in each habitat bat, we calculated the Shannon diversity index (Shannon, 1948) for both habitats as seen in (1).

$$H' = -\sum p_i * \ln(p_i) \quad (1)$$

Where p_i = the proportion of individuals of all species comprised of species i . This index allowed us to determine the relative diversity of the two habitats and the diversity of bats when pooling data from both habitat types.

$$\beta_{SHANNON} = \exp H'_{pooled} / ((\exp H'_{forest} + \exp H'_{farmland}) / 2) \quad (2)$$

From (1), we exponentiated each H' and calculated beta diversity as $\beta_{SHANNON}$ where $\exp H'_{pooled}$ = the value of the exponentiated pooled Shannon index; $\exp H'_{forest}$ = the value of the exponentiated forest Shannon index; and $\exp H'_{farmland}$ = the value of the exponentiated farmland Shannon index as in (2). We thus quantify the relative contribution of the two habitat types to the pooled diversity.

$$BC_{ij} = 1 - (2 * C_{ij}) / (S_i + S_j) \quad (3)$$

We also calculated the Bray-Curtis Dissimilarity (Bray & Curtis, 1957) between the two habitats, (3). C_{ij} = the sum of the lesser count of each species found in both habitats. S_i = the number of individuals counted in one site. S_j = the number of individuals counted at the other site. Bray-Curtis dissimilarity quantifies how different the two communities are in terms of percentage of the bat community's relative abundance not present in both habitats.

Results and Discussion

We observed five different genera of bats: *Myotis*, *Eptesicus*, *Lasiuris*, *Nycticeus*, and *Perimyotis*. Figure 3 reports the counts of each bat species identified in each habitat.

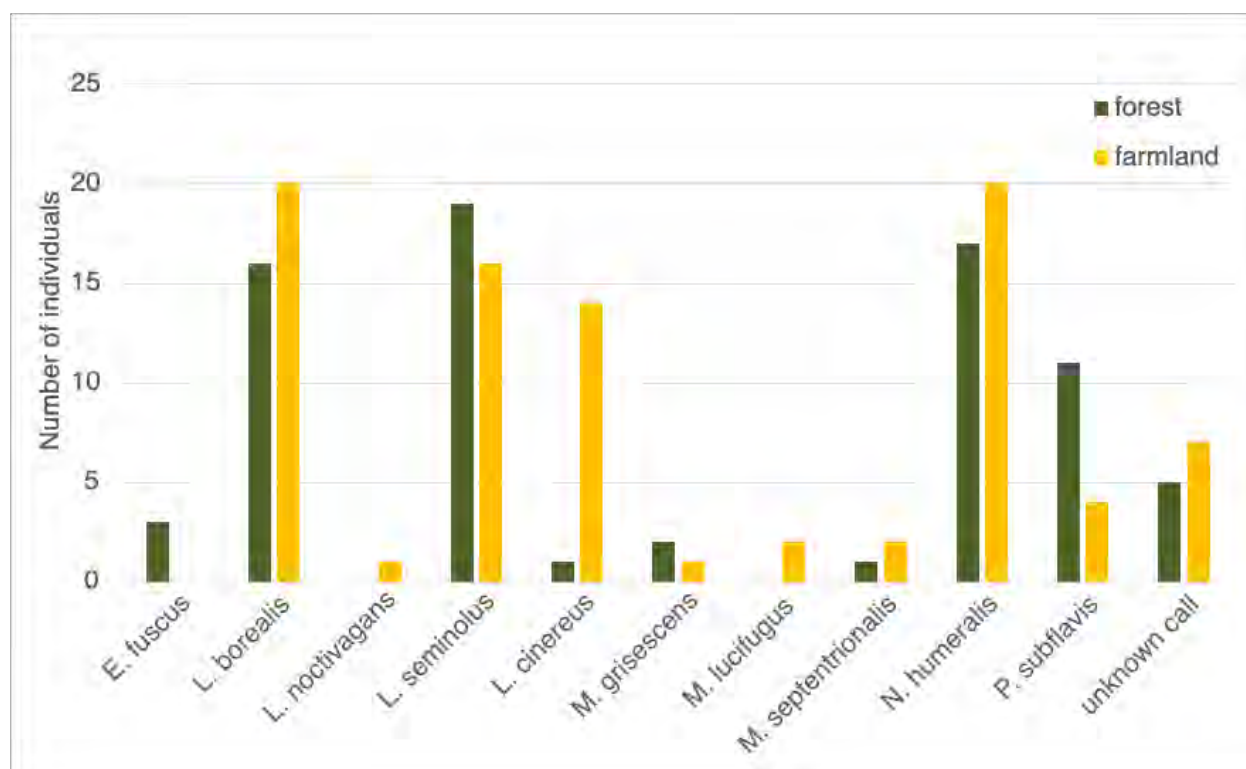


Figure 3: Comparison of relative abundance of each species between forest and farmland habitats.

Shannon Diversity Index

Our Shannon diversity index shows that the two communities are not the same in regard to diversity and relative abundance. With two different H' values, the two communities are not equally diverse. However, it is important to note that our data collection is not yet complete, so this calculation may change slightly depending on what is seen in future sampling. For instance, if we see *M. lucifugus*, which is currently only present in farmland recordings, appear in the forest habitat in future recordings, the diversity index for the forest community will increase slightly. It is likely that both the forest and farmland H' will increase with a larger sample size. We do not know whether these values will change in a way that brings their H' values closer, or farther apart.

Beta Diversity ($\beta_{Shannon}$)

Our calculation of $\beta_{Shannon}$ gives us 1.09. When calculating beta diversity, a value above one indicates a difference between the communities being compared. Meaning that $\beta_{Shannon}$ also shows a difference in community composition between our two habitat types. This indicates that the two habitats are moderately different in regard to foraging usage by local bats. $\beta_{Shannon}$ is calculated using $\exp H'$, therefore, if the H' of forest and farmland become more or less similar once data collection is complete, then $\beta_{Shannon}$ will do the same.

Bray-Curtis Dissimilarity

The Bray-Curtis dissimilarity is directly related to beta diversity in the way that they both measure a difference between the diversity of two habitats. Our Bray-Curtis dissimilarity shows a difference of 23% when comparing the diversity of the forest and farmland communities. We expect the dissimilarity to decrease with a larger sample size. Generally, as sample size increases communities become more similar rather than less (Williams, 1997). The trend of certain species such as *P. subflavis* to be heavily numbered in one habitat but not the other could be due to a small sample size. There is a possibility that these trends are truly differences in preference based on the bat species. In which case we would expect dissimilarity to increase as our sample size increases.

Conclusions

This study provides us with information relevant to understanding the effects of deforestation and habitat loss on bat communities. By measuring how diverse these foraging bat communities are, we get closer to answering our hypothesis that there is a difference between the bat communities that forage in our forests and farmlands. Currently our small sample size is not

large enough to accurately quantify the difference between the two habitats. However, we have shown that the foraging bat communities therein are somewhat different based on current data.

Larger-scale studies have found that species richness declines in forest bat communities as habitat disturbance increases (Griffith & Jara-Guerro, 2021). Interestingly, that is not what we see in our data, where species richness is similar between intact forest and the fragmented and modified habitat of farmland. As we continue to collect data, there is a potential for the species richness to increase in our forest habitat. However, it is possible that the bat genera local to our research sites have different foraging preferences than the phyllostomids from Griffith and Jara-Guerro's (2021) study.

Our Bat communities in the forest and farmland have significant dissimilarity in relative abundance. The question is what is driving certain bat species to be more inclined to the farmland over the forest, or vice versa. Most species in our sample occur either in very low numbers in a single habitat or in similar numbers in both habitats. However, *L. cinereus* seems to prefer farmland based on our data, (Figure 3) with 14 individuals in the farmland and 1 in the forest. This could potentially be due to *L. cinereus*' tendency to fly without using echolocation, reducing our count of this species within a given habitat. (Corcoran & Weller, 2018) Additionally, these bats use a form of echolocation that is 3 orders of magnitude weaker than a typical echolocation vocalization. These micro calls may make it harder to detect these bats when they are present. However, it is not likely that *L. cinereus* make these low-registry vocalizations while foraging, as it would make detection of smaller prey items more difficult (Corcoran & Weller, 2018). Future research should investigate the foraging habits of this species to better understand what may drive them toward a farmland habitat as opposed to the forest.

Our data suggest that *P. subflavus* prefers the forest habitat. Notably, their numbers are not as skewed toward one habitat as *L. cinereus* is. However, there is a notable difference in *P. subflavus* numbers between our two habitats, with 11 in the forest, and 4 in the farmland. Gaulke, et al., (2023) found that overhead vegetation and closeness to a water source were key elements to suitable *P. subflavus* habitats. This is consistent with our data because our forest transect is very close to the Ocoee River, with plenty of tree canopy coverage. Future transect selection in each habitat may need to balance proximity to rivers to isolate effects of farmland versus forest habitat from effects of proximity to water.

The other genera present in our data set are either close in number in both habitats, (see *L. seminolus*, *L. borealis*, and *N. humeralis*) or are not present in high enough number in our data for us to make a conclusion about those species yet. As we collect more data, the relationship between foraging habitat and bat community composition will become clearer. As we reach our target sample size via adding additional transects to both habitats, we will get a clearer picture of the genera present in each habitat. Although preliminary and possibly exaggerating differences in bat community and thus effects of habitat, our data suggest that many species use the two habitats similarly. The final data will enable us to determine the extent to which *L. cinereus* and *P. subflavus* differ in relative abundance between the two habitats. We will also be able to accurately determine the overall degree of difference between the bat communities and the extent to which habitat type affects community composition

References

- Agosta, S. J. Habitat use, diet and roost selection by the Big Brown Bat (*Eptesicus fuscus*) in North America: a case for conserving an abundant species. *Mammal Review*, 32(3)179-198. <https://doi.org/10.1046/j.1365-2907.2002.00103.x>
- Minnis, A.M., Lindner, D.L. 2013. Phylogenetic evaluation of *Geomyces* and allies reveals no close relatives of *Pseudogymnoascus destructans*, comb. nov., in bat hibernacula of eastern North America, *Fungal Biology*, 117(9)638-649. <https://doi.org/10.1016/j.funbio.2013.07.001>.
- Arnett, E. B., Baerwald, E. F., Mathews, F., Rodrigues, L., Rodríguez-Durán, A., Rydell, J., Villegas-Patraca, R., & Voigt, C. C. (2015). Impacts of wind energy development on bats: A global perspective. In *Bats in the Anthropocene: Conservation of Bats in a Changing World* (pp. 295–323). Springer International Publishing. https://doi.org/10.1007/978-3-319-25220-9_11
- Arnett, E. B., Brown, W. K., Erickson, W. P., Fiedler, J. K., Hamilton, B. L., Henry, T. H., Jain, A., Johnson, G. D., Kerns, J., Koford, R. R., Nicholson, C. P., Piorowski, M. D., & Tankersly, R. D. (2008). Patterns of Bat Fatalities at Wind Energy Facilities in North America. *The Journal of Wildlife Management*, 72(1), 61-78. <https://doi.org/10.2193/2007-221>
- Beilke, E. A. (2023). Bats reduce insect density and defoliation in temperate forests: An exclusion experiment. *Ecology*, 104(2), e3903. <https://doi.org/10.1002/ecy.3903>

- Bray, J. R., & Curtis, J. T. (1957). An Ordination of the Upland Forest Communities of Southern Wisconsin. *Ecological Monographs*, 27(4), 326–349. <https://doi.org/10.2307/1942268>
- Cao, Y., Williams, W. P., & Bark, A. W. (1997). Effects of Sample Size (Replicate Number) on Similarity Measures in River Benthic Aufwuchs Community Analysis. *Water Environment Research*, 69(1), 107–114. <http://www.jstor.org/stable/25044847>
- [Corcoran Aaron J.](#), [Weller Theodore J.](#) (2018) Inconspicuous echolocation in hoary bats (*Lasiurus cinereus*). *Proc. R. Soc. B.*, 258(1878). <http://doi.org/10.1098/rspb.2018.0441>.
- D'Acunto, L. E., Pauli, B. P., Moy, M., Johnson, K., Abu-Omar, J., & Zollner, P. A. (2018). Timing and technique impact the effectiveness of road-based, mobile acoustic surveys of bats. *Ecology and Evolution*, 8(6), 3152–3160. <https://doi.org/10.1002/ece3.3808>
- Federico, P., Hallam, T. G., McCracken, G. F., Purucker, S. T., Grant, W. E., Correa-Sandoval, A. N., Westbrook, J. K., Medellín, R. A., Cleveland, C. J., Sansone, C. G., López, J. D., Betke, M., Moreno-Valdez, A., & Kunz, T. H. (2008). Brazilian free-tailed bats as insect pest regulators in transgenic and conventional cotton crops. *Ecological Applications*, 18(4), 826-837. <https://doi.org/10.1890/07-0556.1>
- Fort Collins Science Center. (October, 2016). *North American Bat Monitoring Program (Nabat) active*. North American Bat Monitoring Program (NABat) | U.S. Geological Survey. Fort Collins Science Center. www.usgs.gov/centers/fort-collins-science-center/science/north-american-bat-monitoring-program-nabat
- Gaulke, S. M., Cable, A. B., Hohoff, T. C., Rogness, B. A., & Davis, M. A. (2023). One model to rule them all: Identifying priority bat habitats from multi-species habitat suitability

models. *The Journal of Wildlife Management*, 87(2), e22351.

<https://doi.org/10.1002/jwmng.22351>

Holliday, C., Wisby, J. P., Roby, P. L., Samoray, S. T., & Vannatta, J. M. (2023). Modeling migration and movement of gray bats. *The Journal of Wildlife Management*, 87(3), e22364. <https://doi.org/10.1002/jwmng.22364>

Marín, G., Ramos-H, D., Cafaggi, D. *et al.* Challenging hibernation limits of hoary bats: the southernmost record of *Lasiurus cinereus* hibernating in North America. (2021). *Mamm Biol* 101, 287–291 <https://doi.org/10.1007/s42991-020-00080-4>

Meier, F., Grosche, L., Reusch, C. *et al.* Long-term individualized monitoring of sympatric bat species reveals distinct species- and demographic differences in hibernation phenology. (2022). *BMC Ecol Evo* 22, 7. <https://doi.org/10.1186/s12862-022-01962-6>

Michael D. Whitby, Timothy C. Carter, Eric R. Britzke, Scott M. Bergeson. (2014). Evaluation of mobile acoustic techniques for bat population monitoring. *Acta Chiropterologica*, 16(1), 223-230. <https://doi.org/10.3161/150811014X683417>

Moreno, C. E., & Halffter, G. (2000). Assessing the completeness of bat biodiversity inventories using species accumulation curves. *Journal of Applied Ecology*, 37(1), 149-158. <https://doi.org/10.1046/j.1365-2664.2000.00483.x>.

Park, K. J. (2014). Mitigating the impacts of agriculture on biodiversity: Bats and their potential role as bioindicators. *Mammalian Biology*. Retrieved April 28, 2023, <https://doi.org/10.1016/j.mambio.2014.10.004>

- Shannon, C.E. A mathematical theory of communication. (1948). *The Bell System Technical Journal*, 27(33), 379-423. <https://10.1002/j.1538-7305.1948.tb01338.x>
- Stathopoulos, V., Zamora-Gutierrez, V., Jones, K. E., & Girolami, M. (2018). Bat Echolocation Call Identification for Biodiversity Monitoring: A Probabilistic Approach. *Journal of the Royal Statistical Society Series C: Applied Statistics*, 67(1), 165–183.
<https://doi.org/10.1111/rssc.12217>
- Valle, D., Griffith, D. M., Jara-Guerrero, A., Armijos-Ojeda, D., & Espinosa, C. I. (2021). A multifaceted approach to understanding bat community response to disturbance in a seasonally dry tropical forest. *Scientific Reports*, 11(1), Article 1.
<https://doi.org/10.1038/s41598-021-85066-z>

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AI Concept Maps

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Abstract

We've created software utilizing GPT-3, the powerful language model that powers the popular ChatGPT application, to generate visual concept diagrams for condensing natural language texts. This article delves into the application's technical intricacies, its possible applications, and upcoming enhancements.

Introduction

In an era defined by the relentless expansion of information, the ability to distill complex texts into intelligible insights stands as a paramount challenge. As the volume and intricacy of data continue to surge, innovative solutions are imperative to bridge the comprehension gap and harness the power of knowledge. The innovations made in artificial intelligence (AI) and natural language processing (NLP), have led to a new cultural reliance on these technologies, with applications like Chat-GPT. While this has brought this technology to the forefront of public attention it leaves many with the questions of how AI will affect our daily lives.

The goal of this article is to offer a potential use case for new technologies such as these. We believe our application can help digest written information and enhance the work of researchers, professionals, and students. This paper delves into the technical marvel that lies at the heart of an ingenious software tool, Generative Pre-trained Transformer 3 (GPT-3) to create visual concept diagrams. We consider the potential of AI-driven collaboration and concept elucidation, envisioning a landscape where comprehension reaches new heights.

We used widely accessible tools and online code libraries such as Flask, jQuery, and Bootstrap, to build this application as proof for the usability of GPT, as well as AI in general, in the development of a variety of specialized software tools.

We explore the various layers of our concept-mapping application. We look at the intricate orchestration of GPT-3's language understanding, decoding the process by which it transforms raw text into interconnected nodes of knowledge. The architecture of the application, deftly intertwined with Python and Flask, serves as the canvas upon which GPT-3's creative strokes are painted.

Description of the GPT technology

GPT (Generative Pre-trained Transformer) is a cutting-edge language generation technology developed by OpenAI. It is based on a deep learning architecture called the Transformer. GPT takes the Transformer architecture and adapts it for natural language understanding and generation tasks [4]. This Transformer architecture utilizes self-attention mechanisms to allow the model to weigh the importance of different words in a sentence, considering the context of the whole sequence. This enables the model to capture long-range dependencies and understand the context of each word more effectively [3]. The advent of the GPT technology has ushered in a new era of capabilities and possibilities into the realm of natural language processing (NLP) [5]. GPT, built upon the transformative Transformer architecture, addresses longstanding challenges in NLP and language understanding.

Traditional NLP methods often grappled with complexity and scalability, struggling to capture the intricate nuances of human language. However, linguistic models faced a critical bottleneck in scaling. The sheer volume of data and linguistic intricacies demanded models of unprecedented magnitude. Attempting to upscale traditional models often resulted in diminishing returns or outright infeasibility due to resource constraints. This limitation hindered the attainment of higher levels of linguistic understanding and expression. GPT emerged as a transformative solution to the scalability challenge. By harnessing the power of larger models, GPT succeeded where its predecessors faltered. This approach demonstrated that increased model size correlated with substantial improvements in

linguistic comprehension and generation [3]. GPT's ingenious architecture facilitated the training of colossal models, enabling the capture of intricate linguistic patterns and the generation of coherent, contextually relevant text.

Software Implementation

This application is a software tool that leverages the power of GPT-3, to generate visual concept diagrams from natural language texts, bridging the gap between sophisticated language processing and visual representation. This application condenses and synthesizes complex pieces of text into concise and visually organized concept maps. The user can input a piece of text or content into the application's interface. This text can range from paragraphs of information, articles, research papers, or any textual data that the user wants to distill into a more comprehensible format. The application extracts main topics and key points from the input text using AI-powered language understanding. It identifies the most salient concepts, terms, and ideas present in the text. The application interacts with the GPT-3 language model using a sequence of structured prompts. The first prompt instructs the AI to identify the main topics of the text. Then subsequent prompts ask the AI to identify subtopics related to each main topic. The prompt requires the AI to return this information to the main program in a format that can be easily used by a diagram generator script [1]. The resulting diagram provides a clear visual representation of the interconnected concepts, making it easier for users to grasp the overall structure and content of the original text. Users can interact with the generated concept map, exploring different nodes, expanding or collapsing subtopics, and gaining a deeper understanding of the content. The map includes nodes representing main topics and subtopics, with connecting lines indicating relationships and hierarchies. We believe this application has potential uses across different fields, including education, research, content summarization, and brainstorming. It serves as a tool to enhance

comprehension, communication, and collaboration by simplifying complex information into visually digestible formats.

The process of preparing a base for the GPT3 API to run consisted of a few complex steps. For this project the choice was made to go with Python to access the API, as well as HTML to display the input and output fields. To use the GPT3 API in a Python environment a few modules must be installed into the Python application directory; OpenAI and Flask Libraries [2]. For this use case, we also found it necessary to include the JSON library to allow the parsing of data between the Python file and the HTML file. The OpenAI library is required to send requests to GPT3, using the library allows the file to access the GPT3 API. Additionally, the Flask library is necessary for the utilization of the Python file because the OpenAI module must be run within a server environment.



The OpenAI library includes a method "*openai.Completion.create*" used in the OpenAI API to generate text completions. This API call allows developers to interact with the OpenAI language model to receive text completions given a prompt or an initial text. The method includes many parameters including engine, prompt, temperature, max_tokens, and stop, which can all be used to alter the API request. The parameters are described below [2].

Engine: specifies the language model you want to use. For example, 'davinci' or 'curie'.

Prompt: is the input text or the beginning of the text you want the model to continue.

Temperature: controls the randomness of the generated completions. Higher values (e.g., 0.8) make the output more random, while lower values (e.g., 0.2) make it more deterministic.

Max_Tokens: Sets the maximum length of the generated completion in tokens.

Stop: Allows you to specify a custom stop sequence to control where the completion should end.

The most important part of generating concept maps is picking the topics and subtopics that will be highlighted. Picking out topics with AI meant that we must be very specific with the prompt used. This process is part of a function called `get_topics_and_subtopics`. The following prompt was used in this project.

```
prompt = f"Extract the Main topics from this paragraph: {text} List topics:"
```

In this code, `f` is used to create an f-string (formatted string) in Python. An f-string is a way to embed expressions inside string literals, allowing you to insert the values of variables directly into the string. `"{text}"` is the submitted text segment entered by a user.

AI Concept Maps

Please Enter Your Essay Or Article

Generative Pre-trained Transformer 3 (GPT-3) is a large language model released by [OpenAI](#) in 2020. Like its predecessor GPT-2, it is a decoder-only transformer model of deep neural network, which uses attention in place of previous recurrence- and convolution-based architectures.[2] Attention mechanisms allow the model to selectively focus on segments of input text it predicts to be the most relevant.[3] It uses a 2048-tokens-long context and then-unprecedented size of 175 billion parameters, requiring 800GB to store. The model demonstrated strong zero-shot and few-shot learning on many tasks. [4] Microsoft announced on September 22, 2020, that it had licensed "exclusive" use of GPT-3; others can still use the public API to receive output, but only Microsoft has access to GPT-3's underlying model.[5]

Please Enter A Specific Focus

GPT-3

Process

When we provide all of the information above into "openai.Completion.create" it returns a response object containing various information related to the completion. To access this generated completion from the response, you can use "completions.choices[0].text". The completions field in the response object holds an array of choices made by the language model. For most completions, there's only one choice, located at '[0]' within the array choices. The "text" field within the chosen completion contains the actual generated text. The format of the data received is one massive string and isn't in a usable form by default and must be cleaned up and separated into usable parts.

```
response_text = completions.choices[0].text.strip()
topics = [topic.strip() for topic in response_text.split("\n")]
```

Doing this cleans up the text as well as separates it into an array of strings stored in "topics" which can then be further changed into an array of objects of type "Topic" rather than simple strings.

The "Topic" class has a few parameters: Name, children[], parentID, ID, and Synopsis. These parameters have many uses for this program, mainly the children[], parentID, and ID values, which allow for the easy ordering of the topics when they are displayed to the user. The process of creating the objects depends on the ParentID of the topic. This group of topics called main topics all have a ParentID: none (null) because they have no parent. For each topic, there will be a new object created with their generated AI text as their name value, a unique ID starting at 1 to ensure no duplicates, a parentID of none, and a synopsis that is generated by a second call to the AI using the original text segment and the name value of the object. After creating the objects, they are all added to a new array called listOfTopics.

The list of topics stored in listOfTopics would then be used to find corresponding subtopics. While the process is similar it is different in that we need to iterate over the list of topics in listOfTopics and use the parameters of the objects contained within. The name value of the topic is needed to provide context so that the AI knows what it's looking for. We can also use the ID for the relevant topic to assign that sub-topic a parentID. But the last part is the text segment that the user submitted, which is needed so that the AI has access to the document. When all of that is put together you get something like this.

```
for topic in listOfTopics:
    subtopic_objects = get_topics_and_subtopics(text, main_topic=topic.name, main_topic_id=topic.id)
    topic.children = subtopic_objects
    listOfSubtopics += topic.children
```

Because of the nature of the OpenAI library and the GPT API in general you cannot make follow-up requests using previously submitted prompts, which makes the task of finding subtopics more complex. This means the API must be accessed separately for each main topic, which needs the text segment submitted every time. The previous prompt is not usable for this request however due to the

extra specification added from the parent topic. We now need to include the name value which was provided by the previous code segment.

```
prompt = f"Find subtopics related to the main topic '{main_topic}' in the  
following text: {text} List sub-topics:"
```

After receiving an output of each sub-topic for the main topic we once again need to clean up that response just like for the main topics and then switch them to objects. Once that process is complete, they will be added to a new array listOfSubTopics. This will repeat for each main topic and then the listOfSubTopics will be added to the listofTopics.

The HTML file is where the initial request to the Python file was made, and it is also what is waiting for the script to finish running and return some value. Using the POST and GET methods. The Post method sends the data from the user interface to the HTTP request's body. The server-side Python script can access this data using the request.POST (in the case of a web framework like Flask) or other similar methods, depending on the web framework you are using. Alternatively, the Python script can send the processed data back to the HTML file using the GET method by redirecting the user to a new URL or appending the data as query parameters in the URL. The HTML file can then access this data using JavaScript or by parsing the URL parameters.

```
if request.method == 'POST':  
    text = request.form['text']  
    focus_topic = request.form['focus_topic']
```

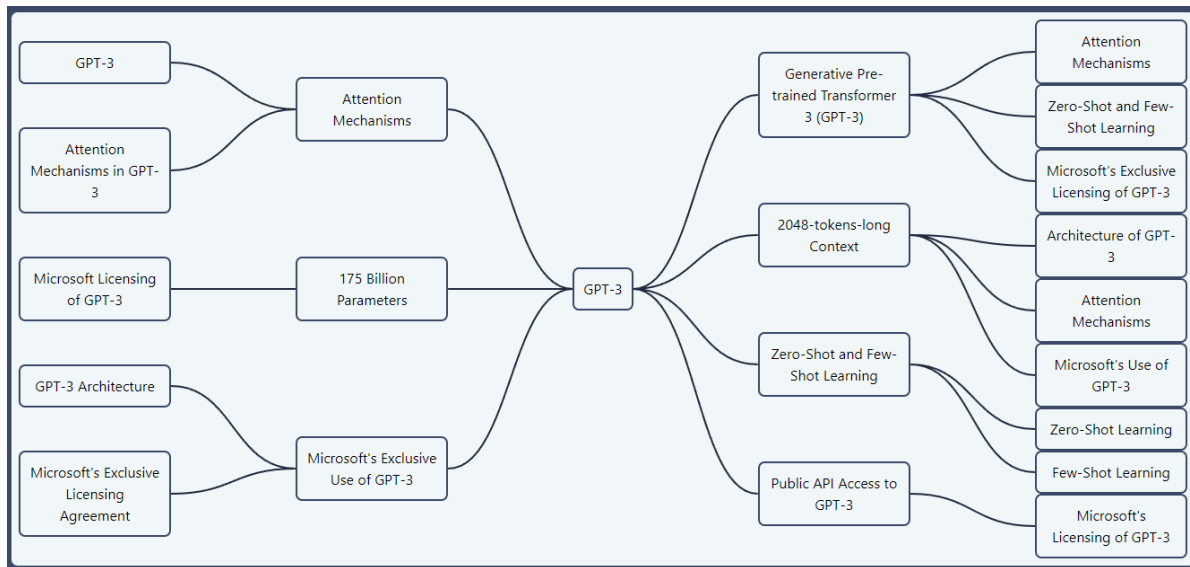
To get the array of topic objects to the output file we first needed to use the `to_json()` method on each topic in the array of topics. `to_json()` refers to a second definition of the `Topic` class of objects which was defined to contain the data for the topics. Using this second definition we can reformat our data into the form that the GET method can send back.

```
class Topic:
    def __init__(self, topicName, topicID, parentID, topicSynopsis):
        self.name = topicName
        self.children = []
        self.parentID = parentID
        self.link = None
        self.id = topicID
        self.synopsis = topicSynopsis

    def to_json(self):
        return {
            "id": self.id,
            "text": self.name,
            "parentId": self.parentID,
            "synopsis": self.synopsis,
        }
```

```
jsonTopics = [topic.to_json() for topic in listOfTopics]
return jsonify(jsonTopics)
```

Once the finalized data has been processed through the map generator script it is then displayed onto the HTML page for the user to see. They can then look at all of the synopsis that has been generated as well as how each topic relates to their subtopics.



Future Work

In the pursuit of advancing this research, several avenues for exploration and enhancement could yield valuable insights and improved outcomes. The following areas represent potential directions for future work.

1) An intriguing avenue for further exploration is the comparison between Node.js and Python for interacting with the GPT-3 API. While this project chose Python as the interface for API access, investigating the merits of Node.js could provide valuable insights. Exploring the strengths and weaknesses of each platform, particularly in the context of real-time interactions and responsiveness, could lead to a more informed choice for similar projects in the future.

2) Introducing a fine-tuned AI model into the framework could elevate the precision and quality of the generated concept maps. By adapting the model to better understand the specific nuances of concept mapping and relationship extraction, the output could become more aligned with the desired outcomes. A fine-tuned model could potentially reduce noise, improve topic and subtopic coherence, and generate concept maps that more closely match human expertise.

3) Implementing an AI-driven filtering mechanism to process and refine the identified topics and subtopics could significantly streamline the concept mapping process. Currently, our application attempts to perform limited filtering by only eliminating nodes that are perfectly redundant. By employing natural language processing techniques, the AI could automatically categorize, prioritize, and refine the extracted concepts. This could enhance the usability of the generated concept maps by presenting users with a more organized and relevant set of topics and subtopics.

4) Currently, our application always represents the concept map as a tree – that is, as a graph with no cycles (or “loops”). It would be interesting to allow for concept maps that are not trees, since it is common for two main topics to have the same subtopic.

The current project represents a foundational step towards automated concept mapping using the GPT-3 API. The suggested future work areas outlined above present exciting possibilities for further refinement, innovation, and application of this technology. As AI and natural language processing continue to evolve, these directions could contribute to the development of more sophisticated and powerful concept mapping tools.

Bibliography

[1] Frank Wisniewski, *Create a MindMap* [Online]: <https://dev.to/frankwisniewski/create-a-mindmap-22pb> (Accessed June 2023)

[2] OpenAI. (2023). *ChatGPT* (August 1 0.27.6) [text-davinci-003] [Online]: <https://chat.openai.com>

[3] Mingyua Zong, Bhasar Krishnamachari. (2022) *Survey on GPT-3*: <https://arxiv.org/abs/2212.00857>

[4] Amazon. (2023) *What Is GPT?* [Online]: <https://aws.amazon.com/what-is/gpt/>

[5] Alana. (2023) *GPT-3 and innovation in natural language processing (NLP)* [Online]:

<https://blog.alana.ai/en/alana-for-innovation/gpt-3-and-innovation-in-natural-language-processing-nlp/>

Summer 2023

How Titles Affect Women in Ministry Leadership

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Under the guidance of Lorinda Roberts, D.Ed.Min

HOW TITLES AFFECT WOMEN IN MINISTRY LEADERSHIP

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Introduction

Since the Early Church until now, the phrase “women in ministry” has been a huge topic in denominations, churches, and religious circles. There are various theological books written to explain Scriptures that some use to support women in ministry and that some use to speak against women in ministry. Yet, the issue reaches far beyond women serving in a ministry context. It extends to women serving in ministry leadership positions, meaning women have an official ministerial title, leading both men and women in ministry contexts of all kinds.

Different church denominations have specific roles and titles as to what they deem appropriate for each gender serving or leading in ministry settings. For example, some might allow women to hold the title of missionary, teacher, or pastor’s wife, but not hold the title pastor, bishop or priest. Churches have taken authority and made decisions as to which genders can hold specific titles. This paper will show that while titles can separate and distinguish men from women in ministry, they do not define one’s identity, as an individual made in the image of God. Rather, one is defined as a daughter or son of Christ. The Spirit equips people with gifts to teach, preach, evangelize, counsel, lead, etc., but these ministry roles do not define who one is. Everyone has a special God-given gift to fulfil the mission of God. Both men and women must learn to work together as a spiritual family to full God’s mission.

The questions that remain and that this paper will seek to address are: Should women be included in ministry leadership positions?; Can men alone fulfill the mission of God?; Is one’s interpretation of Scripture blaspheming against God?; Is Paul against women in ministry?; Is there Biblical evidence for women serving and leading alongside men in ministry? There are four

parts to this research: 1) Denominational Roots of Ministry Titles; 2) A Biblical/Theological Perspective on Women in Ministry Leadership; 3) *How Titles Affect Women in Ministry Leadership*; 4) The Universal Calling of God. Through this paper, I will demonstrate that God equips all believers with distinct spiritual gifts so that the body of Christ may be built up (Eph. 4:11-13 NIV). This paper aims to show that God calls both men and women to serve and lead in ministry positions of all kinds.

I. Denominational Roots of Ministry Titles

How did various denominations come into existence? The word “denomination” means “a religious group that has slightly different beliefs from other groups that share the same religion.”⁴²⁸ Christian denominations came into existence because of the vast differences found between churches when interpreting Scripture. These deeply rooted beliefs from various churches and traditions have created “a large number of separate denominations within Christian families and Christian traditions.”⁴²⁹ In 2019, the Center for the Study of Global Christianity reported that there were 45,000 Christian denominations.⁴³⁰ Out of those 45,000 denominations, this paper will focus on three denominations: Assemblies of God (AOG), Church of God (COG), and Southern Baptist Convention (SBC).

The AOG, COG, and SBC share similar Evangelical Christian perspectives, however, they have different interpretations on Scripture related to women in ministry leadership positions. They

⁴²⁸ “Denomination,” Cambridge Dictionary, accessed 2023, <https://dictionary.cambridge.org/us/dictionary/english/denomination#>

⁴²⁹ “How do you define a ‘Denomination’?” Center for the Study of Global Christianity, accessed 2023, <https://www.gordonconwell.edu/center-for-global-christianity/research/quick-facts/>

⁴³⁰ “How do you define a ‘Denomination’?” Center for the Study of Global Christianity, accessed 2023, <https://www.gordonconwell.edu/center-for-global-christianity/research/quick-facts/>

hold varying theological perspectives as to whether women should or should not participate in ministry leadership roles. I have many friends and acquaintances within these denominations, including members of my own family. It is not the intention to shed negative light toward any of these denominations. Rather, it is the purpose of this paper is to highlight ways in which the Church can work together with both God and one another. Men and women were created to not only be fruitful, but to continue the mission of God as a spiritual family, united in purpose. Therefore, this paper will begin by explaining the history of these denominations, how their ministry titles came to exist, and for whom they were created.

A. Assemblies of God (AOG)

During the early days of the Pentecostal movement, numerous periodicals helped spread the news about the revivals.⁴³¹ One of those periodicals was *The Apostolic Faith* published by E. N. Bell in Malvern, Arkansas, and later renamed to *Word and Witness*.⁴³² One of the articles Bell published was entitled “General Convention of Pentecostal Saints and Churches of God in Christ, to be Held in Hot Springs, Arkansas April 2-12, 1914.” On December 20, 1913 the article stated,

“We desired at this time to make this preliminary announcement of this general meeting so that workers far and near, at home and aboard, may sidetrack everything else and be present. Laymen as well as preachers are invited... this call is to all churches of God in Christs, to all Pentecostal or Apostolic Faith Assemblies who desire with united purpose to co-operate in love and peace to push the interests of the kingdom of God everywhere...Neither is this meeting for an captious, contrary, divisive, or contentious person. But we leave for the body itself to take up any subjects it desires more than what is herein afterwards mentioned.”⁴³³

⁴³¹ Mario G. Hoover, *Origin and Structural Development of the Assemblies of God* (Cape Girardeau, MO: Southwest Missouri State College, 1970), 22.

⁴³² Hoover, *Origin and Structural Development of the Assemblies of God*, 22.

⁴³³ Hoover, *Origin and Structural Development of the Assemblies of God*, 22-23.

Therefore, *Word and Witness* was used to call the first General Council in April 1914. The article continued to list five topics for the upcoming meetings: Unity (“that we may do away with so many divisions, both in doctrines and in the various names under which our Pentecostal people are working and incorporating”); Stabilization (“conserving the work, that we may all build up and not tear down”); Effective Missions Outreach; The Legal Character of the Movement; and The Consideration of a Bible School to Serve Pentecostals.⁴³⁴ During the first few days of the meeting, people in attendance devoted themselves to prayer and community before dealing with business matters. An outcome of these meetings was that on April 6, 1914, the Assemblies of God was founded in Hot Springs, Arkansas, and E.N. Bell became the first chairman of the newly formed denomination.

As the years progressed, the AOG created a leadership team, consisting of a General Superintendent, Assistant General Superintendent, General Secretary, General Treasurer, U.S. Mission Director, World Missions Director, and Executive Presbytery. The process for receiving credentials consisted of “...to tell...what kind of work you are doing, whether pastor, evangelist, or missionary, and give your home post office,” and they were to offer a name of a person that would give them a recommendation.⁴³⁵

In 1914, women were already ordained or licensed for ministry from previous churches before joining the AOG.⁴³⁶ The AOG allowed the women’s previous credentials and licensure to carry over into their denomination and ordained these credentialed women to serve only as

⁴³⁴ Edith W. Blumhofer, *The Assemblies of God: A Popular History* (Springfield, MO: Gospel Publishing House, 1985), 36.

⁴³⁵ ...*In The Last Days...: An Early History of the Assemblies of God* (Springfield, MO: AOG Public Relations Department, 1991), 16.

⁴³⁶ Blumhofer, *The AOG: A Popular History*, 137.

missionaries or evangelists. Women were allowed to become ordained to preach, but not to serve as a senior pastors, except in the case when there was an emergency and a man was not available.⁴³⁷ Three years following that the first general meeting, the AOG set up an organization to ordain clergy with certifications for ministers, licensed and ordained.

In 1920, women finally had the right to speak and vote during the General Council, yet, still denying them the right to be “elders.”⁴³⁸ During the General Council in 1933, they explained that “ordination certificates of women shall clearly state that women are ordained only as evangelists.” This remained in effect until 1935 when the General Council granted women the same rights as men to serve in various types of ministries and administer ordinances.⁴³⁹ Today, women are allowed to be members of the AOC Executive Presbytery, led by the leadership team. In 2018, Donna Barrett was the first woman elected to the AOG General Secretary leadership team.

B. Church of God (COG)

A Baptist preacher named Richard G. Spurling organized a meeting in Monroe County, Tennessee on August 19, 1886, with a small group of believers. Spurling called the group together to talk about the spiritual issue: “the need of spiritual renewal and Christian unity”⁴⁴⁰ because he noticed the church “had drifted from Christ’s intention and purpose and must renew

⁴³⁷ “Women in the Pentecostal Movement,” Cecil M. Robeck Jr., Fuller Studio, accessed 2023, <https://fullerstudio.fuller.edu/women-in-the-pentecostal-movement/>

⁴³⁸ Margaret M. Poloma, *The Assemblies of God at the Crossroads* (Knoxville, TN: The University of Tennessee Press, 1989), 107.

⁴³⁹ Poloma, *The Assemblies of God at the Crossroads*, 107.

⁴⁴⁰ Charles W. Conn, *Like A Mighty Army: A History of the Church of God 1886-1996* (Cleveland, TN: Pathway Press, 2019), 11.

itself in Him.”⁴⁴¹ The small group of believers had eight members, consisting of Spurling, two men, and five women. All eight accepted Spurling’s challenge to address the spiritual issue he presented and without hesitation, they agreed to “(1) take the New Testament as the only rule of faith and practice, (2) give each other equal rights to follow their conscience as directed by Scripture, and (3) sit together as the Church of God.”⁴⁴² For this reason, the Church of God was founded on August 19, 1886. It was originally founded under the name of Christian Union, which was later changed to Holiness Church, before finally becoming the Church of God.⁴⁴³ In 1905, the idea of an Annual Assembly was formed to gather people together as “Churches of God” and to discuss “some perplexing questions.”⁴⁴⁴ Twenty-one members consisting of both men and women attended the first Assembly. During the second General Assembly, churches began reading their reports. People’s attention was grabbed when they noticed that there were more women than men in the church. This led to a discussion on “the important positions occupied by women in the time of Christ and His Apostles.”⁴⁴⁵ By the fourth General Assembly, A.J. Tomlinson was selected as the first general overseer of the COG. Additionally, the topic of females in ministry was discussed, and it was decided to allow women to preach and detain minister’s certification, but not to be ordained.⁴⁴⁶ Females could only become licensed ministers and not ordained bishops. Their reasoning behind not allowing

⁴⁴¹ Conn, *Like A Mighty Army*, 9.

⁴⁴² Conn, *Like A Mighty Army*, 12.

⁴⁴³ Conn, *Like A Mighty Army*, 86.

⁴⁴⁴ Conn, *Like A Mighty Army*, 74.

⁴⁴⁵ *General Assembly Minutes 1906-1914* (Cleveland, TN: White Wing Publishing House and Press, 2002), 21.

⁴⁴⁶ Conn, *Like A Mighty Army*, 109.

women to be ordained is due to their understanding of the Scripture found in 1 Corinthians 14:33-34. Their interpretation of Paul's letter was that "women should be silent in the business of the church rather than in its worship service."⁴⁴⁷ Therefore, COG women could participate in ministry but they were not permitted to take part in COG leadership positions. Further, women could not vote in the General Council because only ordained bishops were allowed to vote. As the COG kept expanding, it began to create categories of ministry position participation. Currently, the leadership team consists of a General Overseer, First Assistant General Overseer, Second Assistant General Overseer, Third Assistant General Overseer, Secretary General, and the International Executive Council of Eighteen. Throughout the years each of these positions have only been led by men who hold the title of ordained bishop. Today, women are allowed the same ministerial titles males hold with all the requirements, duties, responsibilities, and ministry opportunities, but are not eligible for ordination as bishops.⁴⁴⁸ Ironically, the COG started with five women and three men, but today the denominations is only lead by men.

C. Southern Baptist Convention (SBC)

The National Baptist denomination was located in both the Northern and Southern states until slavery occurred. In 1845, the Southern Church portion of the National Baptists split and convinced the mission boards within the denomination to reject men who owned slaves from being allowed to serve as missionaries.⁴⁴⁹ "About 300 churches joined the new group" and helped to create their own denomination.⁴⁵⁰ The Southern Baptist Convention was founded "in

⁴⁴⁷ Conn, *Like A Mighty Army*, 297.

⁴⁴⁸ *2018 Minutes Church of God General Assembly*, ed. Daniel L. Black (Cleveland, TN: Pathway Press, 2018), 106.

⁴⁴⁹ Jesse C. Fletcher, *The Southern Baptist Convention: A Sesquicentennial History* (Nashville, TN: Broadman & Holman Publishers, 1994), 2.

⁴⁵⁰ "History & Society: Southern Baptist Convention," Britannica, 30 June 2023, <https://www.britannica.com/topic/Southern-Baptist-Convention>

Augusta, Georgia, on May 8, 1845, and adopted a constitution on May 10.”⁴⁵¹ The SBC began to grow quickly and became known for their Foreign Mission and Sunday School Boards.

Additionally, the Women’s Missionary Union was created to help Southern Baptist churches raise money for missions.

Since SBC is not a church, it does not have a policy or requirement for ordination.⁴⁵² According to their website, local churches decide whether the individual can or cannot be ordained. Some churches may have requirements to become ordained and some do not. It works the same way in becoming a Southern Baptist pastor. The church has the freewill to decide that, not the SBC. The SBC leadership team is comprised of the president and Executive Committee with 86 members. Additionally, the SBC has two main boards called The International Mission Board and The North American Mission Board.

In times past, women have been ordained within the Southern Baptist denomination. In 1971, the Kathwood Baptist Church of Columbia, South Carolina, ordained Shirley Carter.⁴⁵³ Between 1964-1978, around fifty women became ordained through their local church and “more churches began to ordain women as deacons or deaconesses.”⁴⁵⁴ In 1976, Arkansas’s Black River Associations disagreed with the ordination of women because they thought it was ““unbiblical,” and thus criticized the state’s executive secretary, Charles Ashcraft, for an article perceived to be favorable to the practice.”⁴⁵⁵

⁴⁵¹Fletcher, *The Southern Baptist Convention: A Sesquicentennial History*, 7.

⁴⁵² “What is the procedure for ordination in SBC,” SBC: FAQ, accessed 2023, <https://www.sbc.net/about/what-we-do/faq/>

⁴⁵³Fletcher, *The Southern Baptist Convention: A Sesquicentennial History*, 225.

⁴⁵⁴ Fletcher, *The Southern Baptist Convention: A Sesquicentennial History*, 226.

⁴⁵⁵ Fletcher, *The Southern Baptist Convention: A Sesquicentennial History*, 227.

Over the years, few churches have allowed women to become pastors and/or ordained. The situation of women in serving in ministry or becoming ordained has been an ongoing debate for the SBC and their local churches until recently. In 2023, the SBC had its annual convention in New Orleans, Louisiana, where they decided to remove women from all church leadership.⁴⁵⁶ SBC declared and affirmed their belief that women cannot teach or have authority over men (1 Tim. 2:12), meaning “they cannot have a pastoral position, or perform the pastoral function, for that puts them in authority over men.”⁴⁵⁷

D. Summary

Within the three denominations this paper highlights, one discovers that women were used to make a unique impact in each. Carrie Judd Montgomery was a charter member of the AOG and remained “a part of the Assemblies of God without cutting her ties to her broader network of evangelical and Holiness believers.”⁴⁵⁸ In 1938, Amy Martha Hanley organized the first Church of God congregation in New Jersey and was a mentor to young male and female ministers.⁴⁵⁹ “In 1972, Druecillar Fordham became the Southern Baptist Convention’s first woman pastor and also its first black ordained female pastor.”⁴⁶⁰ These three examples, along with many other women made a significant impact in AOG, COG, and SBC history.

⁴⁵⁶ “Southern Baptists’ Fight Over Female Leaders Shows Power of Insurgent Right,” Elizabeth Dias and Ruth Graham, The New York Times, 16 June 2023, <https://www.nytimes.com/2023/06/16/us/southern-baptist-women-pastors-church.html>

⁴⁵⁷ “Women Pastors: What does the Bible Teach?” Richard R. Melick Jr., SBC Life, 1 May 1998, <https://www.baptistpress.com/resource-library/sbc-life-articles/women-pastors-what-does-the-bible-teach/>

⁴⁵⁸ “This week in AG History – Feb. 12, 1938,” Ruthie E. Oberg, Assemblies of God: Features, 13 February 2020, <https://news.ag.org/features/this-week-in-ag-history-feb-12-1938>

⁴⁵⁹ Conn, *Like A Mighty Army*, 526.

⁴⁶⁰ *Religious Institutions and Women’s Leadership: New Role Inside the Mainstream*, ed. Catherine Wessinger (Columbia, SC: University of South Carolina Press, 1996), 173.

Today, the AOG and the COG still allow women to minister, yet COG does not allow them to serve in ministry leadership positions. Similarly, the SBC does not allow women to be in a ministry leadership positions and does not allow them in authority over men. Each of these denominations has gone through various changes through the years related to their policies or teachings on women in ministry leadership positions.

II. A Biblical/Theological Perspective on Women in Ministry Leadership

In the Old and New Testament, the Bible offers multiple examples of ways God used both men and women to be used in leadership positions to fulfill His purposes. However, today, some have the impression that only men can have authority over men and women. God knew men and women were not perfect, yet He still used both genders to help fulfill His mission on earth. With these things in mind, one may wonder, who were the women in the Old and New Testament that God used? What are the Scriptures denominations use to discuss women in ministry leadership and how do they interpret these verses?

A. Women in the Old Testament and New Testament

During Israel's subsequent history, God viewed women as capable leaders and allowed them to serve as prophets.⁴⁶¹ Women were also used to boldly call out to men serious issues going on in Israel. In the Old Testament, Miriam, Moses and Aaron's sister served Israel well during the wilderness years by playing the tambourine, singing, and leading as prophetess (Exod. 15:20;

⁴⁶¹ Linda L. Belleville, "Women Leaders in the Bible," in *Discovering Biblical Equality*, 3rd Edition. ed. Ronald W. Pierce, Cynthia L. Westfall, and Christa L. McKirland (Downers Grove, IL: InterVarsity Press, 2021), 71.

Mic. 6:4).⁴⁶² According to traditions, God sent her to accompany her brothers to lead Israel out of Egypt and rescue the Israelites from slavery.

Hilkiah and a group of men were sent by the king Josiah of Judah to visit Huldah, wife of Shallum, who lived in Jerusalem and who was a prophet (2 Chr. 34:22). The king was concerned about what was written in the Book of the Law. Huldah gave a prophecy to the men about what God was going to do to Judah and the reasons why He would do it (vv. 23-28). Some wondered why King Josiah wanted Huldah's advice, but the king knew she was a "political insider" and she had a "track record of prophetic leadership and expert council."⁴⁶³

Deborah also served in various leadership roles as described in the Old Testament. She was a "prophet (Judg 4:4, 6-7), judge (Judg 4:5), and mother of Israel (Judg 5:7)."⁴⁶⁴ The Lord gave Deborah a message for Barak son of Abinoam for him to go against the oppressors (4:4-7).

Barak did not want to go if she did not go with him. When they were at Mount Tabor, Deborah commanded Barak along with his ten thousand men to go fight, which led them to victory (4:8-16).

Throughout Scripture one finds that God gave women a message to be delivered to the men. "It is sometimes remarked that God permitted women to lead at times when Israel lacked adequate male leadership."⁴⁶⁵ However, it is important to note that God does not show preference in using one gender over another. Rather, He uses the ones who listen and obeys.

⁴⁶² Belleville, "Women in Ministry: An Egalitarian Perspective," in *Two Views On Women in Ministry*, ed. James R. Beck and Stanley N. Gundry (Grand Rapid, MI: Zondervan, 2005), 35.

⁴⁶³ Belleville, "Women Leaders in the Bible," in *Discovering Biblical Equality*, 3rd Edition. ed., 73-74.

⁴⁶⁴ Belleville, "Women Leaders in the Bible," in *Discovering Biblical Equality*, 3rd Edition. ed., 71.

⁴⁶⁵ Belleville, "Women Leaders in the Bible," in *Discovering Biblical Equality*, 3rd Edition. ed., 74.

In the New Testament, Paul wrote letters to the Roman church. “The letter carrier was a woman (Rom 16:1-2), and at least five of the nine women Paul greets were ministry colleagues (“coworkers”; Rom 16: 13, 6-7, 12).”⁴⁶⁶ These women served in various roles in the church leadership. In Paul’s letter to the churches, he greeted those who were reading them. Many of the readers were women serving in church leadership ministry roles. For example, Euodia and Syntyche partnered with Paul to preach the gospel and served as leaders of the Philippian church.⁴⁶⁷

In Romans 16:1-2, Paul introduces Phoebe as his benefactor and “a deacon of the church in Cenchreae.” The word “deacon” in Greek is called *diakonos*. Although, the ending -os refers to a male person, during the ancient Greek, “a masculine noun can serve to point to a function or position that was owned or operated by a woman.”⁴⁶⁸ Paul was not minimizing Phoebe for being a female; he saw her as a leader.

Paul later greeted Priscilla and Aquila (vv. 3-4). It is important to note that Priscilla’s name was mentioned first in Scripture before her husband. They had gone to teach a man Apollos, a Jew from Alexandria, who only understood the baptism of John and not the way of God.⁴⁶⁹ From the order of the names, one may conclude that a women, Priscilla was teaching a man the way of God. It is clear that Paul respected and worked alongside God-fearing women.

B. 1 Timothy 2:11-12

⁴⁶⁶ Belleville, “Women Leaders in the Bible,” in *Discovering Biblical Equality*, 3rd Edition. ed., 77.

⁴⁶⁷ Belleville, “Women Leaders in the Bible,” in *Discovering Biblical Equality*, 3rd Edition. ed., 81.

⁴⁶⁸ Cross, *Serving the People of God’s Presence*, 154.

⁴⁶⁹ Cross, *Serving the People of God’s Presence*, 157.

To understand 1 Timothy 2:11-12, one needs to read the entire chapter. In this chapter, Paul commands Timothy on how to instruct the Ephesus Church. The church of Ephesus was having trouble with false teachers and worship, thus in verses 1-7, Paul encouraged those in the church to participate in “petitions, prayer, intercession, and thanksgiving” towards God. Paul desired for believers to be saved and to have a realization of His truth while still on the Earth. Paul continued to instruct the church on how to behave at church (vv.8-10). During that time, men were not worshipping with their hearts, mind, and soul. They were not sincere in their worship of God because their focus was not on Him, it was on their situation. Some questions arise from the reading of these verses, such as, were the husbands and wives or men and women arguing at church, since Paul instructed men to not worship God with “anger or disputing?” On the other side, women were also not behaving well in the church. They were not dressing appropriately for God, but instead, they were dressed for humankind (vv.9-10). Thus, one finds that Paul was not writing as a “universal command.” Rather, he was addressing the specific issues, like false teachers in the church (vv.11-12). Perhaps, women were teaching the people in the church their “truth” in a public worship setting.⁴⁷⁰ The women in Ephesus were blaspheming against God. Was Paul trying to say that to “learn in quietness and full submission” means to learn to hear God’s voice and submit to Him? In v. 12, Paul then proceeds to prohibit women from teaching or having authority over men, but that they should be quiet. Another question arising from text could be, were women teaching the wrong doctrine towards men in Ephesus? Further, because Paul explained that women should dress modestly, were the teaching women’s clothing caused distractions and temptations to men?

⁴⁷⁰ Cross, *Serving the People of God’s Presence*, 176.

Overall, Paul told the false/hypocritical women to be quiet for their wrongdoing in the Ephesus church. Just as God used women in the Old Testament to call out the wrongdoing of men, God used men to call out the wrongdoing of women. However, these verses do not serve as a reference as to whether or not women should be in women in ministry leadership. As previously noted, men and women are both imperfect and yet, God still uses them for His mission.⁴⁷¹

C. 1 Corinthians 14:34-35

1 Corinthians 14:26-40 explains the order for worship. It appears that in the Corinth church there were people who prophesied and either others were talking at the same time as the prophesy was spoken or the prophecies was not in order. Paul was writing that when brothers and sisters come together, they each bring a unique gift from God to help the church grow spiritually (v.26) and these gifts must be demonstrated in an orderly fashion. For example, if there are two or three people speaking in one tongue, they “should speak, one at a time, and someone must interpret” (NIV). If at any time, there is no interpreter or one does not know how to interpret its own tongue, the speaker must remain quiet. Instead, the speaker should talk to God. When the speaker is prophesying, the church should listen carefully to what is said. Paul gave these instructions to the Corinth church, because there was unorganization during worship. Prophets were talking among each other, thus Paul instructed them that “if a revelation comes to someone who is sitting down, the first speaker should stop” (v.30). “God is not a God of disorder, but of peace” (v.33). Paul’s teachings were intended to guide believers to do things with everything one had and with the best one could offer.

Going further, Paul wrote, “women should remain silent in churches,” “must be in submission,” and “if they want to inquire about something, they should ask their own husbands at home” (vv.

⁴⁷¹ My mother always told me that before I preach or speak in public, I need to present in front of the Lord and listen to His voice so that every word that comes out of my mouth is from Him rather than me.

34-25). In addition, Paul wrote about speaking in tongues. It appears that women were being disruptive during the time someone was prophesying or were simply not silent or listening to what the person prophesying was saying. Paul addressed this because, "...God is a God of peace, not disorder or confusion."⁴⁷² It is important to note that in verses 34-35 it does not mention women not being in ministry leader. "It is the disruptive speech that is being clamped down by Paul, not ecstatic speech or prophecy or even judgment on the prophecy."⁴⁷³ In these Scriptures and more, it is important to note the context of why Paul wrote the things concerning women's behavior. Through all his specific teachings to women, Paul still had females working alongside him in ministry leadership.

D. Ephesians 5:21-33

In Ephesians 5:21-33, Paul offers instructions on what a Christian family should look like. These verses are not indicators that women should not be in ministry leadership. The Scriptures address why a wife should submit to her husband and why a husband should love his wife. "Mutual submission to one another precedes any family's obligation for submission from wives to husbands."⁴⁷⁴ Wives were to support their husband as Christ supports the church. Paul's teachings remind wives that as their husbands experience difficult seasons, they are to hold their husband's right hand while the Lord holds his left hand. An illustration would be fellow soldiers coming alongside their wounded partners in order to accomplish their mission. A wife is there to pray and to help the husband to the mission of God. The same concept applies with the church submitting to Christ. Christ guides the church in fulfilling the mission of God.

⁴⁷² Cross, *Serving the People of God's Presence*, 185.

⁴⁷³ Cross, *Serving the People of God's Presence*, 184.

⁴⁷⁴ Cross, *Serving the People of God's Presence*, 173.

When a man and a woman marry, they become one body in Christ. One pastor said, “A man who loves God, will love you.” Basically, if the husband does not love God, then how can he love his wife? He must love his wife just as Christ loves him. Because Christ is loyal to him, he must be loyal to his wife. The same is true for wives.

III. How Titles Affect Women in Ministry Leadership

Through the research a few questions arise: Is there more to uncover as to why some denominations do not allow women in ministry leadership? Do people have more reservations for women in ministry leadership beyond what the Bible references? Could pride be hindering one from working alongside women?

No matter what the reasons are for not allowing women to serve in ministry leadership, the effect of these decisions are far-reaching. Not only do the titles prevent women from serving in various leadership roles, but it is also creating a culture of negativity and frustration. The titles of ministry positions affect the situation. “It is more of a cultural tradition than a biblical one.”⁴⁷⁵ It is not to say that we should not have positions of leadership; we need them in the church because God is a God of order and purpose. However, one must remember that God uses anyone to do anything for His mission. He is doing all the work through His people. He created men and women, to work alongside each other like brothers and sisters. So, why have some denominations allowed only men to take ministry leadership positions? The Scripture clearly reveals why Paul wrote what he did. It was not to minimize women; it was to discipline the actions of the women in those churches at the time.

⁴⁷⁵ Cross, *Serving the People of God's Presence*, 125.

The Bible is full of stories of women being used by Him. Thus, one learns that a woman's role is not only to sit and listen to the preacher every Sunday. But rather, a woman has a responsibility to join with her brothers in Christ to make disciples and spread God's Word so that people will be saved and know the truth of the God of all gods, the King of all kings. Together, we are His disciples meaning followers-, believers-, and leaders- of Christ. "Leaders in the body of Christ make room for the ministry of others."⁴⁷⁶ They make room because they are a team and a family. Men cannot do it all alone, nor women cannot do it all alone. We need God and each other to bring God's Truth to this world.

Jesus Christ served as a leader while on this earth and continues to lead us all. He knew He was the Son of God, yet He was not selfish to lead alone. He invited women and men to do ministry alongside Him. "The word 'leader' seems to connote someone who guides and directs others towards a goal."⁴⁷⁷ Believers are to guide and direct others toward God.

There is a difference between leadership and titles. Titles are simply names; Leadership is a gift from the Spirit. "Leaders are to build up the church, edify the believers, and help them grow spiritually."⁴⁷⁸ Thus the various ministry leadership titles do not belong strictly to men. However, not every woman or man is for leadership roles. Ministry leadership belongs to those who have the spiritual gift for leadership and thus should be directed as a leader.⁴⁷⁹

⁴⁷⁶ Cross, *Serving the People of God's Presence*, 120.

⁴⁷⁷ Cross, *Serving the People of God's Presence*, 131.

⁴⁷⁸ "Women in Church Leadership – a Series of Study Papers: 2. The Nature of Leadership in the Church," Michael Morrison, GCS, accessed 2023, <https://learn.gcs.edu/mod/book/view.php?id=4261&chapterid=2>

⁴⁷⁹ "Women in Church Leadership – a Series of Study Papers: 11. Women in Church Leadership – Conclusion," Michael Morrison, GCS, accessed 2023, <https://learn.gcs.edu/mod/book/view.php?id=4261&chapterid=15>

IV. The Universal Calling of God

So Christ himself gave the apostles, the prophets, the evangelists, the pastors and teachers, to equip his people for works of service, so that the body of Christ may be built up until we all reach unity in the faith and in the knowledge of the Son of God and become mature, attaining to the whole measure of the fullness of Christ (Eph 4:11-13 NIV).⁴⁸⁰

As shown throughout Scripture, God used both men and women to fulfill His mission on the earth. He continues to do so today. Every character in the Bible had a different story, but they all brought a piece of the puzzle to assemble. We are still connecting the puzzles as a team. Each person, unique and gifted has the opportunity to be used by God.

According to Ephesians 4:11-13, some of us have the spiritual gift of apostles, prophets, evangelists, pastors, and teachers. Everyone is called to serve in ministry leadership using the gift God has given him/her. The gifts are what a leader does. Everyday Christ uses individuals to equip people in ways that lead to maturity in their spiritual and physical selves and have a better understanding of the Son of Christ. All are called to build the body of Christ in unity as a spiritual family.

The title in a person's credential does not define who they are. The titles will fade away; Who the person is does not change. Believers are called to as sons and daughters in Christ to lead and equip others to the Truth. "Leadership among the people of God's presence is about making room for them to be trained and released into their ministry as we all work together with God."⁴⁸¹

We are called to work together with God to unite the body of Christ. Spiritual leadership is Christ's gift to His people, so that God's mission will be fulfilled. Men and women who are

⁴⁸⁰ This Scripture inspired me to do this research and it is why I believe everyone is called to be part of ministry leadership.

⁴⁸¹ Cross, *Serving the People of God's Presence*, 121.

leaders are “to build up the church, edify the believers, and help them grow spiritually.”⁴⁸²

Women and men have a unique calling and purpose that connects God’s mission. He uses the one who is willing to carry their cross and follow Him. A leader says “Yes” to Him. God sees a woman’s potential. The titles will not save or help one become a better Christian. “People can have leadership gifts without necessarily being leaders in the church.”⁴⁸³ Believers must ultimately learn to lead for God, not for humankind.

Conclusion

What good will it be for us to achieve being in a ministry leadership team, and to lose our soul? I did not do this research to change people's minds or to talk negatively about denominations. I did it to learn more about God and my brothers and sisters. I prefer to be a leader for Him than to become a leader for a denomination. Serving in leadership is about Him and what He wants from us as a spiritual family. I believe God does not like it when there is division between which gender can do the job better. He wants us to work together, men and women for His mission. God gave up His Son’s life so that men and women can do ministry leadership alongside Him. What else do we need from Him? Father, Son, and Spirit created men and women because He loves us. We are a spiritual family. Amen.

⁴⁸² “Women in Church Leadership – a Series of Study Papers: 2. The Nature of Leadership in the Church,” Michael Morrison, GCS, accessed 2023, <https://learn.gcs.edu/mod/book/view.php?id=4261&chapterid=2>

⁴⁸³ “Women in Church Leadership – a Series of Study Papers: 11. Women in Church Leadership – Conclusion,” Michael Morrison, GCS, accessed 2023, <https://learn.gcs.edu/mod/book/view.php?id=4261&chapterid=15>

BIBLIOGRAPHY

2018 Minutes Church of God General Assembly. Edited by Daniel L. Black. Cleveland, TN: Pathway Press, 2018.

Belleville, Linda L. "Women in Ministry: An Egalitarian Perspective." In *Two Views On Women in Ministry*. Edited by James R. Beck and Stanley N. Gundry. Grand Rapid, MI: Zondervan, 2005.

Belleville, Linda L. "Women Leaders in the Bible." In *Discovering Biblical Equality*. 3rd Edition. Edited by Ronald W. Pierce, Cynthia L. Westfall, and Christa L. McKirland. Downers Grove, IL: InterVarsity Press, 2021.

Blumhofer, Edith W. *The Assemblies of God: A Popular History*. Springfield, MO: Gospel Publishing House, 1985.

Conn, Charles W. *Like A Mighty Army: A History of the Church of God 1886-1996*. Cleveland, TN: Pathway Press, 2019.

Cross, Terry L. *Serving the People of God's Presence*. Grand Rapid, MI: Baker Academic, 2020.

"Denomination." Cambridge Dictionary. Accessed 2023.
<https://dictionary.cambridge.org/us/dictionary/english/denomination#>

Fletcher, Jesse C. *The Southern Baptist Convention: A Sesquicentennial History*. Nashville, TN: Broadman & Holman Publishers, 1994.

General Assembly Minutes 1906-1914. Cleveland, TN: White Wing Publishing House and Press, 2002.

"History & Society: Southern Baptist Convention." Britannica. 30 June 2023.
<https://www.britannica.com/topic/Southern-Baptist-Convention>

Hoover, Mario G. *Origin and Structural Development of the Assemblies of God*. Cape Girardeau, MO: Southwest Missouri State College, 1970.

"How do you define a 'Denomination'?" Center for the Study of Global Christianity. Accessed 2023. <https://www.gordonconwell.edu/center-for-global-christianity/research/quick-facts/>

...In The Last Days...: An Early History of the Assemblies of God. Springfield, MO: AOG Public Relations Department, 1991.

Poloma, Margaret M. *The Assemblies of God at the Crossroads*. Knoxville, TN: The University of Tennessee Press, 1989.

Religious Institutions and Women's Leadership: New Role Inside the Mainstream. Edited by

Catherine Wessinger. Columbia, SC: University of South Carolina Press, 1996.

“Southern Baptists’ Fight Over Female Leaders Shows Power of Insurgent Right.” Elizabeth Dias and Ruth Graham. The New York Times. 16 June 2023.

<https://www.nytimes.com/2023/06/16/us/southern-baptist-women-pastors-church.html>

“This week in AG History – Feb. 12, 1938.” Ruthie E. Oberg. Assemblies of God: Features. 13 February 2020. <https://news.ag.org/features/this-week-in-ag-history-feb-12-1938>

“What is the procedure for ordination in SBC.” SBC: FAQ. Accessed 2023.

<https://www.sbc.net/about/what-we-do/faq/>

“Women in Church Leadership – a Series of Study Papers: 2. The Nature of Leadership in the Church.” Michael Morrison. GCS. Accessed 2023.

<https://learn.gcs.edu/mod/book/view.php?id=4261&chapterid=2>

“Women in Church Leadership – a Series of Study Papers: 11. Women in Church Leadership – Conclusion.” Michael Morrison. GCS. Accessed 2023.

<https://learn.gcs.edu/mod/book/view.php?id=4261&chapterid=15>

“Women in the Pentecostal Movement.” Cecil M. Robeck Jr. Fuller Studio. Accessed 2023.

<https://fullerstudio.fuller.edu/women-in-the-pentecostal-movement/>

“Women Pastors: What does the Bible Teach?” Richard R. Melick Jr. SBC Life. 1 May 1998.

<https://www.baptistpress.com/resource-library/sbc-life-articles/women-pastors-what-does-the-bible-teach/>

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Angels of Death: Demographics, Socialization, Work Experiences, and Motivations of Healthcare Serial Killers

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Abstract

Although there are significant numbers of studies on the psychological dimensions of healthcare serial killers, studies on the motivational and structural trends of their killings remain scant. This study explores the relationship of intrinsic and extrinsic motivations by certain demographic criteria, socializations, work experiences, and methods of killings. Utilizing the Radford/Florida Gulf Coast University Serial Killer Database, this study utilized a chi-square analysis of 165 sample of identified health care serial killer across the globe. The research found that intrinsic motivation for serial killing significantly relates to experiences of being teased in school, early problems in school, and anger management issues. Similarly, having experienced being in combat and job instability also contributes to serial killing. Finally, being motivated as an angel of death correlates to killing with a partner.

Introduction

According to the Office of Disease Prevention and Health Promotion (ODPHP) the purpose of healthcare is to improve quality of life. As one of the rare types of serial murder, healthcare serial killing is a phenomenon that goes against all that healthcare represents (Gill, Fenton, Lagnado 2022). Each year, there is an average of 35 healthcare serial killing cases in the United States (Frank 2020). It is assumed that the actual number is much higher, but accurate case numbers are difficult to know as death is a common occurrence in healthcare facilities. “Healthcare serial killing involves the intentional killing of multiple patients by a healthcare professional. It is a formidable challenge to identify in the medical context, and a daunting legal task to prove beyond reasonable doubt” (Menshawey & Menshawey, 2022).

There is an abundance of research and literature on serial killers and the psychological factors that exist within those individuals. However, within the limited data that exists on healthcare serial killers, there is a gap in the structural elements of healthcare serial killers’ motivation. Serial killers that intentionally murder their patients are vastly different than typical serial killers. The goal of this project is to explore the structural gaps in healthcare serial homicide research and its relationship with the intrinsic and extrinsic motivations that led them a life of serial killing.

Significance of study

Understanding the factors that influence healthcare professionals to commit these heinous crimes can help to recognize the red flags before it is too late. Thus, studying the demographic, socialization, and work trends of serial health care serial killers, we will be able to pinpoint variables that have significant predictability.

One of America's most prolific serial killers is nurse Charles Cullen. With a speculated 300 murdered patients and admitting to 40 of those, his criminal career is an example of how easily these cases slip through the cracks and are difficult to recognize (Tilley, Devion, Coghlan, McCarthy 2019). Healthcare serial killers go undetected for far too long as they use their education and lifestyle as a facade (Lubaszka, C.K., Shon, P.C., & Hinch, R. 2014).

It is important to bring awareness to healthcare homicides and seek to understand so that innocent lives are not taken from people that have sworn to do no harm. "Killers in the medical profession seem especially heinous to us because while they have taken a solemn oath to do everything in their power to do no harm, they nevertheless view their patients as guinea pigs. Their motive for becoming healthcare practitioners seems to have more to do with power, control, attention, and personal gain than healing" (Ramsland 2007).

Review of Literature

According to the National Library of Medicine (2020), the term angel of death refers to a serial killer that also fulfills a role as a healthcare professional. Healthcare serial killers (HSK) are unlikely criminals (Ramsland, 2007). It is important to first note the difference and understand the meaning of a healthcare killing compared to healthcare serial killing. First, healthcare killings include medical errors ending fatally (Makary, Daniel 2016). The Journal of Patient Safety (2023) reported that there are more than 400,000 preventable deaths in the United States each year due to these medical errors. The number is staggering compared to the estimated 35 cases of healthcare serial killing cases that occur each year (Frank, 2020).

Medical serial killings, on the other hand, are executed by individuals who serve as any kind of employee within the healthcare field who intentionally murder at least two individuals on two separate occasions (Ramsland, 2007). As masters of deception and manipulation, these types of killings are rare and often go unnoticed (Samenow, 1984). Hospitals are settings in which many unusual situations arise often and therefore when odd circumstances arise, they are often overlooked (Gill, Fenton, Lagnado, 2022). It is assumed that when a patient dies in a hospital, that the cause came about from the disease or illness the patient experienced and not from (Pelander, Juote, Ojanperä 2013). The time in between the beginning of the murders and suspicions arise to the capture of the suspect is a lengthy period (Beine, 2003).

Serial Killers and Education

Healthcare serial killers are different as they exploit the education system to obtain a career of high prestige (Ramsland 2007). Working in a field with many benefits and monetary gain, healthcare serial killers have some to terminal degreee education (Samenow 1984). Samenow (1984) explains three patterns that help demonstrate how criminals approach education. The first trajectory explains the students who are already causing disruption and whose behavior is difficult to manage (Samenow, 1984). These students often drop out before completing high school and use school as an environment to engage in deviant behavior (Samenow, 1984). The second trajectory pattern are students that do well academically but show slight amounts of deviance (Samenow, 1984). These students do enough to get by while putting in the minimum amount of effort. The third trajectory pattern is especially important with healthcare serial killers (Samenow 1984) because these are the “good students” that often graduate with academic honors and attending college. Many careers in the healthcare field require extensive education such as physicians, nurses, chiropractors, physical therapists, and

more. For criminals, doing well academically and being successful paves the way for them to attain prestigious careers that are highly respected (Samenow, 1984). Being successful academically can camouflage criminality (Samenow, 1984) in contrast to the manner that non-health serial killers perceived.

Goffman's dramaturgy

Erving Goffman's dramaturgical analysis (Gilmore 2014) provides a theoretical explanation on understanding healthcare serial killers. Goffman argued that every individual presents a front stage and backstage and the impressions and way that individuals act is based on the context of where they are (Gilmore, 2014). In front stage, the performance differs in situations that require interactions with others in public or within professional contexts such as a doctor's interaction with their patient. Putting on the best self and "performing" according to the social context (Gilmore 2014). Backstage is behavior that typically occurs when someone is not in public and is in a space where they can be themselves without needing to act a certain way and this behavior typically happens at home (Bullingham, Vasconcelos 2013). To carry out the crimes desired, HSK must gain the trust of their patients, and this is done through presenting their best self as a trusted healthcare professional (Lubaszka, Shon, Hinch, 2014). "He lies to preserve a view of himself as special and powerful, a self-image that he fortifies every time he succeeds at deceiving others." To healthcare serial killers, any means to reach the desired end is justifiable. People are viewed as objects to manipulate (Samenow 1984).

Motivation

Like Goffman's dramaturgy, motivation place a big facet in deciding when to kill or not to kill. "Motivation is defined as the nature of a person and the deep resting life factors, their

complex interactions through various key incidents which predispose the person with a “killer instinct” and the way the instinct was reinforced throughout life, which eventually results in serial killing” (Deepak, S.A., & Ramdoss, S. 2021). Motives of healthcare serial killers are difficult to establish (Field, 2008). We are not able to understand the motivations behind serial killers, it is important to try and understand things from their perspective (Burgess A., Hazelwood R., Rokous F., Hartman C., Burgess A. G. 1988). Criminals face a choice when they feel strong emotions and sometimes that choice happens to be illegal (Toby 1962). These serial killers are motivated by both psychological (intrinsic) and physical (extrinsic) factors (Tang 2020). Common themes among healthcare serial killers motivations to kill is often gaining power and control over their victims (Menshawey & Menshawey, 2022). “Killers in the medical profession seem especially heinous to us because while they have taken a solemn oath to do everything in their power to do no harm, they nevertheless view their patients as guinea pigs. Their motive for becoming healthcare practitioners seems to have more to do with power, control, attention, and personal gain than healing” (Ramsland 2007). There is a lack of research into how healthcare serial killers are motivated to commit their crimes (Tang 2020).

Victimization

Victims of healthcare serial killing are often characterized by vulnerability such as being terminally ill, elderly, children or in an environment such as intensive care that a patient is not conscious or aware of their surroundings (Tilley, Devion, Coghlan, McCarthy 2019). Due to the broad victim profiles, there are no patients exempt from the threat of becoming a victim of healthcare serial killing (Yorker, Kizer, Lampe, Forrest, Lannan, Russell 2006).

Methodology

Data

This research will utilize the Radford/Florida Gulf Coast University Serial Killer Database (1992). The SKD is a non-governmental database and the largest in the world collecting data since 1992. Comprised of 5,753 subjects including serial killers, spree killers, and mass murderers. With over 15,086 victim profiles and 500 documents, there are over 185 variables for each subject. These include information such as victim preference, treatment, background information of the subjects and crimes that were committed. Of all the occupations listed within the database, 165 of those were healthcare professions fulfilled by serial killers. Some of these careers include nurse, doctor, paramedic, dentist, psychologist, home healthcare nurse, x-ray technician, and chiropractor. The information was imported into JASP, an open-source statistical analysis program.

Variables

The independent variables used in this study are the demographic and life factors associated with each Healthcare Serial Killer. These include *demographic variables* such sex, race, marital status, education, living situation, number of children; *socialization variables* psychologically abused as a child, physically abused as a child, sexually abused as a child, abuse of alcohol, abuse of drugs, raised by (family), significant family event, teased in school, problems in school, mental illness; *work experience* which include service in military, combat, fired from previous job, age of first kill; and *manner of killings* number of years active, and killing with a partner.

The dependent variables in this study are the motivations. These include enjoyment, power, Angel of Death, revenge, financial gain, lethal, munchausen, attention, rape, home

invasion, drug dealers, robbery, sexual relationship, black widow, convenience, mental illness, family, did not want spouse, bluebeard, did not want babies, insurance fraud, anger, religious, homophobia, visionary, and racial. These variables are nominal. Table 1 shows the summary of the independent and dependent variables for this research.

Table 1: Frequency Table

Variable	f/m	% SD
Sex		
Male	97	62.17%
Female	59	37.82%
Race		
White	127	81.41%
Black	10	6.41%
Hispanic	10	6.41%
Asian	9	5.76%
Marital Status		
Single	17	20.98%
Married	49	60.49%
Separated	2	2.46%
Divorced	12	14.81%
Widowed	1	1.23%
Education	16.18 (m)	4.18 (SD)
Living Situation		
Lives with		
Self	2	7.14%
Spouse	20	71.42%
Lover	4	14.28%
Mother	1	3.57%
Other Family	1	3.57%
Number of Children	2.12 (m)	2.54 (SD)
Psychological abuse as a child		
No	20	76.92%
Yes	6	23.07%
Physical abuse as a child		
No	23	79.31%
Yes	6	20.69%
Sexual abuse as a child		
No	25	80.64%
Yes	6	19.35%
Killer abuse alcohol		

No	18	50%
Yes	18	50%
Killer abuse drugs		
No	22	61.11%
Yes	14	38.8%
Raised by (family)		
Both birth parents	48	75%
Birth mom	4	6.25%
Adopted Parents	7	10.93%
Relative	4	4.6%
Birth + stepparents	2	3.12%
Significant family event		
Stay with family	4	19.04%
Divorce	1	4.76%
Death of parent	12	57.14%
Ran away	2	9.52%
Arrested	1	4.76%
Married	1	4.76%
Teased in school		
No	15	57.69%
Yes	11	42.30%
Problems in school		
No	17	54.83%
Yes	14	45.16%
Mental illness		
No	145	99.31%
Yes	1	0.68%
Served in military		
No	66	79.51%
Yes	17	20.48%
Combat		
No	77	97.46%
Yes	2	2.53%
Fired from previous job		
No	3	20%
Yes	12	80%
Age of first kill		
Number of years active	4.22 (m)	6.07 (SD)
Killed with partner		
No	132	85.71%
Yes	22	14.28%

Statistics

A chi-square statistic was used to measure how a model is compared to actual data. A chi-square is used to test hypotheses. The size of discrepancies between the expected and actual results are compared. The chi-square formula is: $\chi^2 = \sum (\mathbf{O_i} - \mathbf{E_i})^2 / \mathbf{E_i}$, where $\mathbf{O_i}$ = observed value (actual value) and $\mathbf{E_i}$ = expected value. There are 26 motivation variables that can be divided into two categories, intrinsic and extrinsic motivations. Intrinsic motivations include enjoyment, power, revenge, munchausen, attention, mental illness, anger, and visionary. Extrinsic motivations include angel of death, financial gain, lethal care taker, rape, home invasion, drug dealing, robbery, sexual relationship, black widow, convenience, family, did not want spouse, bluebeard, did not want babies, insurance fraud, religious, homophobic, and racial.

Results

Table 2: Chi-Square analysis of Health Care Serial Killers' Motivation by Demographics

Motivations Variables	Sex	Race	Marital Status	Lives With
Enjoyment	1.50	3.05	3.56	4.19
Power	1.97	5.03	1.64	3.73
Angel of Death	1.7	5.34	2.13	3.73
Revenge	0.68	13.69	3.92	--
Financial Gain	0.39	2.74	4.66	1.60
Lethal	4.7	1.23	1.50	0.90
Munchausen	3.63	1.81	0.82	12.98
Attention	3.631	1.81	0.82	12.98
Rape	4.12	2.05	4.76	13.18
Home invasion	0.68	0.19	--	--
Drug dealers	0.68	23.49	--	--
Robbery	0.018	11.74	9.64	2.25
Sexual Relationship	1.48	0.19	6.17	5.97
Black widow	4.20	1.66	12.04	2.25
Convenience	2.04	0.80	1.95	0.90
Mental Illness	1.48	0.19	3.92	--
Family	0.68	0.19	0.63	--
Did not want spouse	0.68	0.19	0.63	--
Bluebeard	0.68	0.19	0.63	--
Did not want babies	2.99	0.39	1.28	0.90
Insurance Fraud	0.68	0.19	0.63	0.43
Anger	0.83	3.05	3.15	1.28
Religious	0.68	17.36	0.63	0.43
Homophobia	0.68	17.36	0.63	0.43
Visionary	1.48	0.19	3.92	--
Racial	0.68	23.49	--	--

* $p < .05$, ** $p < .01$, *** $p < .001$,

Table 2 shows the results of chi-square analysis of Healthcare Serial Killers' motivation and certain demographic. The research shows that there are no significant relationships with either intrinsic or extrinsic motivation towards specific demographic characteristics.

Table 3: Chi-square analysis of health care serial killers' motivation and socialization

Motivations Variables	Raised (parents)	Significant Family Event	Problems in School	Teased in School
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<i>Intrinsic</i>	χ^2	χ^2	χ^2	χ^2
Enjoyment	3.04	5.81	0.27	0.006***
Power	1.94	4.91	3.54	0.08
Angel of Death	2.15	4.91	4.88	0.08
Revenge	--	--	--	--
Financial Gain	8.44	4.09	0.29	0.13
Lethal	0.96	--	0.003***	0.74
Munchausen	2.18	0.86	2.30	0.06
Attention	2.18	0.86	2.30	0.06
Rape	4.7	12.87	2.43	0.007***
Home Invasion	--	--	--	--
Drug Dealer	--	--	--	--
Robbery	14.23	0.86	1.11	1.46
Sexual Relationship	14.23	0.86	1.11	1.46
Black Widow	6.92	1.81	1.11	0.74
Convenience	0.31	--	--	--
Mental Illness	9.15	9.47	0.96	0.74
Family	0.31	--	--	--
Did not want spouse	NA	--	--	--
Bluebeard	0.31	--	--	--
Did not want babies	0.31	--	--	--
Insurance Fraud	0.31	--	--	--
Anger	3.93	1.81	0.003***	1.46
Religious	--	--	--	--
Homophobia	--	--	--	--
Visionary	9.15	9.47	0.96	0.74
Racial	0.31	--	0.96	--

* $p < .05$, ** $p < .01$, *** $p < .001$,

Table 3 shows the results of chi-square analysis of Healthcare Serial Killers' motivation and socialization. There is a significant relationship between the motivation enjoyment and being teased at school $\chi^2(df) = .0006$, $p < .001$. Being teased at school is also significant to the motivation of rape $\chi^2(df) = .0007$, $p < .001$. Being motivated by both lethal and anger show the same significance level with problems in school $\chi^2(df) = 0.003$, $p < .001$.

Table 4: Chi-square analysis of healthcare serial killers' motivation and work

*.05, ** $p < .01$, *** $p < .001$,

Motivations Variables	Fired from previous job	Military	Combat
<i>Intrinsic</i>	χ^2	χ^2	χ^2
Enjoyment	1.11	2.27	0.006***
Power	0.000***	1.16	1.04
Angel of Death	0.06	1.39	1.11
Revenge	--	0.22	0.02
Financial Gain	1.87	0.75	0.34
Lethal	--	1.44	0.18
Munchausen	0.26	0.69	0.08
Attention	0.26	0.69	0.08
Rape	0.26	7.85	4.84
Home Invasion	--	--	--
Drug Dealers	--	--	--
Robbery	0.26	0.93	0.11
Sexual Relationship	0.26	0.22	0.02
Black Widow	9.23	0.07	0.18
Convenience	--	0.69	0.08
Mental Illness	--	0.22	0.02
Family	--	--	--
Did not want spouse	--	--	--
Bluebeard	--	--	--
Did not want babies	--	0.45	0.05
Insurance Fraud	--	4.55	0.02
Anger	0.26	1.71	0.14
Religious	--	--	--
Homophobia	--	--	--
Visionary	--	0.22	0.02
Racial	--	4.55	0.02

Table 4 shows the results of chi-square analysis of Healthcare Serial Killers' motivation and work. There is a great significance between individuals who were motivated by power and fired from a previous job $\chi^2(df) = 0.000$, $p < .001$. Another significance is among individuals formerly being involved in combat and motivated by enjoyment $\chi^2(df) = 0.006$, $p < .01$.

Table 5: Chi-Square analysis of healthcare serial killers' motivation and serial killing.

Motivations Variables	Killed With Partner	Killing Method	Years Active
<i>Intrinsic</i>	χ^2	χ^2	χ^2
Enjoyment	1.17	39.12	24.20
Power	0.03	51.62	25.01
Angel of Death	0.002***	54.53	27.42
Revenge	0.18	13.99	28.39

Financial Gain	4.85	39.17	40.22
Lethal	1.12	5.09	33.39
Munchausen	0.93	5.46	4.64
Attention	0.93	5.46	4.64
Rape	0.23	85.40	34.54
Home Invasion	0.18	21.49	2.41
Drug Dealers	5.58	13.99	2.41
Robbery	4.32	45.62	10.89
Sexual Relationship	5.58	134.0	3.73
Black Widow	1.52	39.62	62.78
Convenience	0.30	71.16	50.26
Mental Illness	0.18	134.0	11.24
Family	0.18	0.81	2.41
Did not want spouse	5.58	134.0	3.73
Bluebeard	0.18	0.81	146.0
Did not want babies	0.36	77.32	96.65
Insurance Fraud	0.18	134.0	146.0
Anger	1.52	54.67	30.63
Religious	0.18	25.99	2.41
Homophobia	0.18	25.99	2.41
Visionary	0.18	134.0	11.24
Racial	0.18	13.99	3.73

* $p < .05$, ** $p < .01$, *** $p < .001$,

Table 5 shows the results of chi-square analysis of Healthcare Serial Killers' motivation and serial killing. There is a significance between being motivated as an angel of death and killing with a partner χ^2 (df) = 0.002, $p < .01$.

Discussion & Conclusion

The results from this study show that there are certainly factors that contribute to the how and why healthcare serial killers' murder. It is not merely the demographics such as gender or race that led to certain motivations to kill, but rather life experiences. Table 3 displays that there is a significant connection between HSKs being teased in school and murdering for enjoyment and rape as well as experiencing problems in school and being motivated by anger and lethal. Table 4 shows the link between those who were fired from a previous job and how they were motivated by power and experiencing combat were linked to killing for enjoyment. The last significant result from this study was that those serial killers who are primarily motivated from being an angel of death is connected to killing with a partner. These results show that from the sample of healthcare serial killers that were examined, motivation to kill comes from situations in which they experienced negative emotions such as losing a job, being teased in school or experiencing combat. These results do not adequately explain the psychological factors that can also influence killing but prove that there are in fact experiences in an individual's life that can lead to this kind of criminal offending.

This research does not ignore the idea that there are psychological aspects that greatly impact an individual to become a healthcare serial killer. However, this research does suggest that there are life experiences that can be the beginning of a dark road of evil. The significant motivations that were found in this study were power, enjoyment, lethal, rape, killing with a partner and angel of death. These motivations are specific to serial killers who are employed in the healthcare field, making them unique. As typical serial killer motivations often vary, this study sought to create a profile of motivations that are common with healthcare serial killers and the social experiences that could play a role as to why they are motivated by what they are.

Understanding the motives behind the crimes could be a key element in being able to identify these crimes more often. It is difficult to catch healthcare serial killers due to the capacity in which they go unnoticed as criminals and therefore understanding profiles can aid in lowering the statistics of healthcare homicides. We cannot forget that healthcare serial killings do happen (Pelander, Juote, Ojanperä 2013).

Limitations

This study was able to identify key factors associated with Healthcare Serial Killers and their motivations for killing. However, there are limitations that impact the results of this research. In the database, all healthcare careers are categorized together. This includes hospital custodians to surgeons. There could be a difference in motivations between those who work in healthcare face-to-face with patients and those who simply work in healthcare facilities. Also, the database includes a large number of subjects, most of which who reside outside of the United States. This limits the knowledge that we can gain and apply to make changes in our healthcare system if the results are not accurate for America.

Future of the study

This research aims to spotlight healthcare homicides carried out by serial killers and understand more about why and how individuals carry out these crimes. The objective for this study was to use what we know and the data available in hopes to implement programs and policies in the future within the healthcare industry to detect unusual behavior before a healthcare homicide strikes by examining both a healthcare provider's personal and professional life. Understanding the basics of healthcare homicides not caused due to negligence is the first step in making a

difference. Focusing on cases in the United States and bringing attention to the dangers of Healthcare Serial Killers is an important next step for this research.

References

- Beine, Karl H. (2003). Homicides of Patients in Hospitals and Nursing Homes: A Comparative Anyalysis of Case Series, *International Journal of Law and Psychiatry* (Vol. 26, Issue 4).
- Bullingham, L., & Vasconcelos, A. C. (2013). ‘The presentation of self in the online world’: Goffman and the study of online identities. *Journal of Information Science*, 39(1), 101–112.
- Burgess A., Hazelwood R., Rokous F., Hartman C., Burgess A. G. (1988). Serial rapists and their victims: Reenactment and repetition. In Prentky R. A., Quinsey V. L. (Eds.), *Human sexual agression: Current perspectives, Anals of the New York Academy of Sciences* (Vol. 528, pp. 277-295).
- Deepak, S. A., & Ramdoss, S. (2021). The Life-Course Theory of Serial Killing: A Motivation Model. *International Journal of Offender Therapy and Comparative Criminology*, 65(13–14), 1446–1472.
- Field, J. G. (2008). *Caring to death: a discursive analysis of nurses who murder patients* (Doctoral dissertation).
- Forsyth, C.J. (2015). Posing: The Sociological Routine of a Serial Killer. *Am J Crim Just* **40**, 861–875.
- Frank C. (2020 Oct). Health care serial murder: What can we learn from the Wettlaufer story? *Can Fam Physician*. ;66(10):719-722.
- Gill, R. D., Fenton, N., & Lagnado, D. (2022). Statistical issues in serial killer nurse cases. *Laws*, 11(5), 65. MDPI AG.

- Gilmore, D. M. (2014). Goffman's front stage and backstage behaviors in online education. *Journal of Learning Analytics*, 1(3), 187-190.
- Ramsland, K. (2007). *Inside the mind of healthcare serial killers: Why they kill*.
- Lubaszka, C.K., Shon, P.C., & Hinch, R. (2014). Healthcare serial killers as confidence men. *Journal of Investigative Psychology and Offender Profiling*, 11, 1-28.
- Makary M A, Daniel M. (2016). Medical error—the third leading cause of death in the US. *BMJ*.
- Menshawey, R., Menshawey, E. Brave Clarice (2022) Healthcare serial killers, patterns, motives, and solutions. *Forensic Sci Med Pathol*.
- Meyer, H. (2002). Killers: Demon doctors: Physicians as serial killers. *JAMA*. 2002
- Samenow, S. (1984) *Inside the Criminal Mind*.
- Tang, F. (2020). A qualitative exploration into the subjective experiences of healthcare Serial Killers. *Theses and Dissertations (Comprehensive)*. 2279.
- Tilley E., Devion, C., Coghlan, Anne L., McCarthy, K. (2019). A regulatory response to healthcare serial killing. *Journal of Nursing Regulation*, 10 (1) pp. 4-14.
- Toby, J. (1962). Criminal motivation: A sociocultural analysis. *The British Journal of Criminology*, 2(4), 317–336.
- Vuori, E., Pelander, A., Rasanen, I., Juote, M. and Ojanperä, I. (2013). A rare case of serial killing by poisoning. *Drug Test. Analysis*, 5: 725-729.
- Yardley E., Wilson, D. (2014). In search of the “Angels of Death”: Conceptualising the Comtemporary Nurse Healthcare Serial Killler. Wiley Online Library

Yorker, B.C., Kizer, K.W., Lampe, P., Forrest, A.R.W., Lannan, J.M. and Russell, D.A. (2006).
Serial Murder by Healthcare Professionals. *Journal of Forensic Sciences*, 51: 1362-1371