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Meet the Editorial Board

Danny Alice

Hi everyone, my name is Danny Alice, and I am a junior at Florida Atlantic University studying sociology with a minor in criminal justice. My research interest includes social good and using Artificial Intelligence to help create a positive social impact in our communities. Last April, I presented my poster involving Artificial Intelligence and social good at Florida Atlantic University's undergraduate research symposium and it was my first time presenting. Although my days can be busy, I organize my due dates with a planner and my extracurriculars on Notion.

Emmaline Blikstad

My name is Emmaline Blikstad, and I am a senior majoring in history and minoring in psychology at Florida Gulf Coast University. My research interests include European and American religious and social history, with special emphasis on education, gender, and the Holocaust. I recently completed an honors thesis on Nazi Germany and Protestant Christianity and hope to continue this or similar research into graduate school. Before that, I plan to take a little time to work in the public sector. Though I am kept busy with various responsibilities, I find time to continue researching by devoting a few hours each weekend to my projects.

Dr. Melodie Eichbauer

My name is Dr. Melodie Eichbauer, and I am the Executive Editor of FURJ as well as the Interim Director of Scholarly Innovation and Student Research and a Professor of Medieval History at Florida Gulf Coast University. I am passionate about student research and the wide-ranging benefits it can bring. My own research specializes in legal and ecclesiastical history from c.1000 to c.1500. My research interests focus on legal pluralism and the evolution of legal principles. I am particularly interested in the dissemination of legal knowledge; the interpretation of law; and the ways in which social, political, and intellectual developments and trends shaped both during the height of the medieval period. By examining the larger processes linking law to the world in which it functions, my hope is to show new ways of thinking about current issues.

Damian Hernandez

My name is Damian Hernandez, and I am a senior majoring in Biochemistry at Florida Gulf Coast University. I am currently working in Inorganic Chemistry research. This research involves the synthesis and characterizations of organic ligands, coordination polymers, and metal organic frameworks, which are porous materials that can be used for many applications like gas and water filtration, energy storage, drug delivery and more. For the most part, I work in the lab and work with the Chemistry Club to organize fun events for our members. At the moment, I am focusing on my Honor's Thesis and often find myself de-stressing by watching movies and exploring new hobbies.

Angela Huang

My name is Angela Huang, and I am a student at South Florida State College. My research interests include the gut and oral microbiome, thyroid and colorectal cancer, and cell metabolism. My research focuses on Fusobacterium nucleatum, a common oral gut bacteria, and its effects on inducing the epithelial-mesenchymal transition in colorectal cancer. Research in my small lab is sometimes difficult, but I find that through research workarounds, anything is possible!

Paula Koppel

My name is Paula Koppel, I am a senior at Florida International University majoring in Natural and Applied Sciences. This is my second year on the Editorial Board and I have loved reading everyone's submissions! While I am not reviewing papers, I help run a non-profit, volunteer with an honor society, and make trips to Disney as often as I can!

Jess Moorefield

My name is Jess Moorefield, and I am a computer science and English major at Florida State University. My current research is an intersection of my studies and focuses on using natural language (e.g. English) rather than a programming language to interact with databases. I hope my research will be useful to non-technical users in the business world. Even while navigating the COVID-19 pandemic and a busy schedule, I continue to pursue research because it is an exciting chance to translate my knowledge into a practical tool that can benefit others.

Kieran Stenson

My name is Kieran Stenson, and I am a sophomore majoring in History and minoring in Russian and Eastern European Studies at Florida State University. My research interests include the long 19th century, Romanticism, and Polish History. I am currently preparing to undertake a research project incorporating these topics in the coming semesters. Previously, I have done research into the history of race relations in Tallahassee, Florida during the era of the civil rights movement. I hope to continue my research and studies through the rest of my undergraduate experience and into graduate school.

Eve Vazquez

My name is Eve Vazquez, and I am a senior studying psychology at the University of Central Florida. My research interests lie at the intersection of human factors and developmental psychology. These interests led me to conduct my most recent project which takes a lifespan development approach to examine how cognitive disposition impacts individuals' intention to engage with mobile health applications. Prioritizing spending time with my friends and family has been imperative to keeping my energy up throughout this past semester.

Welcome from the Editorial Board

Student researchers are one of the most valuable assets any higher education institution can have. Their fascination and drive to dive into the subjects that interest them leads them to produce original research to present to their classes, schools, and at academic conferences. Yet, this research often ends there. The *Florida Undergraduate Research Journal* believes that student researchers should have the opportunity to publish their research to as wide an audience as possible, and it is devoted to the publication of undergraduate research.

We are so excited to share the research of undergraduate students from Florida institutions in our second volume of the *Florida Undergraduate Research Journal*. All submissions have cleared a rigorous, tiered review process consisting of an initial review by the Executive Editor and Editorial Assistant, followed by a thorough review from the Editorial Board and a disciplinary faculty reviewer. The Editorial Board consists of undergraduate student volunteers from across the state schools—public and private, two-year and four-year—who meet monthly to review submissions, provide feedback to the author, and help advance the scholarship of fellow undergraduates. The diversity within the board offers student authors an interdisciplinary perspective and provides valuable experience for the Board to work together as colleagues in reviewing academic research. On a personal note, it has been a great experience to work with such a wonderful group so dedicated to helping other students.

The process of creating this journal has been a new experience for many involved, but the outstanding hard work of our student researchers, Editorial Board, and faculty mentors has been essential in this publication. We deeply appreciate the care and input of the faculty reviewers whose suggestions are invaluable for the students on their publication journey. This second volume of the *Florida Undergraduate Research Journal* is a testimony to the hard work and dedication of all involved.

—Emmaline Blikstad, Editorial Assistant

—Dr. Melodie H. Eichbauer, Executive Editor

Welcome from the Florida Undergraduate Research Association (FURA)

The [Florida Undergraduate Research Association (FURA)](#) is thrilled to partner with the Florida Gulf Coast University to launch the second edition of the Florida Undergraduate Research Journal (FURJ)! Helmed by Dr. Melodie Eichbauer along with a talented and committed Editorial Board, FURJ continues to be the first peer-reviewed undergraduate research journal composed of submissions from students across the state. FURA would like to offer special recognition to the authors whose research you will read about in the following pages, scholarship spanning across the disciplinary spectrum.

Dissemination, or the sharing of research, is a crucial component of the overall research process. It is not sufficient to conduct our research, if we are not sharing it in ways that benefit the wider public. FURA has long supported undergraduate research sharing through the Florida Undergraduate Research Conference, one of the nation's largest multi-disciplinary research conferences that is open to all undergraduate researchers from any Florida higher education institution. The addition of the Florida Undergraduate Research Journal provides another significant way for undergraduate researchers across Florida to share their research with this wider community, stretching beyond the boundaries of their individual institutions. We are especially delighted to have created a permanent DOI for the journal, so the incredible work of these undergraduate researchers will remain easily accessible moving into the future.

Again, congratulations to the student authors represented in our inaugural journal and a very special thank you to all those who volunteered their time to review submissions and craft this impressive feat. For those interested in joining the editorial board or submitting your own work in the coming year, please be sure to check out the [FURJ page](#) on our FURA website or follow FURA on any of our social media accounts. We also encourage you to review the great work published in 2022 in the inaugural edition of FURJ [here](#).

Happy reading!

Florida Undergraduate Research Association

Abstracts

"U.S. Foreign Policy, the Evangelical Far Right and the Spanish-Speaking South American Evangelical Left from 1968–1974; Missions, Praxis, and Money"
    Simon Velasco, Florida State University
In the late 1960s through the mid-1970s, evangelicalism rose to prominence as a dominant Protestant movement within the United States and South America. As a result, evangelical figures were forced to confront the socio-political issues that faced South America through different tactics that would seek to resolve instability within the region. This essay offers an intersectional study into the approaches of the American and South American evangelical far-right that influenced Cold War South America from 1968 to 1974, which is not explored within the general body of literature in religious studies. Through the reading of literature produced by and about Billy J. Hargis, Peter Wagner, and René Padilla, this essay argues that theology is a continuation of politics as a mode of operation in religious discourse with historical developments in Latin America and evangelicalism as a whole.

"Disentangling the Rhythm from the Melody: What Really Causes the Mozart Effect?"
    Madison Meares, Florida Southern College
The Mozart Effect refers to enhanced spatial ability following listening to 10 minutes of Mozart music (Rauscher et al., 1993; Rauscher et al., 1995; Rideout & Taylor, 1997). However, many researchers have not been able to replicate its benefit on cognitive functioning (McKelvie & Low, 2002; Steele et al., 1999) while other researchers provide evidence that the intellectual benefit may not be due to the music exclusively, but to changes in mood and arousal levels (Cacciafesta et al., 2010; Steele, 2000; Lints & Gadbois, 2003; Thompson et al., 2001). Furthermore, it is unclear whether this Mozart Effect is the result of the melody or the rhythmic pattern of the Mozart music (Shi, 2020). Therefore, the purpose of the current study was to determine which musical element (i.e., melody or rhythmic pattern) of Mozart's sonata *(Mozart Sonata for Two Piano's in D major*, K. 448) causes the spatial performance enhancement and to determine if the benefit generalizes to another type of spatial ability, specifically 2D mental rotation. In order to disentangle the effects of the rhythm from the melody, we exposed participants to a Lo-fi (i.e., reproduction of audio that highlights the rhythmic pattern of Mozart's sonata with a slower tempo) version of the Mozart sonata that maintained the rhythmic pattern of the sonata but differed in melody. Inconsistent with hypotheses, neither version of the Mozart music significantly improved mood and arousal; however, the mood/arousal benefits approached significance while the control music, Albinoni's *Adagio in G Minor for Organ and Strings*, significantly decreased mood/arousal. Thus, the current results provide some evidence that the rhythmic pattern (as opposed to the melody) of the Mozart sonata increases mood/arousal. However, the rhythmic pattern failed to produce better cognitive functioning (e.g., faster 2D mental rotation) in either its original form or the Lo-fi form.

"'He's a Witch!': Foster's Magical Emasculation of the Libertine in *The Coquette*"
        Mark-Elliot Finley, University of Tampa
Written in 1797, Hannah Webster Foster's *The Coquette* exemplifies seduction and libertinism in the early American Republic. While much of the scholarship on Foster's narrative centers on the coquette's image and consent, critics have also noted Major Peter Sanford's manipulation and control over Eliza. My paper seeks to dive deeper into Sanford's character as I suggest Foster depicts Sanford with qualities that echo the outsider role of witches in Early America to critique his libertine image. Foster not only emasculates Sanford, but also highlights the libertine's fallibility in the new republic and the rake's danger to colonial society, especially in an age of fragmentation and instability. In this paper, I explore the three modes in which Foster presents Sanford as a feminized male witch: 1) as a deceiver, 2) as an outcast, and 3) as a weakened individual, attributes tied with the colonial witch. Foster's rhetorical choice to liken Sanford to a feminized male witch has a twofold result: 1) she emasculates a seventeenth-century masculine image to stay in touch with late eighteenth-century discourses surrounding the feminization of the libertine, and 2) through Sanford's emasculation, declares the libertine's threat to the new Republic during an age when masculinity had altered. The feminization of the libertine is not unique to Foster; rather, her presentation of such emasculation of the rake through witchcraft terms is what makes Foster's Major Peter Sanford so distinctive.

"Challenges of Using Body Temperature as a Screening Method for COVID-19"
        Daniel M. Zuniga and Michelle Martinez, Florida State University
The use of body temperature measurements has played an essential role in disease prevention and identification in recent years, especially during the COVID-19 pandemic when a high body temperature identified infected patients. In this study (Study ID: STUDY0000269), we focused on the correlation between new, daily, local cases of COVID-19 and patients with high body temperature (above 99 F) upon entering a non-urgent medical practice. A reliable screening method is expected to detect more patients with COVID-19 symptoms as COVID-19 cases become more prevalent, supporting that it is a reliable method. A secondary aim of this study was to analyze the relationship between environmental temperatures and changes in the frequency of patients with high body temperature. This study examined a subsample of over 3,000 patients in a medical practice. Results showed a negative correlation between high body temperatures and daily positive cases of COVID-19. The study also demonstrated that environmental temperature predicted patient body temperature.

"Reducing Stress Among College Students: Mindfulness Meditation Versus Adult Coloring"
        Pamela Font and Hannah DeCosta, The University of Tampa
College students report a wide variety of stressors including academic difficulties, uncertainty about future career plans, conflict with roommates, family pressure, and financial worries (Aselton, 2012). It is important to research not only stress reduction interventions for college students, but also effective ways to disseminate these programs to students, especially given how

busy they are. The purpose of this study was to compare a brief two-week peer-delivered mindfulness meditation intervention with an adult coloring intervention and a psychoeducation intervention that consisted of general stress reduction tips. Participants were randomly assigned to one of the three intervention conditions. Participants' levels of stress, psychological distress, anxiety, and mindfulness were measured via pre-and post-treatment assessments (online self-report surveys). All interactions with participants were conducted remotely through Zoom and email. Participants were 74 General Psychology students who enrolled via Sona Systems, a participant pool management system, as part of their class participation. Researchers found that all three interventions were equally beneficial in reducing stress and psychological distress among college students. Both the mindfulness and psychoeducation interventions led to significant decreases in anxiety compared to the adult coloring intervention. Contrary to expectations, the psychoeducation intervention showed significant increases in mindfulness compared to the adult coloring and mindfulness interventions. Mindfulness meditation, adult coloring, and psychoeducation all show the potential to be effective in helping college students manage their stress.

"Identity, Belonging, and Christian Community in Protestant Responses to the Aryan Paragraph in Nazi Germany"
        Emmaline Blikstad, Florida Gulf Coast University
Examining Christianity and its representative denominations and groups in Nazi Germany has led scholars to try to construct how these Christian groups interacted with a government which institutionalized the death of millions. The focus of past scholarship has centered on debates over the extent to which institutional Protestant Christianity and individual Protestants opposed Adolf Hitler's regime and Nazism. The focus of this thesis examines how four Protestants or Protestant groups employed definitions of what made one a Jewish Christian, what being Jewish meant, and who was included within the larger Christian community in their 1933 responses to the Aryan paragraph. These responses originated from the Lutheran pastor, Dietrich Bonhoeffer, the General Synod of the Protestant Church of the Old Prussian Union, the faculty of theology at the University of Marburg, and the German Christian movement. Though each response to the Aryan paragraph utilized a unique definition of Jewish Christians and Christian community, they all reveal a Protestant church unprepared to answer the questions of belonging and identity posed by its society. In their search for a unified answer to the question of whether a baptized Jew belongs in the Protestant church, Protestants displayed that they had no unified answer. The consequences of not belonging in Nazi Germany could and did lead to discrimination, persecution, and genocide.

U.S. Foreign Policy, the Evangelical Far Right and the Spanish-Speaking South American Evangelical Left from 1968–1974: Missions, Praxis, and Money[1]

Simon Velasco
Florida State University

Introduction

Christianity and its political developments within the United States is often studied in a strictly domestic lens within the discipline of American religious history. Little attention is given to the political and cultural power of the United States during the 20th century when viewed in the context of its religious exportations and regional reactions throughout the world. The religious-historical literature concerning the expansion of, and reactions to, American Christian ideals and their prerogatives within the Global South is diverse and expansive within the study of religious history, but few contemporary scholars examine theological discourses between the two groups. The gap in the academic literature is a hindrance for religious historians who seek to understand the role that religious movements and figures had in the context of the Cold War world. This paper strives to understand the discourse and evolution of evangelicalism's role in shaping the religious-political landscape of Latin America in the late 1960s to mid-1970s.

Works such as Daniel K. Williams' *God's Own Party: The Making of the Christian Right* (2010), J. Gillis Harp's *Protestants, and American Conservatism: A Short History* (2019)*,* and Matthew Avery Sutton's *American Apocalypse: A History of Modern Evangelicalism* (2014) cover the political impacts of evangelicalism within the United States, but rarely address the views of evangelical Americans, specifically in South America. In David C. Kirkpatrick's *A Gospel for the Poor: Global Social Christianity and the Latin American Evangelical Left* (2019), the author touch on the interactions between American and Latin American evangelicals in terms of political leanings, with the book focusing mostly on the developments of the latter. David Stoll's *Is Latin America Turning Protestant?* (1991) provides an anthropological insight between the effects of religion, colonialism, missionary efforts and modernity on religious practices and identity. Alvin Goffin's *The Rise of Protestant Evangelism in Ecuador, 1895–1990* (1994) provides an extensive historical analysis of the most active areas of cross-cultural and interdenominational interactions in South America. Although there has been a wealth of work on the matter, the current literature is void of a cross-sectional study of religion as a manifestation of politics in the U.S.-Latin American context when addressing the influence of American evangelicalism in the region through theological positions.

This paper argues that it was primarily the influence of American missionaries in the second half of the 20th century that shaped Latin American evangelicalism. In the early 1970s,

Latin Americans and their American counterparts began to debate and shape the future of Latin American Protestantism in the context of the region's political developments. In this paper, evangelicalism will be defined as a Protestant theological movement that consists of a belief in salvation by grace alone, the authority of the Bible as God's revelation to the world, and the spreading of the Christian message of salvation. Evangelicalism has historically been an Anglo-American-dominated theological tradition that is relatively new in Latin America, where Catholicism has dominated as the main religious force in the region since colonization under the Spanish Empire.[2]

This paper will evaluate the political nature of evangelicalism in Latin America and its historical context from 1968 to 1974 through archival records, secondary historical accounts, and primary writings through the use of Hegel's dialectic. Hegel's dialectic is a theoretical analytical framework where there are "three stages of development… [in which] society moves through to find balance and harmony. These stages are[:] the thesis, which is the reaction to the event[;] the antithesis, which is an opposite reaction to the thesis[;] and the synthesis, which is the solution to the initial problem."[3] The paper will examine the works and writings of radio evangelist Billy J. Hargis, Ecuadorian theologian René Padilla, and missionary Peter Wagner as examples of the various types of religious-political struggles that manifested in the late 1960s and mid-1970s. The paper explores the context of the relationship between missionaries and the Latin American populous following the Second World War. Then, it evaluates the rise of social Christianity through the development of liberation theology in the Latin American Christian world as a view of overt political action that is justified by theology. The paper also evaluates Billy J. Hargis' relationship with the American-Chilean Council. Then, it explores the developments of the Lausanne convention as the entry of social Christianity in the evangelical world, which was countered by Peter Wagner, both through his books and his attempts to influence the FTL (*Fraternidad Teológica Latinoamericana*). The paper concludes by synthesizing the developments of politics via theology and its continuation in current events.

The U.S. and South America: The Origins of Politics of the Cross in Missions
Following the Second World War, evangelical Americans sought to reengage with South America through the Great Commission and the dispensation of American conservative traditionalist values.[4] In contrast with early 20th century American evangelicals, who were ambiguous on the level of activism in U.S Foreign policy—with some advocating isolationist restraint— post-World

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[2] Frank K. Flinn, ed., "Catholicism in Latin America," *Encyclopedia of Catholicism,* Encyclopedia of World Religions, 2nd ed. (New York: Facts on File, 2016), available at https://login.proxy.lib.fsu.edu/login?url=https://search.credoreference.com/content/entry/fofc/catholicism_in_latin_america/0?institutionId=2057.

[3] Julie E. Maybee, "Hegel's Dialectics," in *Stanford Encyclopedia of Philosophy*, last modified October 2, 2020, https://plato.stanford.edu/entries/hegel-dialectics/.

[4] The Great Commission is an instruction given by Jesus in Matthew 28:16-20 (NRSV) that calls for his followers to spread Christianity to all nations. This instruction is the basis of evangelism and mission work in Christian theology. Jonathan P Herzog, *The Spiritual-Industrial Complex: America's Religious Battle Against Communism in the Early Cold War* (Cary: Oxford University Press, 2011), 207.

War II evangelicals sought to promote internationalist views due to their theological emphasis on the importance of international mission work. In the early postwar years, the sermons of Billy Graham mobilized evangelicals, calling communism a product directed by the devil. NAE (National Association of Evangelicals) President Harold John Ockenga also commented on the encroachment of global communism in Third World nations via culture. Both leaders emphasized the role of religion and the state against global Marxism. By the 1970s, South America was seen as a hotbed of political and social strife, making the region prone to the adoption of communism in the eyes of Americans, which led to a missionary call for evangelicals who wanted to preserve western society abroad.[5] Evangelicals sought to strengthen efforts to combat communism by implementing missions, single-issue organizations, and international conferences. It was through missions work rather than the ballot—which would be used in the 1980s with the rise of Moral Majority—that the evangelical right was able to mobilize anti-communist efforts.[6]

Unlike previous missionary endeavors that focused on the values of the social gospel and modernist thought before the Cold War, missionary work within the latter half of the 20th century carried the weight of not only salvation, but also of an American conservative evangelical identity.[7] With American exceptionalism being at its height in the Cold War years, the evangelical right sought to export their views through the lens of a born-again experience and biblical inerrancy to states in the First World periphery. Efforts such as the creation of the Summer Institute of Linguistics (SIL), Wycliffe Bible Translators, Missionary Aviation Fellowship (MAF), and Ecuadorian evangelical radio station HCJB wanted to expand North American evangelicalism to inaccessible corners of Spanish-speaking South America. It was the presence of U.S. evangelical missions in South America during the Cold War that signaled a shift in how religious organizations interacted with their geographical context.

In the United States, Latin America had been perceived as a "weak," "hostile," and "exotic" region prone to radicalism in the minds of the general American evangelical public in the first half of the twentieth century.[8] During the onset of the Second World War, the Havana Conference and the Good Neighbor Policy reshaped the relations between the U.S. and the region as equals and, for a time, eroded U.S. paternalistic policies in the region.[9] But the Cold War reignited U.S paternalism through the growing fear of communism. It was in the wake of the postwar years that

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[5] For Billy Graham quote see Billy Graham, "We Need Revival!" and "Prepare to Meet Thy God!" in *Revival in Our Time: The Story of the Billy Graham Evangelistic Campaigns* (Wheaton, IL: Van Kampen Press, 1950), 72–73, 122–123.
On Ockenga see Harold John Okenga, "The Communist Issue Today," *Christianity Today*, May 22, 1961.
[6] Jonathan P. Herzog, *The Spiritual-Industrial Complex: America's Religious Battle Against Communism in the Early Cold War* (Cary: Oxford University Press, 2011).
[7] The Social Gospel was a Protestant social movement in the United States that sought to integrate Christian ethics with social consciousness and charity. Modernism is an umbrella movement that seeks to reinterpret Christianity by considering developments in science, historical criticism, and rejection of biblical inerrancy and infallibility.
[8] Harold John Okenga "The Communist Issue Today," *Christianity Today*, May 22, 1961.
[9] The Havana Conference of 1940 was a mutual defense agreement between the United States and twenty Latin America states that sought to counteract Axis interests in the region. The Good Neighbor Policy was a U.S. foreign policy initiative pushed for non-intervention and non-interference in domestic Latin American affairs. See Peter H. Smith, *Talons of the Eagle: Dynamics of U.S.-Latin American Relations* (New York: Oxford University Press, 1996).

both the U.S. government and traditionalist evangelicals saw the need to interject their agenda within the Latin American masses. The rise of American intervention in Guatemala and in other Latin American states to combat nationalization efforts further reinforced the fears of right-wing religious leaders that the encroachment of communism as a deadly threat for a religious America. The proselytizing of Anglo-American evangelicalism was seen as the vehicle that would secure the wellbeing of western culture from Soviet secular atheism.

Liberation Theology: The Building Block for *Mision integral*

Latin America of the late 1960s and early 1970s was faced with strong factionalism. The rural peasantry, urban laborers, and emerging intellectuals sought to disrupt the standing of the conservative status quo of major landowners, mine operators, and business owners who had made up the political conservative base that dominated a majority the region since its independence. Amongst the conservative political status quo was the Catholic Church, which held immense power within society as they were the regulators of the socio-cultural fabric of Latin America through its rigid ecclesiastical structure.[10] The Catholic Church in Latin America during the late 1960s was starting to adapt to the developments and resolutions passed by the Second Vatican Council in 1965, which dismantled traditionalist practices such as the use of Latin in the liturgy, anti-ecumenicalism, Catholic supremacy, and anti-modernism. When the Second Vatican Council concluded in 1965, the Church issued the decree of *Ad gentes*, which emphasized that the church should "bring the good news to the poor," introducing the discourse on class, poverty, and struggle in Catholic theology.[11] In light of the development of the Second Vatican Council, the Episcopal Conference of Latin America (CELAM) convened in 1968 to discuss how the decrees of the Second Vatican Council would be adapted to address the sociopolitical issues that faced Latin America at the time. The Second Episcopal Conference of Latin America (CELAM) was the first time that liberation theology was introduced in the region by Juan Luis Segundo— a Uruguayan Jesuit— and Peruvian priest Gustavo Gutierrez. Liberation theology arose from the focus on the need of the church to both address socio-cultural matters of poverty and disparity, and to take action on not only the protection and aid to the materially poor, but also to those who are poor in the soul.[12] Gutierrez also argued against economic dependency as it was the cause of wealth disparity in Latin America. Liberation theology sought to aid the poor and the struggles and educational disparities they faced through the Bible as a means to liberate themselves from the burden via orthopraxy— the commitment to action and reflection on statements true in the Bible. Liberation theology faced backlash from more conservative Catholics such as Colombian Cardinal Alfonso Lopez Trujillo— who would become a favorite of Pope John Paul II— based on its critical

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[10] An ecclesiastical structure is a structure of governance and operation within a Christian denomination.

[11] Vatican Council II, "Decree Ad Gentes on the Mission Activity of the Church," LA SANTA SEDE, 1965. https://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_decree_19651207_ad-gentes_en.html.

Christian Bushges, Andrea Müller, and Noah Oehri, eds. *Liberation Theology and the Others: Contextualizing Catholic Activism in 20th Century Latin America* (Lanham: Lexington Books, 2021).

[12] David Tombs, *Latin American Liberation Theology* (Boston: Brill Academic Publishers, 2002).

analysis of class and society that mirrors that of Marxism and its equating of salvation with political liberation, a critique that would continue up to the present[13]. Latin American Protestant figures like Methodist Jose Miguez Bonino, Presbyterian Rubem Alves, and evangelical Rene Padilla adopted liberation theology in their works on education theology and missiology, with Padilla later developing *Mision integral* as an evangelical adaptation to liberation theology.

Billy J. Hargis and the ACC

The fear of the rise of communism in Latin America was a top concern for U.S. foreign policy and the conservative American community. The evangelical right was shocked with the fear of communist spillage in Latin America in the wake of Fidel Castro's 1961 Cuban Revolution. Billy Graham—considered one of the biggest icons of American evangelicalism—preached about the feared destruction of a Christian America by the threat of Soviet domestic incursion in American society.[14] Among the long list of evangelical figures that staunchly opposed communism was Christian Crusade founder Billy J. Hargis, known for his extreme anti-communist views in his radio shows and his engagement in both foreign and domestic socio-cultural affairs. Hargis was an active figure in the American evangelical far-right, writing works like *Is the School House the Proper Place to Teach Raw Sex?*, and *Why I Fight for a Christian America*. His literature was composed of virulent accusations against prominent leaders, claiming that Martin Luther King, Jr. was a Marxist seeking to destabilize the United States and blaming U.S. Secretary of State Henry Kissinger for being too soft on the threat of global communism.[15]

Hargis believed that the fight against communism was not a political prerogative, but rather a moral one that was to be upheld as part of his ordination vows as a member of the Baptist Bible Fellowship (BBF)—an independent Baptist denomination that held premillennialist views, of which Jerry Falwell was a member.[16] Hargis was a part of a wide network of hard-right radio preachers and business figures like Carl McIntire and H.L Hunt, who were highly critical of the U.S. government and were considered extreme by some within the American evangelical

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[13] Elena Curti, "Study in Scarlet," *The Tablet*, May 8, 2010, 4.
David Tombs, *Latin American Liberation Theology* (Boston: Brill Academic Publishers, 2002), 124.
[14] Daniel K. Williams, *God's Own Party: The making of the Christian Right* (New York: Oxford University Press, 2010), 21–25.
[15] Federal Bureau of Intelligence, "FOIA: Christian Crusade-Billy James Hargis-HQ-2," Internet Archive, 2013, https://archive.org/details/foia_Christian_Crusade-Billy_James_Hargis-HQ-2/page/n167/mode/2up; Robert D McFadden, "Billy James Hargis, 79, Pastor and Anticommunist Crusader, Dies," *The New York Times,* November 29, 2004, https://www.nytimes.com/2004/11/29/obituaries/billy-james-hargis-79-pastor-and-anticommunist-crusader-dies.html; Federal Bureau of Intelligence, "Hargis, Billy James--Christian Crusade, HQ 97-3475, 1 to 81," Internet Archive, 2019, https://archive.org/details/HARGISBillyJamesChristianCrusadeHQ973475181/page/n533/mode/2up.
[16] Daniel K. Williams, *God's Own Party: The making of the Christian Right* (New York: Oxford University Press, 2010), 55; Noel Smith, "Reasons for the Baptist Bible Fellowship" *Baptist Bible Tribune*, May 23, 2020, http://www.tribune.org/reasons-for-the-baptist-bible-fellowship/. Premillennial Dispensationalism is a theological position that claims that the second coming of Christ will arrive before the end of the millennium based on Revelation 20:6 (NRSV). This position relies on the interpretation of world events as signs of the approaching second coming of Christ. For more on premillennial dispensationalism see Matthew Avery Sutton's *American Apocalypse: A History of Modern Evangelicalism.*

community.[17] Hargis claimed to be an orthodox, evangelical, premillennial dispensationalist fundamentalist who believed in Biblical inerrancy and thought that "Satan has chosen communists as a vehicle to use in the tribulation period of the battle of Armageddon."[18] With this theological prerogative, Hargis sought to fight against communism actively within the Western hemisphere, seeing it as a threat to the United States on its doorsteps.

Hargis's connections with far-right leaders abroad and international anti-communist efforts were so extensive that the FBI opened an investigation in 1957 and 1968 under the Foreign Agents Registration Act due to his relationship with the ambassador of the Dominican Republic and criticism of exiled Greek president Georgios Papandreou, claiming him to be a communist.[19] Hargis maintained detailed news accounts through the 1960s and 1970s on the development of Latin American politics, specifically the rise of right-wing military leaders that sought to quash communist subversives, a unique and highly active approach, which was uncommon in the evangelical political community of the time. The accounts that he acquired ranged from missionary news reports, letters to missionary organizations, and news reports.[20] By 1971, Hargis engaged in a more specialized anti-communist endeavor in the wake of socialist candidate Salvador Allende's incumbency to the Chilean presidency, which he saw as the rise of a premillennial dispensationalist Satan in the region.

In the early 1970s, Hargis had connections via correspondence to the U.S. Department of State on Chile's establishment of diplomatic relations with Cuba, to which he called U.S. policy toward Chile "bull" and claimed that Chile will keep its international commitments and obligations "if they help communism, or compelled to by fear of superior forces, and only in which cases will they observe their commitments."[21] Hargis continued to engage in international anti-communist efforts on the ground by attending the 9th World Anti-Communist League (WACL) Conference and the 1975 WACL Rio de Janeiro conference, where he condemned the church council investigations on the American intelligence community, claiming that it was inspired by left-wing forces that sought to weaken America's capabilities to fight its enemies.[22] This was a statement that many military officers from Latin America agreed with and a prerogative that Hargis manifested in the form of the American-Chilean Council, an organization that was created to

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[17] Daniel K. Williams, *God's Own Party: The making of the Christian Right* (New York: Oxford University Press, 2010), 55.

[18] "Tulsa-based Evangelist Billy James Hargis appears on late night Tom Snyder show," Jack Frank Productions, January 15, 2014, video, https://www.youtube.com/watch?v=p5n7nm4lWXE.

[19] Federal Bureau of Intelligence, "FOIA: Christian Crusade-Billy James Hargis-HQ-2," Internet Archive, 2013, https://archive.org/details/foia_Christian_Crusade-Billy_James_Hargis-HQ-2/page/n167/mode/2up.

[20] Billy J. Hargis papers, MC 1412 Box 109 Folder 39, University of Arkansas Libraries- Special Collections, Fayetteville, Arkansas, United Sates of America.

[21] Billy J. Hargis papers, MC 1412 Box 108 Folder 17 and 22, University of Arkansas Libraries- Special Collections, Fayetteville, Arkansas, United Sates of America, p. 5.

[22] Kyle Burke, *Revolutionaries for the Right: Anticommunist Internationalism and Paramilitary Warfare in the Cold War*, The New Cold War History (Chapel Hill: University of North Carolina Press, 2018).
Speech given by Billy J. Hargis to the 9th World Anti-Communist League Conference, Seoul, South Korea, December 12th 1975, folder 6, box 62, KDP,HIWRP.

circumvent the U.S. government in the name of anti-communism and Christian evangelical America.

The American-Chilean Council (ACC) was a Washington D.C.-based organization founded in 1974 that lobbied on behalf of the Chilean Pinochet regime and military juntas in the Southern Cone. The ACC published Pro-Pinochet propaganda throughout the 1970s ranging from the denial of Human Rights abuses by the Chilean government to claiming that Orlando Letelier— a Chilean ex-ambassador and opposition activist— was killed by left-wing Cuban terrorists.[23] Founder Marvin Liberman frequently collaborated with DINA (Chilean Intelligence Agency) director Manuel Contreras on the operations of the ACC in its efforts to promote the military regime. Hargis was well connected with the ACC, receiving ACC literature regularly, and even received a copy of ACC sponsored supporter and National Review editor William Rusher's correspondence with Ambassador John Davis Lodge that reported favorably on free speech and human rights in Chile.[24] Hargis continued to interact and indirectly support the ACC until its demise under an 1978 investigation from the U.S. Department of Justice that concluded that the ACC violated the Foreign Agents Registration Act of 1938 due to its funding being mostly provided for by the Pinochet regime. After the closure of the ACC, Hargis would never engage with the regime for the remainder of his life as he would face allegations of sexual misconduct that ruined his reputation. Hargis' theological commitments became a prerogative for direct action in the region in a manner which only the U.S. government was previously able to achieve through bureaucratic institutions. The ACC proved to be a forerunner to other religio-political interest groups with strong theological commitments—both personally through their founders or institutionally through the organizations mission—that would later have interests in the region.

Lausanne 1974: The Birth of the *Mision integral*

Before the 1970s, most voices in the evangelical community were from the Global North, specifically the United States and the United Kingdom. Most of the interactions that the Global North evangelical community had with the Global South was that of missionary work that was aimed at proselytizing to save those who have never heard the gospel or to those who have not yet had a "born again" experience. This excluded the Global South's capacity to contribute to evangelical theological discourse since there was no institution nor conference in which they could interact with their partners in the Global North. The primary concern for those in the Global South, specifically South America, was that American evangelicals who have exported their brand of conservative evangelicalism which focused on saving souls to a region of the world where economic and political strife were the main issues for the common person. In light of the dissonance between evangelicals in the first world and those in the third world, Billy Graham organized the First International Congress on World Evangelization to serve as a conduit for

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[23] John Dinges, *The Condor Years: How Pinochet and His Allies Brought Terrorism to Three Continents* (New York: New Press, 2005).
Letter from William Rushner to U.S Ambassador John Davis Lodge, March 15, 1978, folder 7, box 131, WRP, LOC
[24] Billy J. Hargis papers, MC 1412 Box 108 Folder 17 and 22, University of Arkansas Libraries- Special Collections, Fayetteville, Arkansas, United Sates of America, 102–104.

evangelical discourse between voices that would have otherwise been isolated in socio-geographic bubbles. Evangelical figures from South America were invited, but were hesitant to attend due to the fear of a celebration of a "mutilated gospel" that was made in the image of middle-class America that reflected white American culture with strong conservative loyalties rather than that of the common man.[25] Latin American evangelicals were for the first time allowed to express their displeasure at the American evangelical establishment which ignored the social aspects of Christianity that was strongly emphasized within the South American religious discourse. René Padilla confronted this, stating that "American culture Christianity infuses racial and class segregation into its strategy for world evangelization," a statement which resulted in a strong backlash against Padilla, who was highlighting the colorblindness of American evangelicalism as a hindrance to the spreading of the gospel.[26] Padilla was known to be controversial in conservative evangelical circles due to his confrontations with American missionaries and his lean towards leftist politics.[27] In an article from *Christianity Today*, Padilla implied that the U.S. Department of State was responsible for the coup that installed General Augusto Pinochet in Chile, striking concern in the largely anti-communist American evangelical community.[28]

Padilla's opposition to paternalism from American evangelicals stemmed from the lack of social action that was emphasized in the theological discourse. Padilla was heavily influenced by liberation theologians like Gustavo Gutierrez and Juan Luis Segundo, who emphasized the preferential option for the poor in the context of Latin American's socio-political climate, a socio-theological concept that was not addressed in American evangelicalism. In the Lausanne Congress, Padilla sought to address the need for evangelicals to address social issues by introducing the concept of *Mision integral*. Padilla's *Mision integral,* unlike liberation theology which called for the praxis of ethics in a more sociological lens, dealt with a social context that sought to decolonize Jesus from a colonial Spanish and American portrayal of strict salvation to that of a socially aware image that reflected the realities of the third world. Although Padilla's *Mision integral* closely mirrored liberation theology, he rejected it as he believed that it strayed from Biblical Christianity, citing the lack of biblical exegesis and narrow definition of praxis in a Marxist lens rather than the Bible.[29] Padilla was knowledgeable in the theo-cultural views of Anglo-American evangelicals, having completed his bachelor's and master's at Wheaton College and a Ph.D. under prominent conservative evangelical scholar F. F. Bruce at the University of Manchester. This gave Padilla credibility that could not be rejected by conservative American evangelicals who opposed him due to his emphasis on social action and anti-colonial rhetoric.

As the Congress progressed, some evangelical conservative figures like Lausanne committee chair John Stott embraced *Mision integral* as a holistic means to follow the gospel

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[25] David C. Kirkpatrick, *A Gospel for the Poor: Global Social Christianity and the Latin American Evangelical Left* (Philadelphia: University of Pennsylvania Press, 2019).
[26] C. René Padilla, "Evangelism and the World," (Uncatalogued), 130.
[27] David C. Kirkpatrick, *A Gospel for the Poor: Global Social Christianity and the Latin American Evangelical Left* (Philadelphia: University of Pennsylvania Press, 2019).
[28] Ibid.
[29] C. Rene Padilla, "The Theology of Liberation," *Christianity Today*, November 9, 1973.

through social action and awareness rather than strictly through the duties of salvation that evangelicals interpreted in the Great Commission. The Lausanne Congress was deeply polarized between social Christians who saw the need to include social engagement in the concept of evangelization and conservative evangelical traditionalists. It became such a point of great concern that Billy Graham requested reports on Padilla's and Escobar's speeches due to their destabilizing nature on the Anglo-American status quo. It was in Lausanne where voices from the Global South could engage in theological and social discourse on the same level as their Anglo-American counterparts in terms of expression and legitimacy. When the Lausanne covenant was formally published, it contained the language of *Mision integral*, in which left-leaning voices of the Congress were able to come to the forefront, with mainstream evangelical voices in unity. In the years following the writing of the Lausanne covenant, *Mision integral* was recognized within evangelicalism as a legitimate theological movement that has permeated throughout evangelical literature, ministries, and missions up to the present.

Peter Wanger and the Containment of the South American Evangelical Left

South America in the 1960s and 1970s experienced a political paradigm shift that embraced cultural and religious syncretism as an expression of heritage and anti-elitist sentiment.[30] For Peter Wagner, a devout dominionist with Pentecostal tendencies who was planting churches in Bolivia with the Andes Evangelical Mission—now *Société Internationale Missionnaire* (SIM)—Latin America was a theological battleground due to the rise of syncretic trends within South American Protestantism.[31] Dominionism generally presented ideals of right-wing Christian nationalism, religious supremacy, and the implementation of Mosaic law via the state as key tenants of "true" Christianity. Seven mountain dominionism—which Wagner sympathized with—"calls for believers to take control over seven leading aspects of culture: family, religion, education, media, entertainment, business, and government."[32] Wagner's brand of evangelicalism was far from Billy Graham's individualist regeneration discourse that most evangelicals in the United States embraced at the time. In the eyes of Wagner, it was American evangelicalism that was seen as free of syncretic corruption, and therefore the theological standard. Wagner saw the rise of left-leaning theological manifestations and developments as a source of concern, for he argued that it could

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[30] The amalgamation or attempted amalgamation of different religions, cultures, or schools of thought.

[31] Pentecostalism is an evangelical Protestant movement that that is focused on direct experiences with God through that baptism with the Holy Spirit. It is believed that through baptism with the Holy Spirit individuals can manifest spiritual gifts like speaking in tongues and divine healing. The term charismatic is also used in reference to Pentecostalism and movements that have a strong emphasis on the work of the Holy Spirit, spiritual gifts, and miracles.

[32] Frederick Clarkson, "Dominionism Rising," *Political Research Associates,* August 18, 2016, https://politicalresearch.org/2016/08/18/dominionism-rising-a-theocratic-movement-hiding-in-plain-sight.

C. Peter Wagner, *Wrestling with Alligators, Prophets, and Theologians: Lessons from a Lifetime in the Church: A Memoir* (Ventura, CA: Regal, 2010).

corrupt Christianity in Latin America, calling it "a deplorable situation [that] became a high agenda item."[33]

Wagner's criticism of South American theological developments stemmed from his Anglo-American missionary fundamentalist background. For Wagner, he saw the Latin American Protestant left as "passive" followers of Christ due to his perception of praxis that was guided on social responsibility rather than "winning souls, saving the lost, baptizing new members into the Church, and fulfilling the Great Commission mentioned."[34] In *Latin American Theology: Radical or Evangelical?* he described Jose Miguez Bonino—an Argentine Methodist who helped establish liberation discourse in Latin American Protestantism—as a moderate who does too little to "combat evil"—that evil being liberation theology—and a theologian who argued that more economically secure individuals are in a better state to listen to the gospel.[35] To curtail the damage of syncretic liberationist developments in South America, Peter Wagner organized the *Fraternidad Teológica Latinoamericana* (Latin American Theological Fraternity, known as FTL) composed of theologians Samuel Escobar, René Padilla, and Orlando Costas. The organization—which Wagner reported on for *Christianity Today*— was intended to be an institutional regulator of the evangelical faith within the region.

Before FTL's 1971 meeting in Cochabamba, Bolivia, Wagner distributed *Latin American Theology: Radical or Evangelical?* to the members of FTL which heavily critiqued the book which Wagner credits to his church growth theories as a product of his paternalistic tendencies.[36] During the Cochabamba talks, Wagner sought to influence the outcome of the declaration by pushing the use of the Frankfurt declaration and a statement of inerrancy—considered to be an importation of the American theological agenda— and the Fuller curriculum in an organizational context that wanted to assert its theological legitimacy and autonomy against the American conservative theo-political agenda.[37] When Wagner published his article "High Theology in the Andes" on the developments of the Cochabamba declaration talks, he praised all of the FTL members except for René Padilla, whom he accused of doubting the authority of the Bible due to his reluctance to include a statement of inerrancy in the Cochabamba declaration[38]. In reaction to Wagner's article in *Christianity Today*, the growing South American evangelical left saw itself rejected in the American evangelical community by the negative portrayal of the declaration proceedings.

Following the event, René Padilla found himself facing backlash from the United States with a letter stating that he needed proper discipleship with suspicions of his claims being unbiblical.[39] In response to the backlash, the Latin American members of the FTL received the

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[33] C. Peter Wagner, *Latin American Theology: Radical or Evangelical? the Struggle for the Faith in a Young Church* (Grand Rapids: Eerdmans, 1970); C. Peter Wagner, *Wrestling with Alligators, Prophets, and Theologians: Lessons from a Lifetime in the Church: A Memoir* (Ventura, CA: Regal, 2010), 87.

[34] Ibid, 23.

[35] Ibid, 29–30.

[36] C. Peter Wagner, W*restling with Alligators, Prophets, and Theologians: Lessons from a Lifetime in the Church: A Memoir* (Ventura, CA: Regal, 2010), 87-88.

[37] David C. Kirkpatrick, *A Gospel for the Poor: Global Social Christianity and the Latin American Evangelical Left* (Philadelphia: University of Pennsylvania Press, 2019), 82.

[38] Ibid, 83.

[39] Ibid, 83.

support of International Fellowship of Evangelical Student (IFES) director C. Stacey Wood stating that "I personally am persuaded that René Padilla holds to a strictly biblical position."[40] and "I really believe the wretched Wagner is malicious. If this sort of thing continues to spread, it could have a bad effect upon the work and its support… I am writing letters to the effect that you subscribed to the statement of faith of the IFES without any reservation. I enclose this statement. I presume this is so without question."[41] Following the controversy, many in the Global South found themselves represented and aligned with the voices of the FTL and the Cochabamba declaration as, by the mid-seventies, more and more anti-paternalistic oppositional voices began to arise in the evangelical theological discourse. Peter Wanger soon stopped interfering with the development of what would later know to be *Mision integral* theology. Wagner left the FTL and Bolivia in 1971 to pursue a position at Fuller theological seminary, later embracing a conservative, charismatic, social Christian agenda that later developed into his involvement in the New Apostolic Reformation movement and the formation of dominionist discourse in the 1990s and 2000s.[42]

Conclusion

The sections discussed in this essay provide a historical cross-section of the approaches of evangelical leaders and their influences concerning the state of Cold War U.S.- South American relations in the late 1960s and early 1970s. The continuation of *Mision integral* theology and dominionism to the present suggest that these movements within mission discourse are still driving forces that influence the actions of those who adhere to them. Within the last 30 years, evangelicalism has played an important role in South American politics, as evangelicals now hold political power in the once Catholic-dominated region. With the rise of the religious non-profit complex, more Americans are able to engage in missionary work in South America, with some embracing a conservative, paternalistic approach that is reflective of American exceptionalism. The rise of evangelical populist Brazilian ex-president Jair Bolsonaro and his incorporation of religious politics signals the ramifications of the praxis of evangelical theologies within formal political structures. Figures such as Peter Wagner and Samuel Escobar continue to expand on the discourse of social Christianity of the left and the right to instigate change within the formal power structures of the church as an agent of power.

Research of foreign policy matters in Latin-America through a theological lens provides an understanding of regional matters that policy makers, non-profits and executive agencies can use in order to evaluate the effects of socio-political objectives on the region. Theological approaches to foreign policy extend beyond the Latin American region. Regions of interest for the U.S. government such as Turkey, Western Africa, and Asia have been exposed to U.S. foreign policy and have contended with its interaction in the form of missionaries as religio-social diplomats of Anglo-American cultural tradition. By further understanding regional political-

[40] Padilla Papers, Buenos Aires, Woods to Kathleen Camache, March 4, 1971.
[41] Padilla Papers, Buenos Aires, Woods to Padilla, March 4, 1971.
[42] C. Peter Wagner, *Wrestling with Alligators, Prophets, and Theologians: Lessons from a Lifetime in the Church: A Memoir* (Ventura, CA: Regal, 2010).

theological environments, state and regional actors can effectively manifest their theological, cultural, and political objectives and desires.

Diplomacy through means of theology is an expression of soft power that has existed in an overt manner since the creation of religious institutions, but the study of non-overt religious politics is still a field that is growing and evolving in the academic world with works such as Herzog's *The Spiritual Industrial Complex* and academic journals such as *Political Theology,* providing an insight to the academic world and regional experts on matters of religion as an agent of policy. Theology as a means of political action is an inherent trait that religion carries as a vehicle for understanding the human condition. Whether it be through theories of salvation, anti-leftism, or the preferential option for the poor, the religious interactions between the United States and South America will be reliant on the socio-political conditions of American and Latin American society.

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Disentangling the Rhythm from the Melody: What Really Causes the Mozart Effect?
The Mozart Effect and Spatial Awareness

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Introduction

The Mozart Effect refers to enhanced spatial ability following listening to 10 minutes of Mozart's music (Rauscher et al., 1993). Rauscher and Shaw (1998) suggest that Mozart's music primes the same neurological pathways in the brain that are utilized during performance of spatial tasks (i.e., a task that assesses an individual's ability to plan an objects' spatial movement and its relationship between coinciding objects within its location). The results of the original study by Rauscher and colleagues (1993) and additional replications (Rauscher et al., 1995; Rideout & Taylor, 1997) incited a widely exaggerated (and possibly misinterpreted) idea that "music makes you smarter."

Additional research on the Mozart Effect is essential because the effect is short lived (10–15 minutes), the effect size appears to be very small, and replication and generalization efforts have been mixed (for meta-analysis, see Pietschnig et al., 2010). Furthermore, there is substantial evidence that the effect is not specific to Mozart music and that the effect itself may be mediated by mood, arousal, and/or preference (Cassity et al., 2007; Steele, 2000; Thompson et al., 2001; Lints & Gadbois, 2003). For example, Thompson and colleagues (2001) examined the effect of exposure to 10 minutes of either sitting in silence, listening to a slow, melancholy piece of music (Albinoni's *Adagio in G Minor for Organ and Strings*), or listening to an upbeat, cheerful sonata (*Mozart Sonata for Two Piano's in D major*, K. 448) on performance of a spatial task called the Paper Folding and Cutting Task. They found that the group that listened to an upbeat, cheerful Mozart sonata (*Mozart Sonata for Two Piano's in D major*, K. 448) scored higher on the spatial task compared to silence. Furthermore, the benefit for the Mozart group only emerged when the music increased levels of arousal and moods as measured by the Profile of Mood States (POMS) (McNair et al., 1992). They concluded that enhanced cognitive performance can be best understood as the result of changes in arousal or positive affect. Further support for the link between mood and cognitive performance has come from other studies showing that positive moods can lead to improved performance on various cognitive and problem-solving tasks (Ashby et al., 1999; Isen, 1999).

Some have successfully replicated the Mozart Effect using the Mozart sonata in the original experiment (*Mozart Sonata for Two Piano's in D major*, K. 448) by Rauscher and colleagues (1993) and the same dependent measures of spatial reasoning such as portions of the Stanford Binet, the Paper Folding and Cutting task, and the Matrices task (Rauscher et al., 1995; Rideout & Taylor, 1997). Others have replicated the effect in children using different music (e.g., Bach's *Toccata in G*) and background noise as a control condition (Ivanov & Geake, 2003), in adults using

different music (Brahms' *Hungarian Dance No. 5 in G major*) and silence as a control (Jaušovec et al., 2006), and in adults using a progressive relaxation condition as a control (Rideout et al., 1998). Taken together, these previously mentioned studies provide evidence that the *Mozart Sonata for Two Piano's in D major*, K. 448 and presumably other pieces of classical music can improve spatial task intelligence and that the effect can be replicated by other researchers, with other populations (i.e., such as children), and in other settings (i.e., the classroom).

Despite research supporting a link between positive, upbeat music and spatial awareness, there is some evidence that the Mozart Effect is unreliable. Thus, others have failed to replicate the effect using the same measures of spatial reasoning. For example, Rauscher and colleagues (1994) (McKelvie & Low, 2002; Steele et al., 1999), used other measures of spatial reasoning (e.g., Raven's Progressive Matrices-Advanced Form) (Newman et al., 1995), and other measures of cognitive performance such as memory tests (Carlson et al., 1997; Rauscher, 1994). Goodmon and colleagues (2018) found that although *Mozart Sonata for Two Piano's in D major*, K. 448 elevated mood and arousal levels, it only produced a medium effect size in memory advantage over the negative auditory condition. More importantly, participants in the Mozart condition had the highest rates of more effective encoding strategies, while participants in the negative auditory condition had the lowest rates of more effective encoding strategies, suggesting that encoding strategy (and not the music itself) mediated the effect of mood and arousal on memory.

Taken together, the previous results suggest one of two conclusions: either the Mozart Effect does not generalize as well to other types of spatial tasks or to different cognitive abilities (such as memory) or previous non-replications reflect participants' preference for the non-musical conditions (Nantais & Schellenberg, 1999), or failure by the experimenters to induce the appropriate mood/arousal to bring about an improvement in cognitive performance (see Steele, 2000; Thompson et al., 2001).

According to de l'Etoile (2002), an important aspect of successful mood induction techniques is that they need to create a mood manipulation that is intense and longer lasting to ensure that the mood sustains across the experiment. One method that has been successfully used to induce longer lasting and intense moods in both men and woman is a musical mood induction procedure (Clark & Teasdale, 1985; Sutherland et al., 1982). Musical mood induction techniques are more successful than other techniques (Gerrards-Hesse et al., 1994), and because they lack verbal material, they are less susceptible to demand characteristics (Pignatiello et al., 1986). Many researchers have reported a cognitive benefit of positive moods as a result of musical mood induction (de l'Etoile, 2002; Thaut & de l'Etoile, 1993). Thaut and de l'Etoile (1993) and de l'Etoile (2002) found that individuals who were induced to be in a positive mood as a result of listening to classical music (Mozart's *Clarinet Concerto in A*, Opus 107) prior to the encoding phase recalled more words than those not induced to be in any particular mood (exposed to silence).

Additional research on the cognitive benefit of positive moods comes from research showing that positive moods induce more cognitive effort and motivation. Although some have shown that negative mood is associated with effort and motivation on some cognitive tasks in order

to alter moods to make them more positive (Erber & Erber, 1994; Forgas, 2013), others have shown that positive moods prime individuals to elicit favorable judgments regarding the target stimuli, resulting in enhanced motivation and engagement towards tasks (Isen & Reeve, 2005). Positive mood has also been associated with increased intrinsic motivation in learners within the context of multimedia learning environments (Liew & Tan, 2016; Plass et al., 2014; Um et al., 2012). Consistent with this finding, sad moods tend to reduce cognitive effort for difficult tasks that potentially further erode mood (see the resource allocation hypothesis, Ellis & Ashbrook, 1988).

According to Bower's (1981) intensity principle, the impact of mood depends on the intensity of the mood state. Perhaps certain kinds of stimuli produce more intense moods states. For example, fast tempo music has been shown to increase physiological arousal levels compared to slow tempo music (Krumhansl, 1997; Van der Zwaag et al., 2011). There is also evidence that, when processing music, there is bilateral engagement of both hemispheres in the brain (e.g., Breitling et al., 1987). Given these findings, it would be fascinating to determine if variations of auditory stimuli also impact mood and arousal levels in similar ways as the Mozart sonata (*Mozart Sonata for Two Piano's in D major*, K. 448) and improve cognitive performance. Of current interest is whether the melody or the rhythmic pattern produces the Mozart Effect (Shi, 2020). If an alternative version of the Mozart sonata (*Mozart Sonata for Two Piano's in D major*, K. 448) that maintains the rhythmic pattern but differs in melody produces similar enhancements of mood/arousal and cognitive performance, one could argue that the rhythmic pattern, and not the melody of the Mozart, is the catalyst of the effect.

Generalization and Clarity of the Mozart Effect

To summarize, researchers have shown that a positive mood/arousal induced by Mozart music improves spatial task performance (e.g., Cassity et al., 2007; Steele, 2000; Thompson et al., 2001; Lints & Gadbois, 2003); however, it is unclear whether this Mozart Effect generalizes to other spatial tasks. Furthermore, it is unclear whether the melody or the rhythmic pattern of the Mozart sonata (Shi, 2020) is responsible for the enhancement of mood, arousal, and spatial task performance. Therefore, in the current study, participants were exposed to 10 minutes of one of three types of music: *Mozart Sonata for Two Piano's in D major*, K. 448 composed by Wolfgang Amadeus Mozart (the original upbeat, happy Mozart sonata), A Lo-fi version of that sonata (i.e., reproduction of audio that highlights the rhythmic pattern of Mozart's sonata with a slower tempo), or. Albinoni's *Adagio in G Minor for Organ and Strings*. Participants' mood and arousal were assessed before and after exposure to the music. Participants then completed a 2D mental rotation task. A schematic of the procedure is shown in the methods section.

Results will be discussed in terms of the differences in mood and arousal and spatial task performance (i.e., 2D mental rotation reaction time) as a function of the type of music exposure where the rhythmic pattern was held constant, but the melody pattern varied. The rhythmic pattern is held constant to test if the Mozart Effect is either truly caused by its rhythm (which is highlighted by the Lo-Fi version) or the melody (which is highlighted by the original Mozart sonata). Because of the link between positive mood and cognitive performance (Ashby et al., 1999; Isen, 1999), it

was hypothesized that participants exposed to Albinoni's *Adagio* rather than to the Mozart sonata would exhibit faster 2D mental rotation reaction time, but only if it also successfully elevated mood and arousal. Because there is no prior research on the effect of the specific Lo-fi version of the Mozart sonata, it is difficult to formulate specific hypotheses related to exposure to that composition. If exposure to the Lo-fi version also induces differences in mood and arousal and results in enhanced performance on the mental rotation task compared to Albinoni's *Adagio*, this could provide evidence that the rhythmic pattern (as opposed to the melody) of the Mozart sonata increases mood and arousal, lending to better cognitive functioning (more specifically in this case, 2D mental rotation ability).

Methods

Design — In order to determine if the Mozart Effect generalizes to other spatial tasks and to determine if the melody or the rhythmic pattern of the Mozart sonata (Shi, 2020) is responsible for the enhancement of mood, arousal, and spatial task performance, we implemented an experimental design. The type of music/mood induction was the independent variable and changes in mood pre and post music exposure, and 2D mental rotation reaction time was the dependent measures. Specifically, the study formed a 3 x 2 mixed-subjects factorial design (an experimental design that allows researchers to study the effects of an independent variable with more than two levels on a dependent variable) with mood/arousal induction condition (positive music: original Mozart sonata; positive Lo-fi music: modified Mozart sonata; negative music: Albinoni's *Adagio*) as the between-subjects factor and changes in mood/arousal from baseline to post-music exposure as one repeated, dependent measure and reaction time on the mental rotation task as the second dependent measure.

Participants — A total of 72 undergraduate psychology students from Florida Southern College served as participants in this experiment. The sample was 68.1% cis female, 20.8% cis male, 2.8% nonbinary, 1.4% trans female, and 6.9% "other." The sample was primarily White (75%), 11% Black, 1.4% Asian, 8.3% Hispanic, and 4.2% other. The sample was 47% freshmen, 15% sophomores, 11% juniors, and 26% seniors. The average GPA of the sample was 3.42 (*SD* = .42).

Materials — **2D Mental Rotation Task.** Participants were shown pairs of letters (e.g., see Figure 1) that varied in how misoriented they were from each other (from 0 to 330 degrees) via the online platform Zaps. Some of the letter pairs were identical and other pairs were mirror images of each other. Participants had to decide as quickly as possible whether the pairs were identical or mirror images of each other by pressing a button on the keyboard. The typical 2D mental rotation effect is faster response times when there is less misorientation between the two letters. Throughout the process participants shared their screen with the researcher to show that they were on Zaps over Zoom.

Music. Participants were exposed to 10 minutes of either upbeat, cheerful music (Mozart's *Sonata for Two Piano's in D major*, K. 448), a modified Lo-fi version of the Mozart sonata, or a slow, melancholy musical selection (Albinoni's *Adagio in G Minor for Organ and Strings*) via Zoom.

Baseline and Post-Music Exposure Mood/Arousal Questionnaire. Participants' mood/arousal before being exposed to the mood/arousal induction phase was assessed using a slightly modified version of the Profile of Mood States (POMS) – Short Form (McNair et al., 1992) over Survey Monkey. Participants rated how they felt prior to music exposure (baseline) and then how the music or images made them feel (post-test). They made their ratings on a 5-point scale, 1 (*not at all*) to 5 (*extremely*), for each of 10 emotional descriptors, including five "Vigor-Activity" adjectives (e.g., Lively," "Active," "Energetic," "Full of Pep," and "Vigorous") and five "Depression-Dejection" adjectives (e.g., "Sad," "Sorrowful," "Discouraged," "Lonely," and "Gloomy"). We modified the original POMS form by substituting the adjective "unworthy" with the adjective "sorrowful," because it was unlikely that the music or pictures used would make participants feel "unworthy." We also added an additional question designed to assess Subjective Mood Arousal, whereby participants rated how they felt in general on a 5-point scale: 1 (*sad*) to 5 (*happy*). The possible range of scores on the Baseline and Post-test Mood Questionnaire was 11 to 55, where lower numbers reflected negative moods/lower levels of arousal and higher numbers reflected positive moods/higher levels of arousal.

Procedure — A schematic of the procedure is shown in Figure 2. The experiment was conducted via Zoom during the daytime between 8am and 5pm. After providing informed consent, participants were instructed to eliminate distractions and sounds from their environment. They were told that they would be listening to music and to close out all other computer programs, make sure that their speakers were on and that they could hear them comfortably, and to turn off their cell phones. After complying with the request to reduce outside distractions and ensure the audibility of their speakers, participants completed the baseline assessment of mood and arousal via a link to a Survey Monkey. After they completed the baseline assessment, participants were randomly assigned to one of three music conditions. The experimenter shared sound with participants via the Zoom platform and participants listened to their assigned musical piece for 10 minutes. Following the mood and arousal induction phase, participants completed the post-test of mood and arousal via the Survey Monkey link. Upon completion of the post-test, they completed a 2D task via a program called Zaps (Mental Rotation, 2D., 2014). The experimenter then provided the participants with the website and log-in information for the Zaps program and instructed the participants to access the 2D mental rotation lab. In the 2D task, participants were shown pairs of letters on the screen and had to determine as quickly as possible whether the two characters were identical, or if they were mirror images of each other. The participants were instructed to press **c** if the letters were mirror images of each other and to press **m** if the letters were identical (not mirror images). After each trial, the participants were given feedback whether or not they were correct. The 2D experiment included 48 trials. The Zaps computer program recorded the reaction time on each trial and the experimenter collected the reaction time data from the Zaps program.

Results

A 3 x 2 repeated measures ANOVA was conducted with mood induction condition (positive music, Lo-fi music, negative music) as the between-subjects factor and changes in mood/arousal from

baseline to post-music exposure as the repeated, dependent measure. As shown in Figure 3., results reveal that there was a significant interaction between mood/arousal induction condition and changes in mood/arousal from baseline to post-test, $F(2, 69) = 7.94$, $p < .001$. Planned pairwise comparisons revealed that the increase in mood/arousal for participants in the positive mood condition from baseline ($M = 4.25$, $SD = .83$) to post-music exposure ($M = 4.53$, $SD = .35$) only approached significance, $t(23) = 1.54$, $p = .069$. Similar to the positive condition, the increase in mood/arousal for those in the Lo-fi music condition from baseline ($M = 4.35$, $SD = .54$) to post-music exposure ($M = 4.55$, $SD = .54$) also only approached significance, $t(23) = -1.60$, $p = .062$. However, there was a significant decrease in mood/arousal for those in the negative music condition from baseline ($M = 4.05$, $SD = .81$) to post-music exposure ($M = 3.31$, $SD = 1.08$), $t(23) = 2.73$, $p = .006$. To summarize, we only partially replicated the effect of different music valences on mood and arousal. Only the negative music condition significantly impacted mood/arousal (i.e., had a negative influence on mood/arousal). In addition, the effect of the Lo-fi condition more closely mimicked the effect of Mozart music on mood/arousal (i.e., an increase in mood/arousal). Thus, our results provide some evidence that the rhythmic pattern (as opposed to the melody) of the Mozart sonata increases mood/arousal.

Inconsistent with the hypotheses, there was no significant effect of music induction conditions on mental rotation reaction time, $F < 1$ (see Figure 4). Despite producing marginally significant increases in mood from baseline to post-music exposure, those in the positive mood condition ($M = 2,688.55$, $SD = 706.60$) and those in the Lo-fi condition ($M = 2,806.63$, $SD = 766.44$) failed to exhibit faster reaction times compared to those in the negative music condition ($M = 2,748.67$, $SD = 690.98$) where there was a significant decrease in mood, $F(2, 69) = .17$, $p = .84$. Thus, our results provide some evidence that the rhythmic pattern (as opposed to the melody) of the Mozart sonata increases mood/arousal. However, the rhythmic pattern failed to produce better cognitive functioning (e.g., faster 2D mental rotation) in either its original form or the Lo-fi form. To conclude, the Mozart Effect failed to generalize to mental rotation ability as another measure of spatial intelligence. Unlike research that included the paper cutting and folding task as a measure of spatial intelligence (Rauscher et al., 1995; Rideout & Taylor, 1997), we failed to find any 2D mental rotation benefit for those exposed to certain types of music that increased mood/arousal.

Discussion

The purpose of this study was to determine if the melody or the rhythmic pattern of the Mozart sonata causes spatial performance enhancement and to determine if it benefits another type of spatial ability classification, specifically 2D mental rotation. We assessed participants mood and arousal from baseline to post musical intervention (positive, negative, Lo-fi) to see how each song influenced the participants, and then tested their spatial ability via a series of 2D mental rotation tasks. However, it is possible that multiple extraneous variables affected the study.

Inconsistent with our hypotheses, both versions of the Mozart sonata produced mood/arousal benefits that only approached significance. However, consistent with our

hypothesis, the negative music significantly decreased mood/arousal. Participants exposed to either the upbeat Mozart sonata or the slower, but rhythmically similar Lo-fi beat reported higher levels of mood and arousal compared to participants who were exposed to the negative condition.

Despite the higher levels of mood/arousal in both Mozart conditions, the rhythmic pattern failed to produce better cognitive functioning (e.g., faster 2D mental rotation) in either its original form or the Lo-fi form. Thus, the current results provide some evidence that the rhythmic pattern (as opposed to the melody) of the Mozart sonata increases mood/arousal, but a further analysis needs to be made on whether the rhythmic pattern or the melody is responsible for the cognitive benefit on previously used spatial tasks (Shi, 2020). Therefore, further musical analysis of the Mozart *Sonata in D Major*, K. 448, could be conducted in a future study where the full sonata's melody is completely stripped away and only its core rhythm remains. Furthermore, more studies could use our current Mozart Lo-Fi beat to test its validity.

Limitations and Future Directions
Throughout the study, we utilized the online platform Zoom to run the study due to the in-person constrictions caused by the COVID-19 pandemic. While using Zoom, it is possible that the rhythm and or pitch, which are vital elements in replicating the Mozart Effect as shown through specific rat and human studies (Xing et al., 2016), could have been distorted due to lag or other technical complications. Although we asked participants to eliminate distractions and sounds from their environment, we did not ask them to wear noise-cancelling headphones because we could not guarantee that participants would possess headphones prior to start of the experiment. Thus, outside noise distractions and other environmental distractions could have been extraneous variables in our study. Because we also did not require participants to set their speakers at a certain decibel level, differences in sound volume could have been another extraneous variable in our study. Additionally, it is possible that each individual was in a unique environment, using distinctive computers and technical equipment. Moreover, we were unable to monitor if the participants shut off their volume during the music induction phase or were entirely invested in listening to 10 minutes of music. Thus, this extraneous variable perhaps caused the Mozart sonata to have a weakened Mozart Effect, departing away from past research and hinting that the effect only happens under select circumstances such as playing the sonata in person or with high-quality sound systems like noise canceling headphones. These possible aforementioned differences (e.g., auditory and visual distractions, sound volume, computer and technical equipment) between participants could have contributed to error in data collection. However, given the larger sample size ($n = 72$), random assignment should have spread individual differences due to environmental and equipment variations equally across the music/mood induction conditions. Future research could include more control over extraneous variables related to differences in experimental environments.

In addition to the technical complications caused by the COVID-19 pandemic, participants could have been in a more negative state of mind due to the multiple lockdowns around the world and never truly knowing when things would go back to normal (Singh et al., 2020), which in turn

might have impacted their cognitive performance overall. To further explain, due to the pandemic causing people to be away from loved ones constantly, perpetually being bombarded with news about the death tolls caused by the COVID-19 virus, and being forced to be locked inside their houses for an extended period took a toll on everyone's mental state. This might mean that mental well-being seemed to be at an all-time low for the world. Therefore, this research should be replicated post pandemic with a measure of mental well-being in order to determine if negative mental states contributed to the current results. Negative moods prompt activation of irrelevant and ruminative thoughts (Nolen-Hoeksema et al., 2008), thus depleting working memory resources (Brose et al., 2012). In support of the memory deficit, there is evidence that individuals have different with memory (Beck, 1974; Russell & Beekhuis, 1976). These findings suggest that a negative mood might have a detrimental impact on cognitive resources and thus, negative performance on cognitive tasks. If participants are already functioning at a lower cognitive level (i.e., Floor Effect), then manipulations to reduce their cognitive effect in performance may not have any effect.

Another limitation of the study is that we did not include a silence condition as part of the mood induction manipulation. Previous researchers did include a silence condition and compared spatial task performance in the silence condition to various conditions in which they were exposed to music (Nantis & Schellenberg, 1991; Rauscher et al., 1993; Thompson et al., 2001). In these studies, exposure to Mozart music was associated with enhanced spatial task performance compared to silence, especially for those who reported elevated mood and arousal, or for those who preferred the musical conditions. In the current experiment, we compared mood and 2D mental rotation reaction time across three musical conditions. Thus, a lack of a condition void of music could have prevented the detection of dependent measure differences between a music condition and a silence condition. Therefore, future researchers might include a silence condition in addition to the other music conditions in either a between-subject design or a within-subjects design, where the same participants' mental rotation ability is compared before (in silence) and after exposure to music. However, it is important to note that the negative music condition in the current experiment was associated with significant decreases in mood and arousal from baseline to post-music exposure, but did not result in slower 2D mental rotation reaction time compared to the Mozart music conditions. Thus, it is unlikely that the addition of a silence condition would have changed the conclusions draw from the current experiment—that mood induction had no effect on 2D mental rotation reaction time.

Our results possibly indicate that by having the Mozart sonata in Lo-Fi form, the non-lyrical, slower, Lo-fi could be an on par music option with the Mozart Sonata itself. Thus, instead of producing a Mozart Effect, we could have produced a Lo-Fi Effect that made our participants mood/arousal approach significance. With Lo-Fi being a study music option alongside to classical music (Flores, 2021), more studies could include different Lo-fi beats to test the theory against our Mozart Lo-fi beat. Additionally, our current study could be replicated with the replacement of our 2D Mental Rotation Task with a different spatial task, such as the Paper Folding and Cutting Task. It is possible for different conditions to be set up where participantsare split up the same way in

the music induction phase, and then one receives the 2D Mental Rotation Task, and the other receives the Paper Folding and Cutting Task, making six total conditions instead of three.

Furthermore, future studies could implement different variations of auditory stimuli to test how they compare to the Mozart sonata and the Lo-Fi Mozart sonata in both mood and arousal levels. Some notable examples of classical music to test against Mozart's *Sonata for Two Piano's in D major*, K. 448, K. 488 would be Vivaldi's *The Four Seasons* "Summer," or Tchaikovsky's *Spanish Dance from Swan Lake* Op. 20: Act III, No. 21, due to both examples being upbeat and melodic like the Mozart sonata. These works can be used against the Mozart sonata due to the notion that more fast paced music has been shown to enlarge arousal levels, which in turn can heighten one's mood (Krumhansl, 1997; Van der Zwaag et al., 2011). Likewise, other Lo-Fi beats can be used to test if they influence arousal and mood equivalent or are superior to the Lo-Fi Mozart sonata.

Future researchers might also aim to replicate this study by using other cognitive tasks as the dependent measure instead of mental rotation. To take past research into account, Goodmon and colleagues (2018) reported that the positive mood induced by the Mozart sonata increases more effective rehearsal strategies for a study list. Thus, it may be interesting to use memory as a dependent measure as a replication and extension of the current research study, where a lo-fi version of the Mozart sonata is implemented as part of the design of the study. Perhaps the use of a Lo-fi version of Mozart also promotes the use of effective rehearsal strategies in memory. Given the link between positive moods and memory benefits (Riediger et al., 2011; Storbek and Watson, 2014), one could predict that the Lo-fi Mozart would induce more positive moods, better studying strategies, and enhanced memory.

Conclusion

Mozart music in its original form or Lo-fi form may enhance mood and arousal, but not 2D mental rotation ability. The results imply that the Mozart effect or Lo-fi Mozart Effect may not generalize to other spatial tasks that involve 2D mental rotation. However, it is unclear from the present results whether the melody or rhythmic pattern causes enhanced performance of other spatial tasks found in previous studies (e.g., the Paper Folding and Cutting Task).

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Figure 1. Example of stimuli in the 2D mental rotation experiment.

Figure 2. Schematic of the procedure.

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┌─────────────────────────────┐
│      Baseline Test of Mood   │
└─────────────────────────────┘
              │
              ▼
┌─────────────────────────────┐
│    Random Assignment to      │
│      10 mins of Music        │
└─────────────────────────────┘
       │        │        │
       ▼        ▼        ▼
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| Positive Music (Original Mozart Sonata) | Negative Music (Albinoni Adagio) | Modified Positive Music (Lo-Fi Mozart Sonata) |

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                    │
                    ▼
          ┌───────────────────┐
          │  Post Test of Mood │
          └───────────────────┘
                    │
                    ▼
          ┌───────────────────┐
          │ Mental Rotation Task│
          └───────────────────┘
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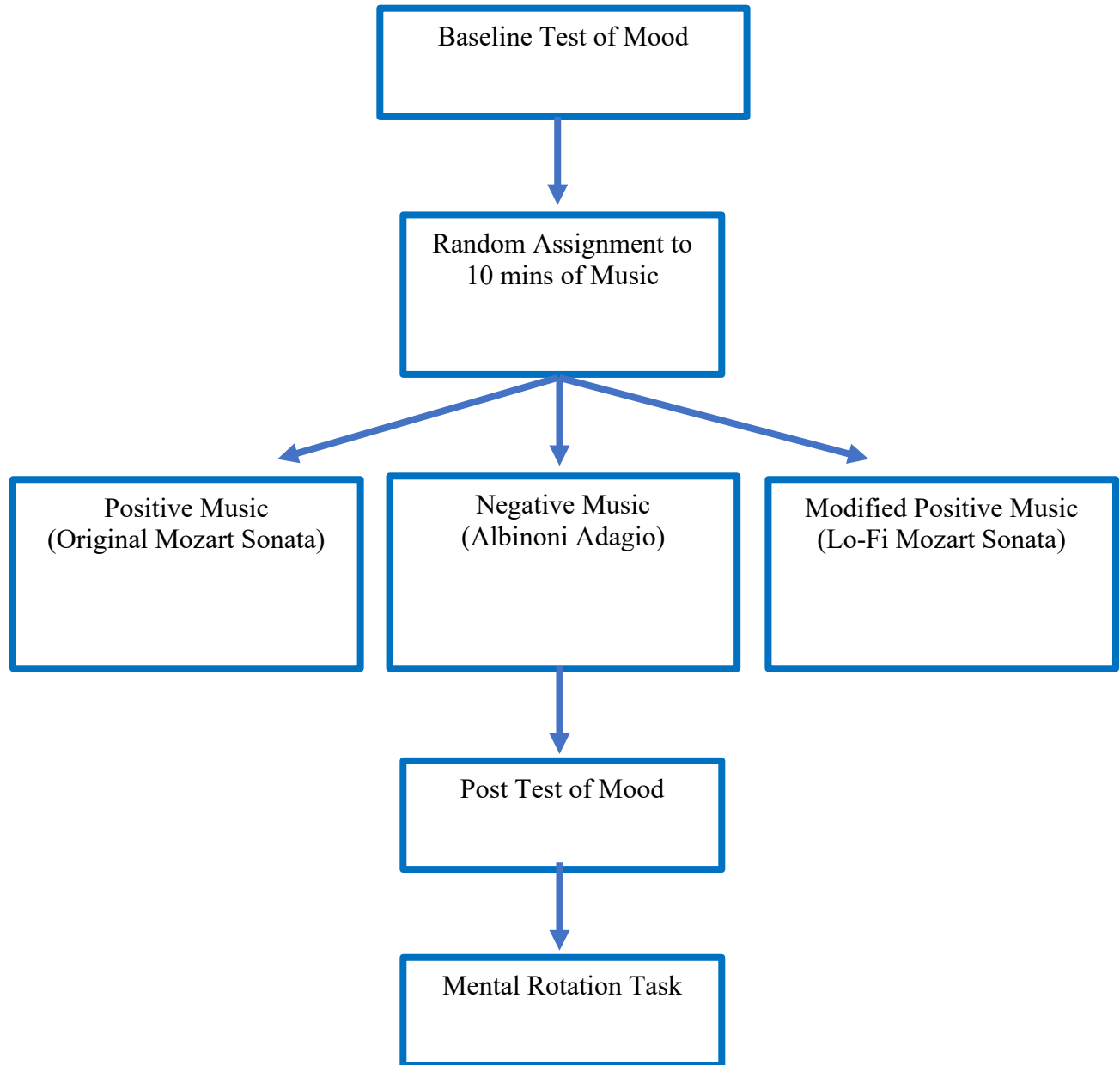
Figure 3. Change in Mood from Baseline to Post Music Exposure
as a Function of Music Condition

	Positive Music Condition (Original Mozart Sonata)	Negative Music Condition (Albinoni Adagio)	Modified Positive Music Condition (Lo-Fi Mozart Sonata)
Series1	0.28	-0.74	0.20

Change in Mood (y-axis): 0.40, 0.20, 0.00, -0.20, -0.40, -0.60, -0.80, -1.00
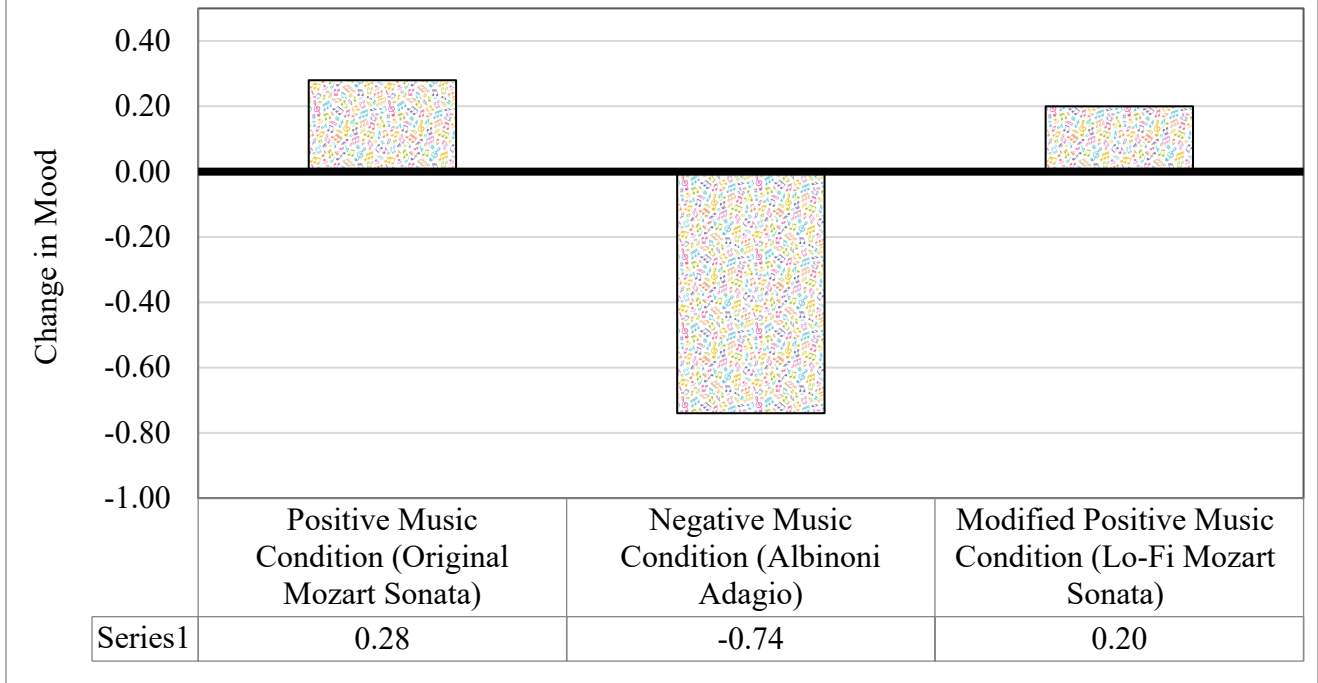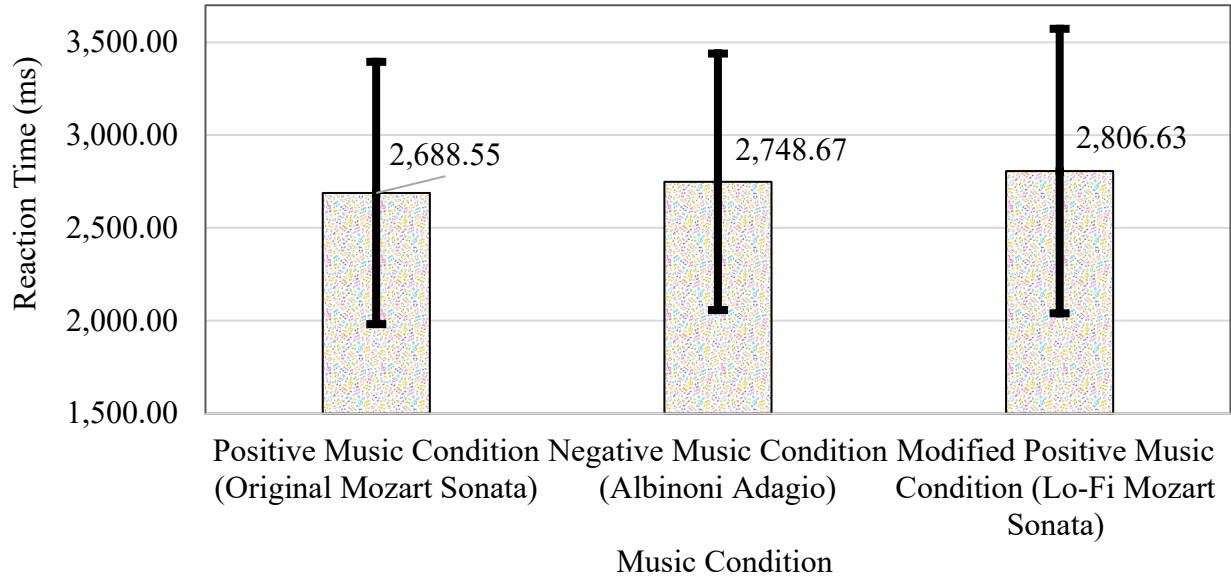
Figure 4. 2D Mental Rotation Reaction Time (*ms*) as a Function of Music Condition

"He's a Witch!": Foster's Magical Emasculation of the Libertine in *The Coquette*

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Introduction

Published in 1797, Hannah Webster Foster's *The Coquette* quickly became popular during the aftermath of the American Revolution.[1] Foster's seduction novel engaged the populous in social and political thinking without requiring public discussion, as tensions were still high from the recent rebellion (Larkin 131). Foster boldly contributed to civil discourses surrounding the evolving relational mores resulting from a fragmented culture. Not surprisingly, much of the scholarship on Foster's novel focuses on the coquette's image and its relation to the nation's post-Revolution instability. Thus, this essay will shift perspective and explore Major Peter Sanford's character, the novel's antagonist.

Considering prior readings and noticing a gap in the literature, I suggest Foster depicts Sanford with qualities that echo the outsider role of witches in Early America to critique his libertine image.[2] Foster not only emasculates Sanford, but also highlights the libertine's fallibility in the new republic and the rake's danger to colonial society, especially in an age of fragmentation and instability. To contextualize my argument, I present both a short narrative summary of *The Coquette* and scholarship related to Sanford's character which emphasizes his libertinism and masculinity. Having situated my thesis within prior scholarship, I explore the three modes in which Foster presents Sanford as a feminized male witch: 1) as a deceiver, 2) as an outcast, and 3) as a weakened individual, attributes tied with the colonial witch.[3]

Literature Review

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[1] Born on September 10th, 1758, in Salisbury, Massachusetts, Hannah Webster Foster married Rev. John Foster in April 1785. Despite bearing five children between 1789 and 1796 and being a minister's wife, she found time for literary pursuits and published, *The Coquette; Or, the History of Eliza Wharton*, under the pen name of "A Lady of Massachusetts" (Mulford xli).

[2] The Oxford English Dictionary (*OED*) defines the libertine as "a person (typically a man) who is not restrained by morality, esp. with regard to sexual relations; a person of dissolute or promiscuous habits."

[3] Because Sanford is a male character, I have opted to use the term "male witch." Lara Apps and Andrew Gow's book, *Male Witches in Early Modern Europe*, offers valuable insight to the cultural perception of the male witch during the early modern period. Commenting on Jean Bodin's *De la démonomanie des sorciers* (On the Demon-Mania of Witches), Apps and Gow note how Bodin starts his first chapter by defining the witch using the masculine singular. The witch was first conceptualized linguistically as male and not female, suggesting witchcraft was at least initially associated with masculinity until a feminine shift occurred (106). They critique witchcraft scholarship, claiming many have argued witch-hunting was essentially woman-hunting despite the fact many executed for witchcraft were men (2). Their scholarship of the early modern witch argues that male witches not only existed, but endured persecutions and "were implicitly feminized" (7). Apps and Gow's scholarship informs and supports the view that Foster emasculates the libertine through the image of a male witch, as male witches were also feminized during an earlier cultural period.

Foster's *The Coquette,* known for its stylistic epistolary form, follows Eliza Wharton's journey as she navigates relationships, family drama, and self-discovery.[4] The narrative opens with the death of Eliza's betrothed, Mr. Haly, to whom she was given in marriage. Not particularly distraught after Haly's death, Eliza enjoys the company of her friends Lucy Freeman and Julia Granby rather than pursuing another marriage. During this time, two courters approach Eliza: Rev. Boyer and Major Peter Sanford. Her friends encourage Eliza to take Boyer's marriage offer but Eliza refuses, preferring rather to follow the coquettish sexual lifestyle; thus, she falls for Sanford's libertine charms and begins an affair with him.

Boyer, grown impatient with Eliza, marries another woman and Sanford, suffering financial trouble, forgoes Eliza and marries a wealthy woman to compensate for his debts. After Boyer's marriage, Eliza expresses desire for him and is met with depression at the revelation of Boyer's new marital status. Sanford, now a married man, notes Eliza's vulnerability, and begins another affair with her, ultimately leading to a pregnancy, resulting in a stillborn child and Eliza's death. Eliza's family and friends bemoan her passing, including Sanford as he recognizes his deception and fault. The narrative concludes with an inscription upon Eliza's gravestone acknowledging her as "endowed with superior acquirements…humility and benevolence" (242).

While much of the scholarship on Foster's piece focuses on the coquette's image, this essay explores Foster's unique crafting of Major Peter Sanford. While many scholars acknowledge Sanford's obvious libertinism (Korobkin 91; Fabi 19), David Waldstreicher notes Sanford's powerful manipulation of Eliza, silencing her over the course of the narrative (212, 214). Mari Fabi similarly notes Sanford's control, undermining Eliza's "narrative authority" (8). Both scholars' views demonstrate power afforded to the libertine within Foster's piece.

Walter P. Wenska specifically argues that Sanford, like Eliza, is "strong-willed," seeking "self-determination" (249). For Wenska, Sanford's power display demonstrates his pursuit of freedom. However, Wenska argues Sanford is defeated in his quest for liberty, highlighting societal limits in the new American republic (250). As will be discussed, Sanford's libertinism falls out of fashion in the late eighteenth century. Wenska's reading informs my analysis by positioning Sanford as one seeking liberty (freedom to express his libertinism) but is halted by the nation's new societal restrictions. The nation's new social limits allow Foster to emasculate the libertine's fallen image during an age of increased masculine sensibility.

Kristie Hamilton argues Wenska's analysis lacks sufficient acknowledgement of gender in a narrative with a female protagonist and believes Wenska is flawed when reading the novel's climax as the scene where Sanford "admits he is not free to do as he wishes" (137; Wenska 250). Hamilton claims Wenska's reading centers too heavily upon the masculine perspective and through Eliza's coquettish characterization, the "social and psychological profile of a coquette [becomes] an issue of utmost importance" (138). Again, the coquette's image is of particular interest to scholars, and while I appreciate Hamilton's argument against Wenska's masculine

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[4] Foster's novel is based on the historical figure of New England's Elizabeth Whitman (1752–88) and her flirtatious relationship with the poet and political diplomat, Joel Barlow (1754–1812). For more information on Elizabeth Whitman and Joel Barlow's relationship, see Bryan Waterman's article "Whitman's Disappearance and Her 'Disappointment.'"

reading, I believe analysis of the narrative's antagonist give us a better understanding of the libertine's figure in colonial America and Foster's unique social commentary on the rake.[5]

While many scholars have commented on Sanford's libertinism and masculinity, I seek to re-read Sanford's perceived masculinity, considering where Foster introduces effeminate qualities linking him with a feminized male witch.[6] Elizabeth Dill is one of the few scholars recently to note both Sanford's character and magic in Foster's novel. Dill notes Sanford's loss of power, writing, "[he] falls desperately in love with the object of his machinations [Eliza], and he loses everything– the girl, the money–all that he wanted is gone and he is destroyed, exiled from the society that once gave him such power and such pleasure" (106). Dill also acknowledges magical undercurrents in the novel: "references to enchantment, witchcraft, and otherworldly forces explain the terms of embodiment throughout *The Coquette*" (103). Dill notes Danvers and Salem as narrative settings and suggest we take seriously Foster's use of gothic imagery (104). Dill's analysis focuses on society's sociability and societal norms, arguing Foster exemplifies this theme through magic and enchantment. Dill's recognition of Foster's magical influences supplies contextualization as we view Sanford as a male witch.

Sanford, the Deceptive Male Witch

Foster emasculates Sanford by emphasizing his deceptive nature. Witches were thought to use their magical charms to seduce and deceive individuals towards maleficent ends. Such deceptive attributes are clearly outlined in Sanford's character through his use of charms and vexation. In Letter X, Eliza is utterly captivated by Sanford: "His person, his manners, his situation, all combine to *charm my fancy*" (121; emphasis added). Letter XI written by Sanford himself, notes Eliza "had been *vexed*, and I doubted not but Peter Sanford was the occasion" (121; emphasis added). Sanford writes he had "charmed the eye at least, of the amiable Eliza" (122). Foster's readership undoubtedly understood Sanford's charms as being seductive techniques, seeking to attract Eliza's fascination through his physical features and mannerisms. Recognizing the word's superficial connotations, I suggest Foster crafts magical undertones into the text, invoking a maleficent essence around Sanford. A witch can be "bewitchingly attractive or *charming*," and Foster exemplifies these deceptive attributes through Sanford's character (*OED*, 3b; emphasis added).

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[5] Andrew P. Williams' scholarship is used to support my argument of Foster's emasculation of the libertine. Williams' essay "Soft Women and Softer Men" primarily focuses on the Early Modern dramatic conception of the libertine. Williams notes how the libertine received a "social restructuring of masculine identity as the 'former' libertine is reduced to a submasculine status" (109). Throughout the article, Williams asserts the libertine's social reconceptualization can be seen commencing as early as the late seventeenth century, causing a societal upheaval of the libertine's identity during the eighteenth century. Such social critique through literature and drama would have been felt in the new Republic due to the trans-Atlantic nature occurring during the time of Foster's novel. Williams concludes by noting the libertine's loss of power during the late eighteenth century as sensibility became a desired masculine attribute rather than the sexual licentiousness of libertinism. This led libertines to become threatened by the *softer* qualities in sensible men.

[6] It is important to note much of the scholarship on Sanford is dated. The following are the publication years of the scholars listed in the literature review, in order of appearance: Korobkin (2006), Fabi (1990), Waldstreicher (1992), Wenska (1977), and Hamilton (1989).

Sanford vexes Eliza, leaving her distant, lost in her "pensiveness" (121). Such vexation allows Sanford to seduce her deceptively and ruin her more easily. Both Sanford and Eliza are aware of such magical deployment; Eliza acknowledges Sanford has "charmed [her] fancy" and Sanford admits he has "charmed the eye" (121, 122). Foster depicts Sanford as a male witch, using charms and vexation to deceive his victim.[7] Obviously, Sanford is not truly using magical spells against Eliza; rather, Foster illustrates Sanford's witchcraft through subliminal references, utilizing magical diction to accomplish her goal. Not only does Sanford embody the attractiveness associated with witches, but he also figuratively charms Eliza's imagination. Because Sanford is described as using charms against Eliza, he exemplifies the Oxford's definition of a "captivatingly attractive or charming" individual (3b).[8] While not a frontal assault on Sanford's masculinity, Foster begins to connect the libertine with imagery and language associated with the witch, starting her emasculation of Sanford.

In Letter LI, Julia Granby criticizes Sanford, writing, "Though naturally penetrating, he has some how or other, *cast a deceptious mist* over her [Eliza's] imagination" (194; emphasis added). Again, while Foster's readership would have read Julia's words as figurative, magical undertones permeate the sentence. When read as a male witch, Sanford infiltrates Eliza's mind through the casting of dark magic (the deceptious mist). Indeed, he deceives Eliza into not only forgiving him, but also by finding him "a pleasing companion" (194). Sanford masks his true, wicked nature under his outward appearance, or as Williams writes of the libertine, "the graceful command of social intercourse" (97). Teresa Kwiatkowska, writing on the supposed powers of witches, notes how they were thought to have the "harmful power to raise storms [and] conjure mists" (30). Such mist clouds the victim's mind, causing confusion; indeed, Eliza's confusion is exemplified when she can neither "love, nor esteem him," and yet still enjoys Sanford's company (194). Foster works within known witchcraft traditions, portraying Sanford as an effeminate deceiver who charms his victims through witchlike actions.[9]

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[7] Scholarship has noted how spirits were thought to vex places of worship. Paul H. Kocher, writing on witchcraft in Christopher Marlowe's *Faustus* specifically cites Bodin and Nyder, noting these authors' thoughts on the influence of maleficent forces and belief that "evil spirits vex the monasteries" (28). Kocher notes Marlowe's portrayal of Faustus as a witch and the ways Faustus "'vexed at his spirit's so long tarrying, used his charms, with full purpose not to depart before he had his intent'" (9, 24). Thus, masculine characters could be posited as witches who use charms to incite their purposes. Kocher's scholarship, while oriented around an early modern English playwright, supports the stance that men could be presented as witches. Additionally, vexation was used in connection with male witchcraft, further supporting the view of Sanford as a male witch as he vexes Eliza.

[8] Interestingly, the first time the word *witch* was used in connection with attractiveness or charms was in Samuel Richardson's *Pamela* (*OED*, 3b). Richardson writes, "He [Mr. B.] then took me [Pamela] in his Armes, and presently push'd me from him. Mrs. Jervis, said he, take the little *Witch* from me; I can neither bear, nor forebear her!" (57; emphasis added). Richardson is credited as one of, if not the most, influential figures in "the sentimental story of seduction… [and the formation of] epistolary heroines" (Tawil 265). Foster, writing within this genre, was influenced by works such as *Pamela*. Indeed, she explicitly cites Richardson's *Clarissa* in Letter XIX (134)*.* It is entirely possible that Foster recognized the word's new usage and sought to employ it inversely, seeking to emasculate the libertine and highlight his fallibility in the new nation.

[9] Shelagh Roxburgh notes the struggle of truly understanding conceptions of the witch "because witchcraft power is inherently deceptive" (1029). She acknowledges the witch's image is evil and corrupt, but because witchcraft is in and of itself deceptive, having an academic grasp of the witch is troublesome. While scholars like Roxburgh note difficulties in studying witchcraft, clearly deception is a crucial aspect associated with the witch, sharing similarities

Foster continues to illustrate Sanford as deceptive when Reverend Boyer writes that Sanford "is a deceiver. Trust not his professions" (171). Sanford's words cannot be trusted, relying solely upon his appearance to entice Eliza into his trap. Deception was a crucial, yet critical, aspect of libertinism. While deceitfulness was necessary to procure multiple sexual partners, such trickery could not stand within matrimony. The libertine staunchly opposed marriage while the Republic held it in high respect, contributing to the natural order of society. Williams notes how resistance to marriage allowed "the unrepentant libertine…to more freely remain true to his conception of masculine selfhood" (113). If masculinity is changing towards a more ordered, controlled man, the libertine becomes that which he so feared: the effeminate male. Deception, a trait associated with libertinism (and witchcraft), is now a feminized characteristic which Foster weaves into Sanford's gendered conception.

In Letter LIII, Eliza is explicitly aware of Sanford's deceptive magic, writing, "he might still have *deceived* me; but now *I defy his arts*!" (195; emphasis added). Sanford previously used his maleficent charms on Eliza, deceiving her fancy. Now Eliza is self-aware, defensive against such ploys. Dill writes of these magical deployments as "ultimately overpowering, and they do their work upon her [Eliza]," demonstrating how strong Sanford's deception truly is (105). He tricks Eliza into thinking he "lives in all the magnificence of a prince;" indeed, Eliza writes, "his situation in life *charms* my imagination" (173–74; emphasis added). Again, Sanford is depicted as one who uses witchcraft to seduce and deceive a victim.[10]

Witchcraft did not die away from colonial social consciousness despite the eighteenth century's push towards rationality.[11] Thus, Foster uses known witchcraft history and custom in her depiction of Sanford, portraying his libertinage through a highly magical lens and ascribing his seduction and deception to the dark arts of feminine witchcraft. Because Sanford is an unrepentant rake, Foster's feminine characterization is precisely what the eighteenth-century libertine feared: effeminacy. Indeed, Williams notes how it was commonplace for the libertine to expose femininity in men who did not exemplify the *true* libertine. As such, the seventeenth-century libertine would highlight such feminine attributes in other men "to display his hegemonic status as a man of power," asserting his authority in the public sphere (107). However, because the "philosophical libertine" gained popularity and prominence in the eighteenth century, the deceptive rake was left with no defense against the feminine during the new century (115).

The libertine was between a rock and a hard place: either accept masculinity's shifting societal conception and its *soft* connotations or become a societal outcast. Foster demonstrates the

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with Sanford and the libertine. For further discussion on Roxburgh's efforts to define and conceptualize witchcraft, see her article "Through the Scrying Glass: Defining Witchcraft in Academic Study."

[10] E.J. Kent, commenting on the male witch in Old and New England writes, "men were also persecuted for…using witchcraft to deceive, and on rare occasion, [using] love magic" (71). Sanford, Foster's figurative male witch, is using deception to seduce Eliza, exemplifying a polluted ideal of love, much how male witches were conceptualized in the early colonies.

[11] According to Isaac Reed, even as witchcraft trials came to an end, the witch's survival continued into the eighteenth century through private belief and practice (230). Eighteenth-century colonists did not employ witch hunts as extensively as their predecessors; however, such trials and witchcraft narratives surely permeated the colonial social consciousness.

rake's unwillingness to conform to sensibility, desiring rather to continue in his sexual promiscuity. In satirizing the libertine, Foster ascribes malicious attributes commonly associated with the feminine witch to Sanford. Thus, Sanford does not become softer as Williams suggests men did in the eighteenth century, but rather villainized further through a magical, feminine lens, adding insult to injury. Not only is Sanford extremely unpopular with many characters, but he is also feminized through his charmingly deceptive attributes as his social notoriety is tarnished and diminished. Foster's subliminal projection of Sanford as a male witch serves not only to illustrate the libertine's manipulation of Eliza, but also demonstrates Sanford's societal exile.[12]

Sanford, the Outcasted Male Witch

As noted by Dill, Foster's mention of Salem offers a more gothic reading of the novel, invoking a "darkly gendered history of colonial America" and the affliction women felt in the public sphere (104). According to Dill, Salem's narrative inclusion suggests Foster's social critique "of the public shaming and shunning" women experienced who were "subject to the moral magic of the public social sphere" (104). I seek to extend Dill's assertion to encompass Sanford, the figurative male witch, as a character who experiences public shame and rejection due to his libertinism and feminized depiction.[13] Foster's rhetoric mimics that used against witches and serves to illustrate Sanford's sense of isolation and fear of banishment as a libertine, similar to how witches were treated in colonial America.

Lucy Freeman, in Letter XXXI, boldly expresses her thoughts on libertines, claiming they have

> pernicious effect[s] on society… [and] when detected, are rigidly punished by the
> laws of the land. If their lives be spared, they are *shunned by society*, and treated
> with every *mark of disapprobation* and contempt. (154; emphasis added)

Sanford, as described by Lucy, is the male witch who commits malefic acts of libertinism and seduction; such behavior causes him to be shunned by society, similar to how female witches were alienated in the seventeenth-century colonies. Foster's use of the word *mark* in Lucy's letter is also telling. As S.W. McDonald writes,

> [the] search for the Devil's or witch's marks formed an important part of the
> examination of suspected witches in the seventeenth century…[and] witches were
> believed to be given the marks by the Devil. (507)

Females suspected of witchcraft were targeted because of their supposed affiliation with the Devil. Witches in the seventeenth century were provided a "trial" where three pieces of evidence were

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[12] Waldstreicher and Fabi's reading of Sanford's manipulation and silencing of Eliza feeds into my thesis; Sanford, the figurative male witch takes autonomy away from Eliza, the individual he wishes to deceive and ruin. In many ways, the mission of the libertine and witch are similar. Foster picks up on these similarities in a nuanced manner, allowing for a deeper appreciation of her writing and unique social critique of a masculine image which fell out of fashion in her Revolutionary era. Additionally, while scholars have noted Sanford's social exile (including most recently Dill), the way his exile relates to witchcraft banishment has yet to be explored.

[13] Witches, noted by Mary Beth Norton, were "accused of malefic acts that often violated community norms, thus singling themselves out for negative attention" (6). Sanford, Foster's male witch, is singled out by Lucy for his malefic acts (his libertine seduction techniques).

needed to sentence a witch to execution: confession, witchmarks, or testimonies from community members, with the first two providing cause for execution (Drake 710). Foster's passage ascribes two means of guilt to Sanford: 1) a community member's testimony against his amoral behavior and 2) his mark of disapprobation.

While Foster's use of the word *mark* may be seen as stylistic and merely a convention used to communicate Sanford's amoral libertinage, if viewed as a male witch, Sanford is metaphorically and socially set apart, given the witch's mark, shunning him from society. Sanford, attempting to assert his masculinity via conventions associated with libertinism, is emasculated by Lucy through her assertion of his malefic acts and witchmark. Sanford, the unrepentant libertine, tries to assert his social identity through "the public recognition of his rapacious sexual appetite" (Williams 97). Lucy unmans his attempt, socially exiling him, implicitly characterizing Sanford as a feminized male witch and not the masculine libertine he so desperately attempts to be. Ironically, Sanford is emasculated through the very act he commits to assert his masculinity.

Sanford is acutely aware and scared of banishment; Eliza receives a letter from Sanford in which he writes, "Have you condemned me to perpetual banishment, without a hearing?" (177). Sanford has already been accused by Eliza's friends of malefic acts (his libertinism) and holding the "mark of disapprobation" (154). Sanford faces the same threat of banishment colonial witches faced, who were often exiled without due process. He is fully aware, evident from his plea to Eliza, that his attempts of sexual conquest have estranged him from the community, just as witches were outcasted from their societies without hearings.

In Letter LXXII Sanford writes that he will "*fly* from [his] country as soon as possible" and that he is "shunned as the pest and bane of social enjoyment" (238–39; emphasis added). Foster illustrates the libertine experiencing social banishment due to his sexual nature as Sanford seeks to *fly away* from his community magically because he is seen as a "pest." Witches were thought to have the ability to fly using their dark magical powers, a stereotypical myth used to associate women with witchcraft.[14] While flying may have been commonly linked with witches, insects too were associated with witchcraft.[15] Foster subtly associates the sexually promiscuous libertine with witchcraft through his association with flying and pests.

Further, Foster implies that Sanford, unless banished, will poison society, becoming the "bane of social enjoyment" (239). Bane is poison and witches were thought to "cook poisonous potions" causing illness for the innocent (*OED*, 1; Zwissler 7). Foster characterizes Sanford as a

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[14] Witches were believed to use "flying ointment" which gave them the power of flight. These flying ointments were thought to have been used as far back as the fifteenth century during the sabbath, (a gathering where witches would perform worship rites to the Devil). According to Thomas R. Forbes, "it was customary first for the devotee to smear *his* or her unclothed body with an unguent, the famous 'witch's ointment' or 'flying ointment'" (267–68; emphasis added). Not only were men part of the devilish rites, but the ointment called for dead infants' fat, a crucial ingredient to cause supposedly hallucinogenic effects. Ironically, Sanford, the text's figurative male witch, causes death not only to Eliza, but also the child he produces with her. Sanford's illegitimate child is stillborn, further connecting him with witchcraft conventions. For further discussion on the "flying ointment," or the connection between flying and witches, see Forbes' article, "Midwifery and Witchcraft."

[15] Harry B. Weiss notes the connection between insects and witches. According to Weiss, witches worked through insects to carry out "nefarious plans" (127). For further discussion on the connection between witches and insects, see Weiss' article "Insects and Witchcraft."

male witch in four different ways, all within one letter: 1) Sanford is isolated from the community due to his evil associations with libertinism, 2) causing him to fly from society, because 3) he is a pest, and 4) the literal poison to society. Foster makes the audience question if Eliza would have died if there was no association with Sanford. Sanford infects Eliza with his baneful sperm, resulting in two deaths: Eliza, dead from childbirth, and Eliza's child, who was stillborn. Sanford, the male witch, causes death to those around him.

Sanford is the bane to colonial America, threatening to destroy the new order of society through his evil sexual nature, just as colonists feared the witch's influence on society a century before. Because Foster casts Sanford as a figurative male witch, Lucy calls for his banishment while Sanford demonstrates an acute fear of exile. The libertine and witch were both symbols which could not be tolerated in societies seeking to organize around natural order. Both figures symbolized harmful societal effects, much in part due to their perceived weakened character. This brings us to the final aspect connoting Sanford as a male witch in *The Coquette*–Sanford's weakness.

Sanford, the Weak Male Witch
Both the witch and libertine threatened the established order; the witch led to "social disharmony," and the libertine held the "reputation for leading otherwise virtuous women into vice," threatening the established order of matrimony in the new Republic (Davies and de Blécourt 4; Finch 16). Foster amplifies and connects the libertine's societal threat with ideals held against the witch during colonial times. To take patriarchal power away from the professed libertine, Foster links Sanford to the *weak-minded* witch through his associations with witchcraft. Apps & Gow note how witches were thought of as weak-minded because they made deals with the Devil and became his servants. While both men and women could be witches (and thus weak-minded), intellectual weakness was "a particularly feminine failing," leading to witchcraft becoming feminized (132).

Nowhere in the novel is Sanford perspicuously referenced as a witch; indeed, the word *witch* is never used in the text.[16] Rather Sanford's "magic arts" and "ensnaring endowments" are ascribed to his character (149–50). However, Sanford's emasculation is acutely noted. In perhaps the most explicit point of feminization in the novel, Sanford likens himself to a woman: "Why, I was as much a woman as the very weakest of the sex!" (205). Sanford equates himself to the *weak* woman who is driven by lust: "I cannot control my passions" (206). Sanford's admission of weakness is an example of the subtle frailty crafted around the rake through his witchcraft associations. Sanford is of the opinion that ruined women are "willed by their own flesh," exemplifying their weakened mentality (Dill 117). Witches were regarded as inherently weak-minded, and because Sanford classifies himself as such, correlates stand between Sanford's self-admission of weakness and the figurative witchcraft subtext Foster has molded around the libertine.

Sanford follows libertinism's custom through his "self-directed quest for sexual pleasure and power," actions symbolizing much of the libertine's conception of masculinity (Williams 97).

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[16] Foster does employ *bewitching* twice in her novel (112, 151), but Sanford is never overtly identified as a witch.

Sanford's quest to dominate Eliza demonstrates his attempt to assert himself in the new Republic, only to experience the social limits Wenska highlights. Expanding on Wenska's claim, some of those social limitations include sexual promiscuity. Lustful weakness, to which Sanford ascribes as a feminine trait, is exactly from what he admits to suffering. Further, Apps and Gow note how witches were thought to have carnal lust, which was associated with witchcraft, and thus, weakness (132).[17] Sanford's connection with witchcraft furthers Foster's emasculation by way of Sanford's inability to control his sexual passions, reinforcing Foster's goal of depriving social power from the libertine.

While it seems counterintuitive for Foster to promote a stereotypical feminine weakness in her text, she is in fact using a misogynistic conceptualization against misogyny itself. Rather than feeding into the image of the weak-minded witch through a female character, Foster projects such viewpoints onto the libertine, demonstrating libertinism's weakness. Because the libertine is guided by lust rather than reason, he is lacking "in intellectual cultivation" (Fabi 13). The mind cannot be truly strong if guided by the weakness of the flesh. Because Sanford, the male witch, is motivated by sexual pleasures, he is inherently a weak, feminized male. Foster's implicit connotative reversal of the word *witch* highlights her overall goal of feminizing the conventional seventeenth-century masculine libertine image, adding to the critical discourse surrounding the libertine in eighteenth-century America. Much how Lucy Freeman unmans Sanford by suggesting his banishment, so too does Foster unman the libertine by highlighting his intellectual weakness, continually striking similarities between the rake and the witch. Thus, Sanford loses societal power as his image is posited as a weakened male witch.

Conclusion

This essay explored Major Peter Sanford's characterization as a male witch. Foster, acutely aware of the libertine's negative societal image, uniquely brought into conversation her own critique of the rake through her subtext, associating Sanford with dark magical witchcraft. Cleverly subverting gender roles, Foster uses witchcraft's conventional weakened image to feminize a masculine figure that has since been left to the outskirts of society. Foster magically emasculates the rake by presenting Sanford as 1) a deceiver, 2) an outcast, and 3) a weakened individual, exemplifying the libertine's loss of societal power in an age where men's sensibility came to be regarded with higher esteem.

Because the witch was viewed as a threat to organized society, witchcraft was thought to negatively influence the Republic. Similarly, Foster's presentation of Sanford as a figurative male witch highlights the rake's threat to the Republic's natural order. Foster's rhetorical choice to liken

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[17] Apps and Gow quote clergymen Henricus Institoris and Jacobus Sprenger's 1496 treatise on witches *Mallenus maleficarum* (*Hammer of Witches*), in which the fifteenth century theologians wrote "all witchcraft comes from carnal lust, which is in women insatiable" (132). Because carnal lust was associated with witchcraft and witchcraft had a feminine connotation, lust was seen as a feminine weakness. In the same fashion, Foster presents Sanford, albeit in a much more subtle manner, as one associated with witchcraft; his inability to control his desires, or "carnal lusts" posits him in a feminine light. According to Institoris and Sprenger, carnal lusts were not only a feminine failing, but the result of witchcraft. Sanford's lustful desires figuratively stem from witchcraft, adding to Foster's projection of the libertine as a male witch, and ultimately, effeminate.

Sanford to a feminized male witch has a twofold result: 1) she emasculates a seventeenth-century masculine image to stay in touch with late eighteenth-century discourses surrounding the feminization of the libertine, and 2) through Sanford's emasculation, declares the libertine's threat to the new Republic. The rake, like the witch, has no underlying morals commonly linked with the honest Republican virtues, corrupting those morals which the new Republic sought to instill. Sanford's masculine image is critiqued through the image of a male witch to highlight his fallibility and threat in the new Republic during an age when masculinity had altered.

In her own literary fashion, Foster demonstrates Sanford as "a man of reduced gender identification," staying in conversation with changing ideals of masculinity (Williams 115). Foster's effeminate rake exemplifies unchecked patriarchal evils through sexual domination by the deceptive libertine. For the new Republic to blossom, the wicked rake must die away, leaving room for the new sensitive men to dominate the eighteenth century. The *softer man* in eighteenth-century America was now the true version of manhood during a transitionary time when the Republic lacked stability. Post-Revolutionary culture attempted to provide order by reinforcing sensibility and reason in its citizens, requiring men to act more traditionally in their relations. Sensibility and reason came to be associated with masculinity, rather than sexual licentiousness.[18] Foster, publishing at the end of the eighteenth century, saw these ideals manifested in society. The feminization of the libertine is not unique to Foster; rather, her presentation of such emasculation of the rake through witchcraft terms is what makes Foster's Major Peter Sanford distinctive.

Foster's post-revolutionary American culture lacked a sense of identity and commonality due to its split from Great Britain. And while it may seem like we are worlds away from late eighteenth-century America, in many ways, our present culture is not too different from Foster's, with fragmentation and divisive rhetoric invading many facets of our lives. Foster's text demands the audience critically evaluate society and continually observe its effects on natural order. Indeed, Foster questions if "the love of our country [should] be a masculine passion only" (139). Foster suggests equality is needed amongst men and women, maintaining without such balance, a country will flounder. Continued appreciation of past texts and cultures allows us not only to reflect on history, but also critique in ways that allow us to work through present problems, much how Foster strove to do during her colonial era.

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Challenges of Using Body Temperature as a Screening Method for COVID-19

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Introduction

As of December 2022, the COVID-19 pandemic has left behind at least 651,767,108 infections and 6,661,666 deaths. Around 65% of the population has been fully vaccinated worldwide, but only 34% of the population has received a booster (Mathieu et al., 2020). Common symptoms of SARS-CoV-2 infection (COVID-19) include fever, fatigue, and cough (Zhu et al., 2020). According to the Centers for Disease Control and Prevention (CDC), fever is the most common symptom (2022). A study found that fever was present in 88.5% of symptomatic patients (Li et al., 2020). To prevent the spread of COVID-19, screening protocols for SARS-CoV-2 infection based on body temperature have gained colossal popularity (Maguire et al., 2021). To slow down the spread of infectious diseases, effective safety measures need to be implemented to identify patients with active infections.

Skin plays an essential role in human thermal regulation. Heat loss via evaporative cooling (sweating) primarily governs the cooling down mechanism that results when body temperature is too high (Cisneros & Goins, 2009). As one of the primary channels for thermal regulation, the skin also gives off heat to the environment. Hence, it provides a unique opportunity to measure body temperature. A classic device used to measure body temperature is the direct-contact skin thermometer, but technological advancement has allowed the development of accurate distance thermometers, also known as non-contact infrared thermometers (NCITs). These devices use electromagnetic radiation infrared rays (light that is not perceived by the human visual system) to determine the temperature of the skin (Figure 1).

Figure 1
Principles Used by Infrared Thermometers
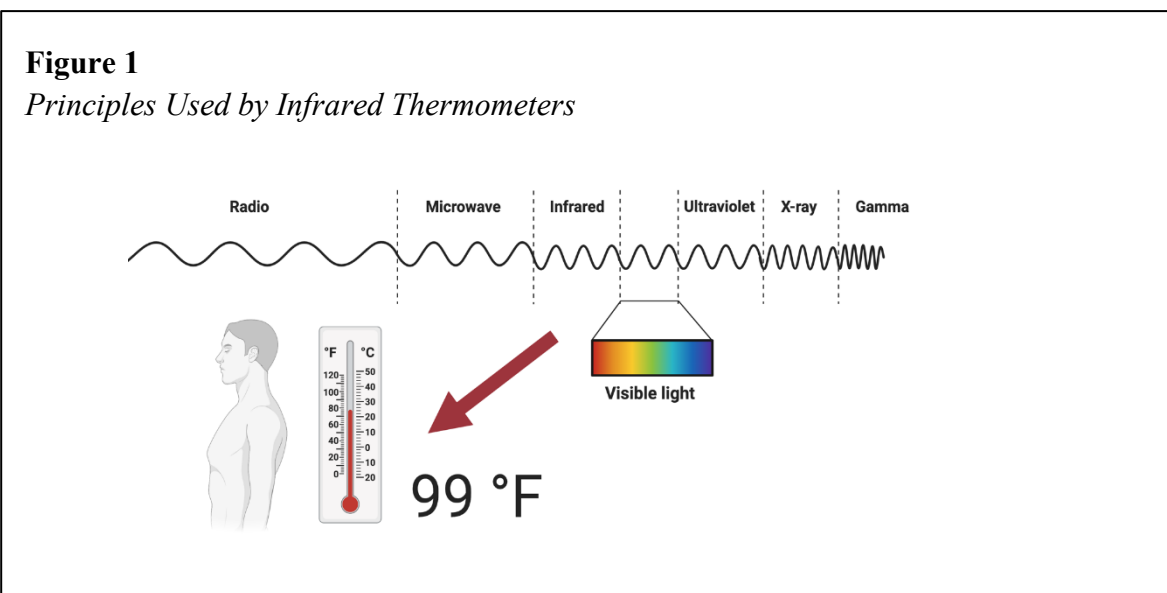
Note: Infrared waves are measured by a thermometer to determine body temperature.

Infrared thermometers have played an essential role in disease prevention and identification in recent years, especially during the COVID-19 pandemic (Maguire et al., 2021). These devices have the potential to detect contagious diseases by measuring forehead temperature, aiding in fever detection and the recognition of pathogenic diseases without the need for direct skin-contact with the patient. This is important as direct contact increases the risk of pathogenic diseases spreading, which present a threat to public health at a worldwide level.

Infrared thermometers have been found to have superior performance compared to traditional thermometers. One advantage is its rapid response (1–3 seconds) and portability (Burnham et al., 2006; Chen, Wang, et al., 2021; Chiappini et al., 2011). Such reasons might help explain why infrared thermometers have been widely endorsed by the public (Aggarwal et al., 2020). Its popularity has led to the development of strict standards for clinical approval from the Food and Drug Administration (FDA).

Nonetheless, using infrared thermometers might pose some unique challenges. For example, a study on COVID-19 infection found that nearly 60% of infected patients had a temperature below 99.1 degrees Fahrenheit (°F) (Chen, Deng, et al., 2020). Other studies have found that detection of COVID-19 using body temperature might not be ideal. One example includes the CDC screening of 268,000 airport travelers using NCITs where only fourteen were found to have an active COVID-19 infection (Schuchat, 2020). Despite these findings, the primary literature on factors negatively affecting the use of body temperature as a screening method for COVID-19 infection is scant.

Weather-related factors such as temperature, relative humidity, and wind velocity have also been found to be significantly correlated with patient body temperature, with effects varying in magnitude depending on the distances from outside to the measurement site (Spindel et al., 2021). For example, high environmental temperatures (above 99.5 °F) readily affect shell (skin) temperature and infrared thermometry measurements (Mei et al., 2021). Another study found that skin temperature was significantly affected by ambient temperature in both hot and cold conditions (Strigo et al., 2000). Thus, while infrared thermometers might be accurate measuring devices, many variables affect core and shell body temperature. For example, studies suggest that sleep, stress, and physical activity might affect resting metabolic rate, and thus have effects on body temperature readings (Davis et al., 2019). Such variability in patient body temperature during SARS-CoV-2 infection makes body temperature measurements not a reliable screening method (Wright & Mackowiak, 2021). Another study found that some brands of infrared thermometers underestimate the temperature of mercury thermometers (Hajela, R., 2020).

This study examined the effects of environmental temperature on body temperature, and how this affects the use of NCITs as screening methods for COVID-19 symptoms. Our hypothesis is related to studying the effects of patients' body temperature on external temperature and COVID-19 prevalence rates.

Methods

Sample – The data sample consisted of adult patients who attended non-urgent healthcare appointments in a medical practice in Jupiter, Florida. Temperature collection was performed by the staff at the medical facility and was then provided for analysis. Patients were pre-screened for COVID-19 symptoms and risk factors by the office staff at the time their appointments were made over the phone. Risk factors included: traveling abroad, being exposed to someone with COVID-19, a recent positive COVID-19 test, and current symptoms related to COVID-19 infection. In addition, all patients were asked for the presence of COVID-19 symptoms immediately prior to recording their temperature at the office. The medical staff provided the temperature values of a total of 3,246 patients. If the patients' temperature were above 99 °F the staff asked them to sit for one minute, then their temperature was retaken. The room temperature in the clinic was kept constant at 75 °F throughout the day for the duration of the study.

Device – Forehead temperatures were collected using an FDA approved infrared thermometer that is marketed for clinical use on adults ("iHealth Wireless," 2022). Measurements have a resolution of 0.1 °F, and a confidence interval of ± 0.4 °F for temperatures between 95–107.6 °F. In addition, the device contained three sensors that simultaneously measure temperature. The device vibrates and beeps once a confident measure has been taken. The thermometer required the use of two 1.5 Volt AAA batteries, which were replaced as indicated by low battery sensors in the device.

Collection period – Temperatures were recorded for a period of 3 seconds (indicated by the beeping of the device) at a distance of 3–5 cm from the forehead skin as recommended by the thermometer's manufacturer and the CDC ("iHealth Wireless," 2022; "Information on COVID-19," 2021). The collection took place three days a week (Monday, Wednesday, and Friday) between October and December 2020 (Figure 2). On days when the collection took place, staff recorded hourly patient body temperatures from 9–12 PM and 1–5 PM. The period of 8–9 AM and 12–1 PM was omitted because of consistently low patient traffic at the clinic during these times.

The total duration of the study was seven weeks (Figure 2). First, the clinical staff collected patients' temperatures under the condition and times previously mentioned for two consecutive weeks. Immediately after, for the following three weeks, the staff continued to collect temperatures as indicated by the clinic, but such values were not recorded nor provided for statistical analyses. For the next two weeks, the staff continued to record the patients' temperatures under the same condition.
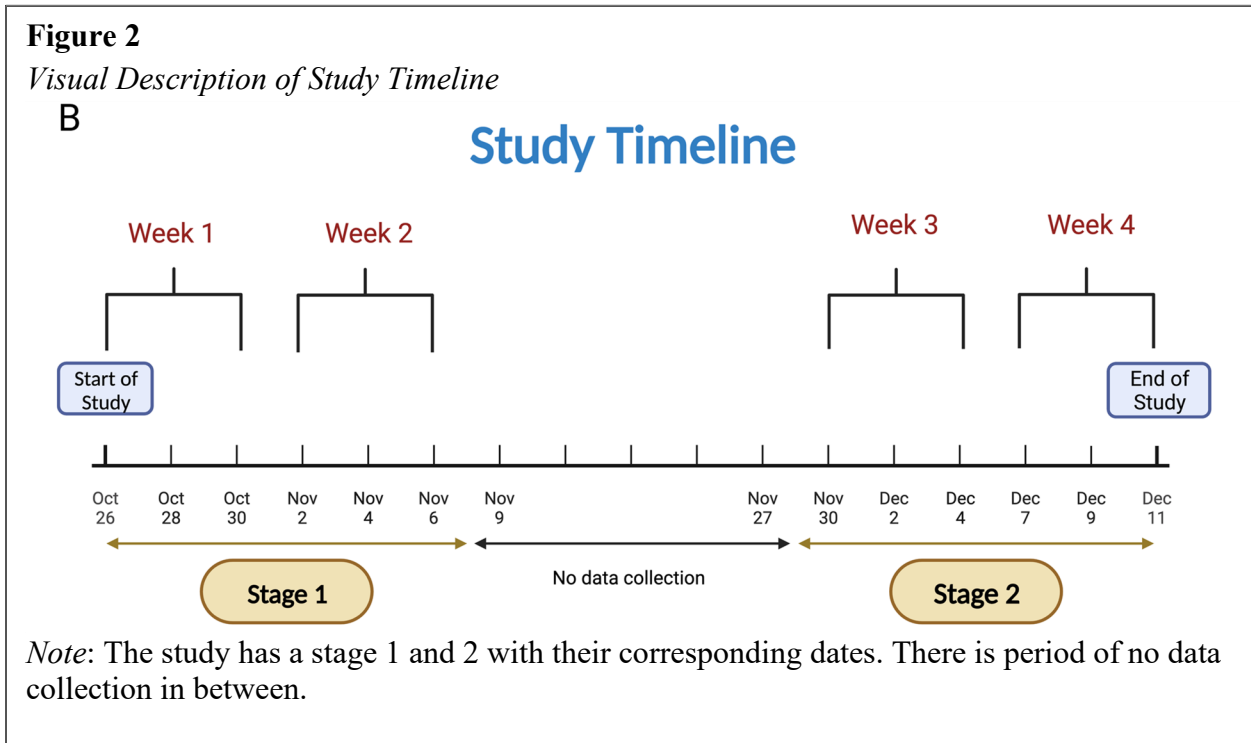
Local COVID-19 Cases

Daily cases of COVID-19 in Palm Beach County, Florida, were recorded from the CDC COVID Data Tracker (2022). Levels of COVID-19 positive infections were measured as the number of new cases reported each day in Palm Beach County. The number of patients that attended the clinic varied by hour and date. Therefore, statistical analyses were performed using the percentage of patients with body temperatures above 99 °F by hour and day. The hourly percentage of patients with high temperature (above 99 °F) was calculated as follows:

$$= \frac{\text{Temperatures Above } 99°\text{F per Hour}}{\text{Total Temperatures Collected per Hour}}$$

The daily percentage of patients with high temperature (above 99 °F) was calculated as follows:

$$= \frac{\text{Number of Temperatures Above } 99°\text{F per Day}}{\text{Total Number of Temperatures Collected per Day}}$$

Figure 2

Visual Description of Study Timeline

Note: The study has a stage 1 and 2 with their corresponding dates. There is period of no data collection in between.

Weather Data

The data collected was specific to the clinic's location in Jupiter, Palm Beach County, Florida, USA. The daily average temperature in Fahrenheit (F) was gathered using an online weather database ("Jupiter November Weather," 2022). In addition, the hourly average environmental temperature in F between 9–12 AM and 1–5 PM was recorded from the same database.

Statistical analyses – The data provided by the facility was categorized into two groups of patients: those with temperatures above 99 °F and those with temperatures equal to or below 99 °F. We used a total of 3,246 patients' temperatures collected over twelve days. All statistical analyses exclusively include the first temperature measurement of each patient. The effects of time and of environmental temperature were analyzed by One-way Analyses of Variance (ANOVA). The relationship between the study's time progression and the average daily environmental temperature was assessed with a Pearson correlation test and simple linear regression. The relationship between the time of the day and both hourly body temperature and hourly percent of body temperatures above 99 °F were assessed with a Pearson correlation and a polynomial quadratic fit. Pearson correlations and Simple Linear Regression tests were performed to compare the relationships between patients' body temperatures and daily cases of COVID-19 with the correlation between

patients' body temperature and daily average environmental temperature. The main effects and interactions between time (weekly) and hour of the day were assessed with a two-way ANOVA. This test was used because the data by time of the day was repeatedly recorded. Lastly, a comparison was completed on the differences between the number of patients in weeks one and two versus weeks three and four for the following variables: number of patients entering the building, patient body temperatures, environmental temperatures, and new cases of COVID-19. Comparisons were conducted via one-tailed t-tests. These analyses were conducted because of the time differences between these two sets of measurements. A p-value of < .05 was considered statistically significant. All analyses were conducted with GraphPad Prism 9.4 Software.

Results

Patient Body Temperature & Environment Temperature – Changes in the percentage of patients that presented with body temperatures above 99 °F were analyzed and the trends in environmental temperature in Jupiter, Florida, throughout the study. The effect of time on patient body temperature was statistically significant, F (2.11, 16.26) = 6.54, p = .005 (Figure 3A), consistent with the decrease in environmental temperature over time. The date and the average daily environmental temperature are strongly correlated, r (10) = -.80, p < .01 (Figure 3B). Moreover, a simple linear regression model suggested that the date of data collection predicted the environment average temperature, R^2 = 0.64, F (1, 10) = 18.37, p = .002 (Figure 3B).
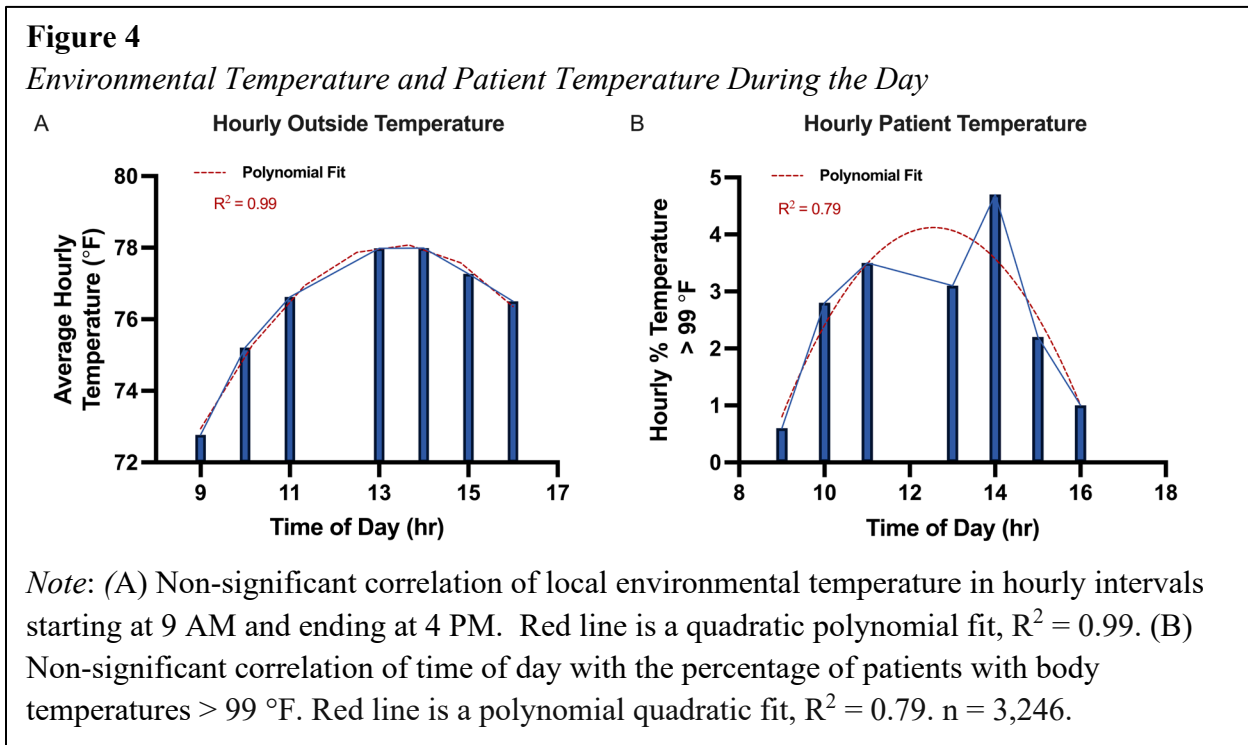
Figure 3

Trends in Patients' Temperature and Environmental Temperature as the Study Progressed
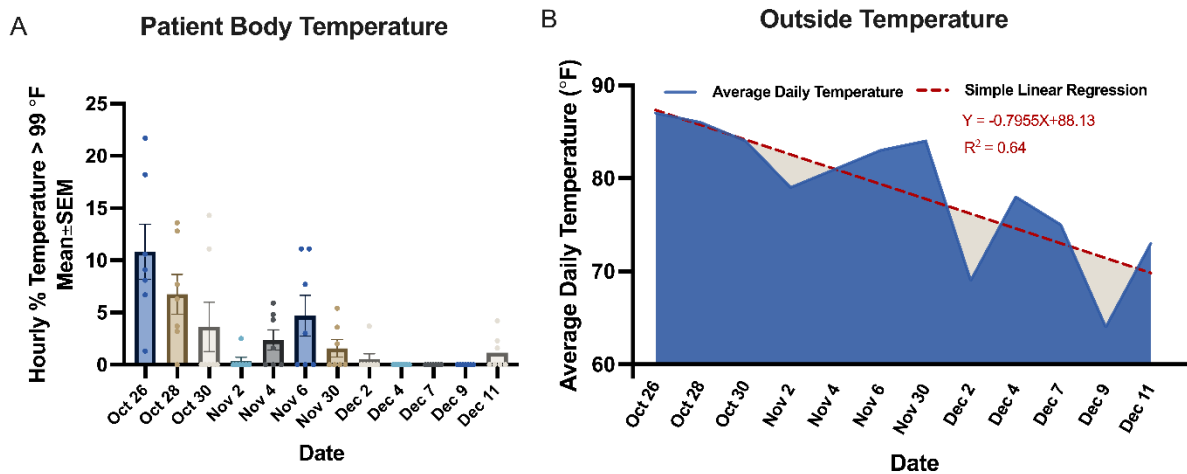
Note: *(A)* Hourly frequency of patients' temperature > 99 °F at daily intervals, ** p < .01. Average temperature change outside the clinic from start (Oct 26, 2020) to end of study (Dec 11, 2020). Error bars show standard error mean (SEM). (B) Correlation between date and average daily environmental temperature as the study progresses, ** p < .01. Red line shows a linear regression modeling of temperature outside the clinic decreasing as study progresses, R^2 = 0.64, p < .005.

Differences by Time of the Day – Next, an analysis of different metrics throughout the day was conducted. A Pearson correlation was not significant between the time of the day and the environmental temperature (Figure 4A). Analyzing the relationship between the time of day and percent of patients with high body temperature under the same procedure yielded a non-significant correlation (Figure 4B).

Figure 4
Environmental Temperature and Patient Temperature During the Day

A   **Hourly Outside Temperature**   B   **Hourly Patient Temperature**

Note: *(*A) Non-significant correlation of local environmental temperature in hourly intervals starting at 9 AM and ending at 4 PM. Red line is a quadratic polynomial fit, $R^2 = 0.99$. (B) Non-significant correlation of time of day with the percentage of patients with body temperatures > 99 °F. Red line is a polynomial quadratic fit, $R^2 = 0.79$. n = 3,246.

To understand changes in patient influx during the day, a correlation was computed between the time of day and the number of patients coming into the clinic. There was a significant correlation between the time of day and the number of patients that entered the clinic, r (3,244) = -.93, $p < .01$ (Figure 5). In addition, a simple linear regression model suggested that the time of day predicts the number of patients entering the clinic, $R^2 = 0.58$, F (1, 82) = 114.6, $p < .0001$ (Figure 5).

Trends in Patient Temperatures – To examine the relationship between environmental temperature and patient body temperature, average daily environmental temperatures were collected during the entire duration of the study. The lowest environmental temperature recorded was 64 °F, and the highest was 87 °F ($M = 76.33$, $SD = 1.84$). This data was collected only on days when patients' body temperature was collected (Oct 26 – Nov 6 and Nov 30 – Dec 11). There was a moderate positive correlation between environmental temperatures and the percent of patients with body temperatures above 99 °F, r (11) = .63, $p = .01$ (Figure 6A). The average daily temperature predicted the percent of patients with body temperatures above 99 °F, $R^2 = .40$, F (1, 11) = 7.42, $p = .02$ (Figure 6A).

Figure 5

Metrics of number of patients' body temperatures collected related to time of the day
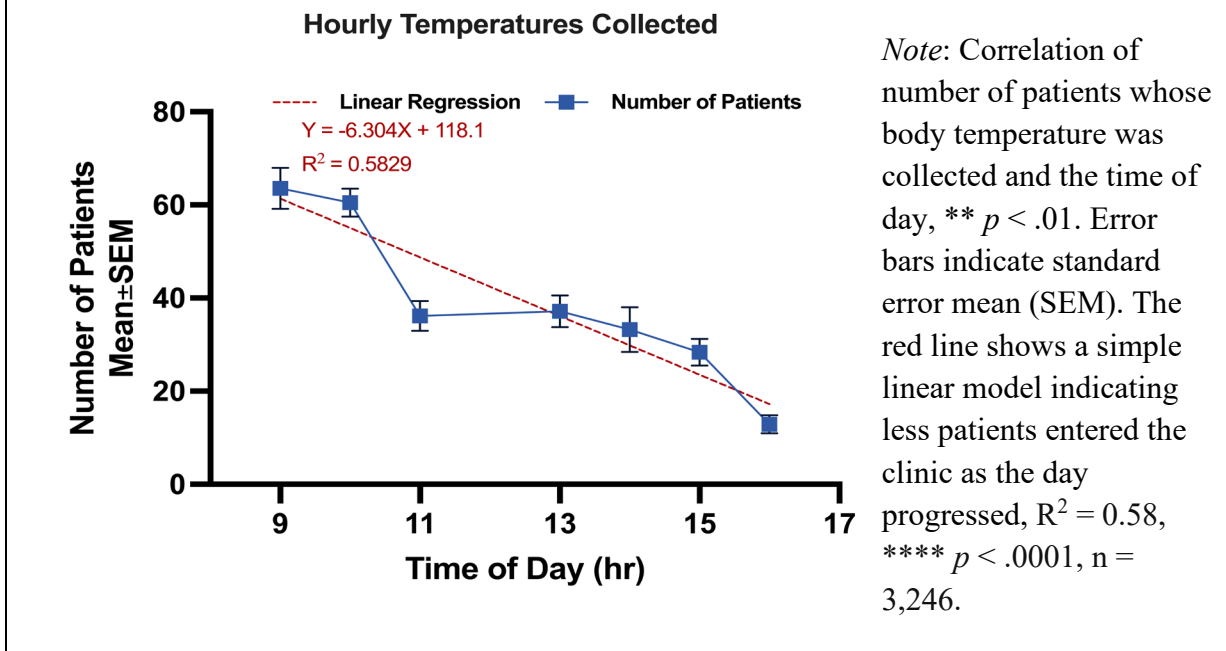

Note: Correlation of number of patients whose body temperature was collected and the time of day, ** $p < .01$. Error bars indicate standard error mean (SEM). The red line shows a simple linear model indicating less patients entered the clinic as the day progressed, $R^2 = 0.58$, **** $p < .0001$, n = 3,246.

Figure 6

*Relationships between Patients' Temperatures with Both Daily Environmental Temperatures and New COVID-19 Cases*
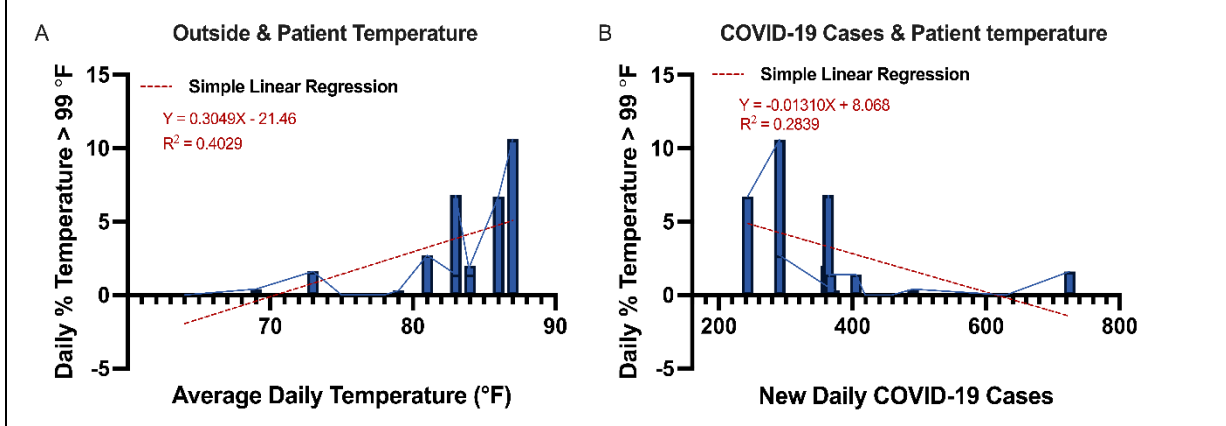
*Note. (*A) Daily percent of patients with body temperatures > 99 °F correlated with daily environmental temperature, ** $p < .01$. Red line is a simple linear regression model that shows an increase in patients' temperature as the temperature outside the clinic increases, $R^2 = 0.40$. (B) Daily percent of patients with body temperatures > 99 °F correlated with new local COVID-19 cases reported each day by the CDC, * p < .05. Red line shows a non-significant simple linear regression model of patients' temperatures as the new daily cases of COVID-19 increases, $R^2 = 0.28$. n = 3,246.

To examine the relationship between the number of new cases of COVID-19 reported by the CDC and the frequency of patients with a body temperature above 99 °F, the same procedure was conducted. The number of new daily cases of COVID-19 was moderately negatively correlated with patients' body temperature, $r(11) = -.53$; $p = .03$ (Figure 6B). The number of daily cases of COVID-19 did not predict the frequency of patients with body temperature above 99 °F, $R^2 = 0.28$, $F(1, 11) = 4.36$, $p = .06$ (Figure 6B).

A two-way ANOVA demonstrated that the effect of weekly environmental temperatures on the hourly percent of patients with body temperatures above 99 °F was significant, $F(3, 8) = 6.06$, $p < .05$ (Figure 7). There was also a significant interaction between weekly environmental temperature and time of the day, $F(18, 48) = 2.38$; $p < .01$ (Figure 7).

Figure 7
Patients' Body Temperature Differences by Weekly Environmental Temperature and Time of the Day
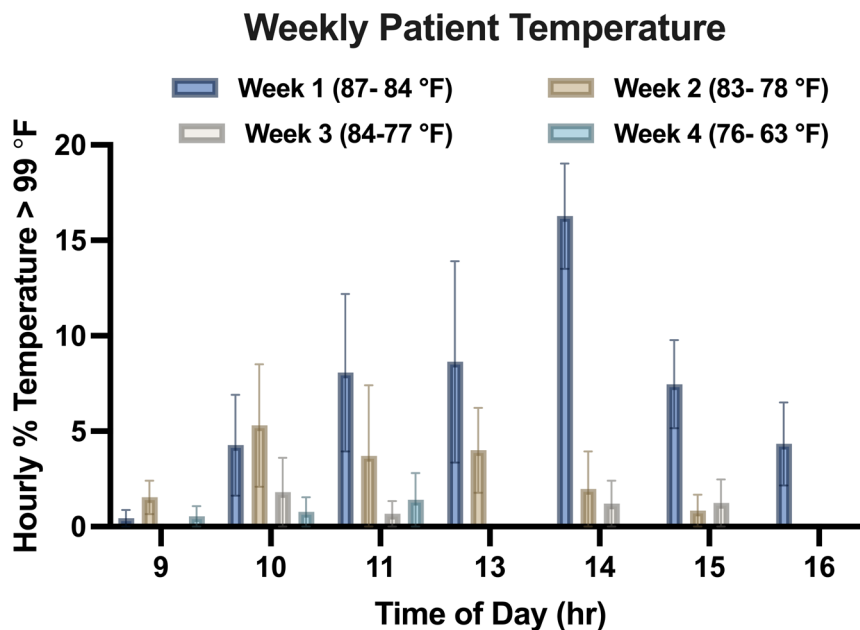

Note. Main effect of weekly environmental temperatures on patients with body temperatures > 99 °F at different times of the day, * $p < .05$. Significant interaction between weekly outside temperature and time of the day, ** $p < .01$, n = 824 for week 1, n = 776 for week 2, n = 834 for week 3, n = 812 for week 4.

Difference by Stage of the Study – Next, a comparison of different metrics between the first and second stages of the study (weeks one and two versus weeks three and four) was conducted. Since there was a period of three weeks of no data collection, third variables were analyzed that could have led to weekly changes in the percent of patients with body temperatures above 99 °F as previously reported (Figure 7). There was no significant effect of time of the year (stage of the

study) on the number of patients entering the clinic, $t(6) = .60$, $p > .05$ (Figure 8A). There was a significant effect of time of the year on the frequency of patients' body temperature above 99 °F, $t(12) = 4.06$, $p < .001$ (Figure 8B). A paired t-test found a significant effect of time of the year on the environmental temperature, $t(5) = 3.70$, $p < .01$ (Figure 8C). Lastly, an unpaired t-test found a significant effect of time of the year on the number of new COVID-19 cases reported, $t(10) = 3.04$, $p < .01$ (Figure 8D).

Figure 8

Differences in Metrics Comparing Stage One and Stage Two of the Study
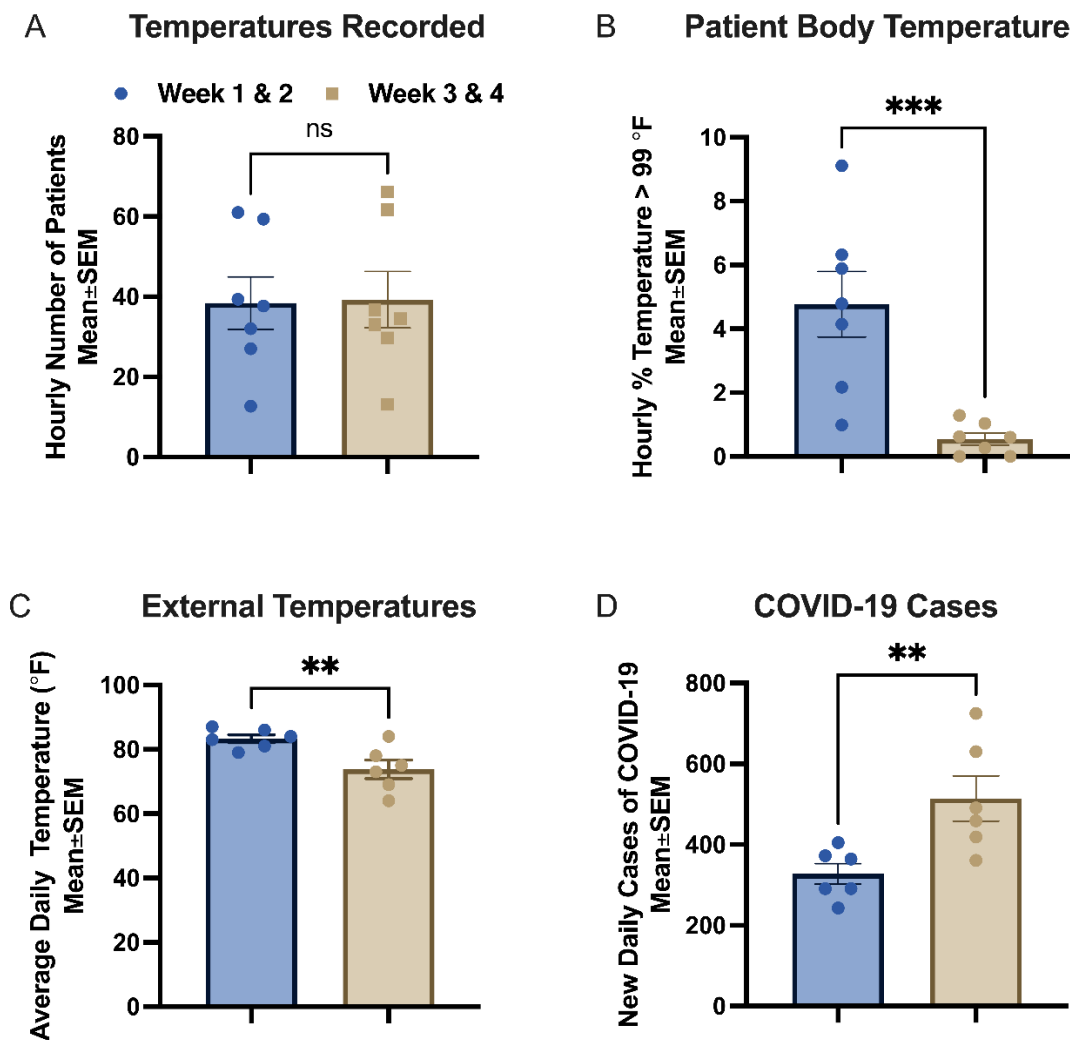
Note: **(A)** Hourly average number of patients entering the clinic on stage one (weeks one through two) and stage two (weeks three through four), $p > .05$. (B) Frequency of hourly patient body temperature > 99 °F by stage of study, *** $p < .001$. n = 7 for week 1 & 2, n = 7 for week 3 & 4. (C) Average daily outside temperature by stage of the study, ** $p < .01$. (D) New daily cases of COVID-19 by stage of the study, ** $p < .01$. Error bars represent standard error mean (SEM). n = 6 for week 1 & 2, n = 6 for week 3 & 4.

Conclusion

This study examines the relationship between patients' shell body temperature, environmental factors, and new local cases of COVID-19. Results point out that using infrared thermometers as the only tool is not an effective screening method for COVID-19 detection. The presence of environmental factors has a stronger effect on patients' body temperature than the positivity rates of COVID-19. During the duration of the study, the body temperature of patients decreased over time (Figure 3A), at the same time the daily local environmental temperature decreased.

A polynomial quadratic fit model suggests that environmental temperature might increase towards 1 PM, and then falls again towards the end of the day (Figure 4A). While patient body temperature is not significantly linearly correlated with the time of the day, a quadratic polynomial model indicates that the percent of patients with a body temperature above 99 °F increases and then decreases as the day progresses (Figure 4B). Hence, environmental temperature and patients' body temperature seem to follow a similar pattern as the day progresses. In addition, results suggest that the overall number of patients that enter the clinic decreases linearly over the day (Figure 5), indicating patient influx is larger earlier in the day. These findings suggests a possible correlation between environmental temperature and patients' body temperature, as they might be correlated with a third variable such as time of the day.

To understand the relationship between the environmental temperature and patients' body temperature better, further analyses were conducted. A Pearson correlation showed a moderate positive relationship between the environmental temperature and the percentage of patients with temperatures above 99 °F (Figure 6A). Surprisingly, there was a moderate negative correlation between new cases of local COVID-19 cases and the percentage of patients with a body temperature above 99 °F (Figure 6B). A linear regression test indicated that environmental temperature predicts the percent of patients with body temperatures above 99 °F. The linear regression test between cases of COVID-19 and patient temperature was not significant. These findings indicate that the use of infrared thermometers is not an effective tool to screen for COVID-19 since patients' body temperature is more affected by environmental temperature than the prevalence of COVID-19 cases.

As the study progressed, environmental temperatures decreased (Figure 3B), which permitted an analysis of changes in patient body temperature over time. The week in which temperatures were collected influenced the percentage of patients that presented body temperatures above 99 °F (Figure 8B). In addition, when analyzed by week, there was a combined effect of time (collection week), and the time of day temperatures were collected (Figure 7). Together, the results indicate changes in environmental temperature between the beginning and end of the study (Figure 8C), and the correlations between environmental temperature and patient body temperature (Figure 6A). It seems plausible that changes in temperature between weeks and within the day might account for differences in the percent of patients that have a body temperature above 99 °F (Figure 7).

To assess the validity of the study, additional tests were conducted to rule out third variables that could explain the correlations reported (Figure 8A, Figure 8B, Figure 8C, and Figure

8D). The number of patients that attended the clinic was not different between stages one and two of the study (Figure 8A), which have three weeks in between of no data collection. There was, however, a decrease in the percent of patient body temperature above 99 °F from stage one to stage two (Figure 8B). At the same time, there was a decrease in environmental temperature (Figure 8C), while the number of COVID-19 cases increased (Figure 8D). These results emphasize that body temperature measurements are not an optimal screening method for COVID-19. If they were, one would expect an increase in the percentage of patient body temperature as the prevalence rate of COVID-19 increased, and no significant effect of environmental temperature. No such effects in this study are reported.

It is noteworthy that at the time of remeasuring body temperatures, all measurements dropped below 99 °F. Therefore, simply put, measuring body temperature did not provide any screening advantages when compared to not using any screening method.

Discussion

The results suggest that environmental temperatures are a better predictor of increases in patients' body temperatures than the prevalence rate of COVID-19 cases. Data indicates that as environmental temperature increases, patient body temperature increases as well. This study not only found that environmental temperature influences body temperature measurements, but also that those effects seem to be stronger than the effects of the prevalence of COVID-19 cases. Most importantly, a reliable screening method would be expected to increase the frequency of seeing patients with high body temperature as the COVID-19 positivity rate increases, but the opposite was observed. Hence, using body temperature as a screening method for COVID-19 poses a non-reliable method to prevent the spread of infectious diseases.

Temperature screening remains a vital tool for fever screening in clinical settings (Najmi et al., 2020). For reference, a body temperature of 100.4 °F or higher is considered a fever ("Fever Overview," 2022). While patients were not screened for fever, a temperature of 99 °F was used to look for patients with high body temperature as a biosafety measure. Most screening protocols based on body temperature measurements used a temperature of 99 °F. Thus, those margins were selected to ensure the external validity of any findings. Yet, no patients were found to have a fever at the time of their visit. Perhaps it is unlikely that a febrile patient would attend a non-urgent medical appointment. Regardless, body temperature has been widely incorporated as the standard screening method for COVID-19 infections among clinical and commercial settings.

Infrared thermometers are not the only measurement method used for screening purposes. Studies have suggested alternative methods for recording body temperature (Apa et al., 2013; Aw, 2020), some attractive options include wrist temperature (Chen, Xie, et al., 2020), neck temperature measurements (Lai et al., 2022), or infra-red thermal imagers (Zhang et al., 2021). Future studies with these devices should be conducted since, consistent with our findings, previous studies have found that infrared thermometers are not an ideal screening method during a pandemic (Khan et al., 2020). To provide higher external validity, this study could be replicated in other

locations with a diverse demographic population. To strengthen the methodology, the study could have a longer duration of 20 weeks and avoid a period of no data collection.

The data from the COVID-19 cases used in this study was retrieved from Palm Beach County, a geographical location that contains Jupiter, the place where patients' temperatures were recorded. Thus, it would have been ideal to use a database of COVID-19 cases specific to Jupiter. Doing so would provide additional resolution to our statistical analyses. Unfortunately, the database we selected was the most specific available at the time.

When interpreting the data presented in this study, it is important to consider the possibility that increases in local cases of COVID-19 were simply not significant enough to reflect changes in the frequency of patient body temperature. Nonetheless, this is unlikely since the strong effects of environmental temperature would likely mask any effects of the prevalence of COVID-19 cases on patients' body temperature. Ultimately, this study suggests that using body temperature as a COVID-19 screening method has significant challenges that threaten its effectiveness as a screening tool. This study demonstrates how blindly applying technological tools to an untested scenario might result in self-deceptive benefits.

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Reducing Stress Among College Students: Mindfulness Meditation Versus Adult Coloring

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<u>Introduction</u>

Stress in college students is widespread and problematic (Aselton, 2012). Collegiate students report a wide variety of stressors including academic difficulties, uncertainty about future career plans, conflict with roommates, family pressure, and financial worries (Aselton, 2012). Perceived stress includes believing that the challenges in one's life are uncontrollable, unpredictable, and overwhelming, and can lead to psychological distress, which is defined as negative emotional states such as symptoms of depression and anxiety (Cohen et al., 1983; Kessler et al., 2003). Approximately 30% of these students report that stress has adverse consequences on their academic performance (American College Health Association, 2017). Furthermore, academic stress in this population can have negative effects on their physical health (Hughes, 2005). Therefore, it is important to research not only stress reduction interventions for individuals in higher education, but also effective ways to disseminate these programs to students.

Previous researchers have found that mindfulness-based interventions are effective in addressing a variety of mental health concerns, including stress (Bamber & Schneider, 2016). Mindfulness involves bringing attention/awareness to the present moment in a nonjudgmental manner (Kabat-Zinn, 1990). For example, mindful walking involves purposefully noticing the sights, sounds, smells, and physical sensations experienced in the present moment while walking (as opposed to getting lost in thoughts). In addition, mindfulness teaches individuals to recognize that difficult emotions and sensations such as stress or anxiety are normal human experiences and there is no need to judge oneself for experiencing them. Formal mindfulness meditation exercises help individuals to train their minds to be in the present moment with an attitude of self-compassion, as opposed to getting caught up in difficult thoughts/emotions or labeling themselves as bad or defective. Mindfulness meditation exercises vary, but may include focusing on the breath, mindful walking, noticing internal events (i.e., thoughts, emotions, sensations) with acceptance, and bringing attention to the external events (e.g., sights, sounds) around them (Kabat-Zinn, 1990).

According to Bamber and Schneider (2016), most published studies of mindfulness-based interventions targeting college students found significant reductions in stress and anxiety at post-treatment. However, across these studies with college students, there was a wide variety in the methods used to deliver the interventions (Bamber & Schneider, 2016). A traditional and commonly structured protocol is that of Mindfulness-Based Stress Reduction (MBSR), which involves 26 hours of formal instruction over an eight-week period (Kabat-Zinn, 2003). However, a comprehensive program such as this may not be logistically feasible for many college students who may feel they have limited time as they attempt to balance their academic, work, and personal responsibilities.

Some researchers have found preliminary support for a brief four-week mindfulness meditation program with weekly sessions with college students (Shearer et al., 2016; Dark-Freudeman et al., 2021). For example, Shearer and colleagues (2016) found that a four-week mindfulness meditation program significantly reduced anxiety and improved stress responses in college students compared to an active control group that interacted with a dog during a group study break. Dark-Freudeman et al. (2021) reported that a four-week mindfulness-based intervention significantly reduced stress compared to an active control condition that involved adult coloring. Although the results of these studies are promising, it is possible that some students may find a month-long time commitment to be challenging due to the rigorous demands of attending a higher education institution. The question then becomes, could an even briefer mindfulness meditation program help college students manage their stress levels?

In addition, it would be important to compare this brief mindfulness intervention with an active comparison condition that does not involve mindful activity. Petting dogs could potentially be an informal mindful activity for some, but engaging in adult coloring likely is not. Although it is possible for one to practice mindfulness during an art activity if instructed to do so (e.g., nonjudgmentally noticing any emotions that are evoked), past research suggests that many individuals may not naturally practice mindfulness when engaged in adult coloring, but rather engage in the activity in a "mindless" manner (Ashdown et al., 2018; Flett et al., 2017; Mantzios & Giannou, 2018). Adult coloring can thus be compared to watching television, reading a book, or playing a game, which can help "get the mind off" of one's unwanted emotional experience (counter to mindfulness, which encourages awareness and acceptance of present-moment emotions). Overall, there are few published research studies on the effects of adult coloring books, but preliminary research suggests it may have at least short-term benefits for reducing stress, anxiety, or depression (Ashdown et al., 2018; Duong et al., 2018; Khademi et al., 2021; Flett et al., 2017).

Our proposed research study explored the efficacy of a brief two-week peer-delivered mindfulness meditation program to reduce stress in college students, with minimal initial instruction and low time requirements for practice. The study design was a randomized controlled trial that compared the brief mindfulness meditation program with an adult coloring intervention and a psychoeducation-only intervention. First, participants were randomly assigned to an intervention (meditation, adult coloring, or psychoeducation). Participants then attended a single hour-long videoconferencing session where they completed baseline measures and received an intervention based on their condition. All interventions in our study were delivered remotely due to the COVID-19 pandemic. Then, they were sent periodic emails over the course of two weeks with instructions to practice their assigned activities. After two weeks, participants completed post-treatment measures of stress, psychological distress, anxiety, and mindfulness. We hypothesized that mindfulness meditation would produce the greatest psychological benefits (i.e., reduction in stress, psychological distress, and anxiety levels; increase in mindfulness levels), followed by the adult coloring intervention.

Method

Participants — Seventy-seven undergraduate participants completed the study. However, one participant was removed from the analysis for not completing the post-treatment survey, and two participants were removed due to the researcher sending the incorrect intervention email. This left 74 participants in the final analysis. Participants had a mean age of 19.3 (*SD* = 2.2) ranging from 18 to 35 years old. Most of the participants (80%) were female. Seventy-six percent were White, 10% were African American, 5% were Multiracial, 5% identified as Other, 3% were Native American, and 1% were Asian (See Figure 5). In terms of ethnicity, 19% identified as Hispanic. Participants were recruited via Sona Systems, an online software that allows individuals to sign-up for research studies. All students 18 years and older and enrolled in a General Psychology class at The University of Tampa were eligible to sign up for the study. Participants completed the study as part of their research requirement for their course.

Measures —The Demographics Questionnaire is a seven item self-report questionnaire that asks about age, gender, race, ethnicity, student year, and past history of mental health treatment.

We chose to measure our dependent variables (stress, psychological distress, anxiety, mindfulness levels) using the following established self-report surveys. The Perceived Stress Scale (PSS) is a 10-item questionnaire that measures the degree to which participants have perceived life situations as stressful (Cohen et al., 1983). Each item is rated on a 5-point scale (1 = *Almost Never* to 4 = *Very Often*). The Kessler Psychological Distress Scale (K10) is a 10-item questionnaire that measures psychological distress levels based on questions about anxiety and depressive symptoms (Kessler et al., 2003). Each item is rated on a 5-point scale (1 = *None of the time* to 5 = *All of the time*). The Beck Anxiety Inventory (BAI) is a 21-item self-report survey that assesses the intensity of physical and cognitive anxiety symptoms (Steer & Beck, 1997). Each item is rated on a 4-point scale (0 = *Not at all* to 3 = *Severely—it bothered me a lot*). The Mindful Attention Awareness Scale (MAAS) is a 15-item questionnaire that assesses the frequency of mindful states (Brown & Ryan, 2003). Each item is rated on a 6-point scale (1 = *Almost Always* to 6 = *Almost Never*). For our study, all measures were administered at pre- and post-treatment, and the language was changed to asked about the past week instead of the past month.

At post-treatment, participants also completed the Satisfaction Survey which asked them to rate the effectiveness of the intervention in reducing and coping with stress, and if they would recommend the intervention to a friend. Additional questions asked how often participants practiced their assigned exercises. Those in the psychoeducation intervention were asked to rate the helpfulness of each psychoeducation tip that they received. Those in the adult coloring intervention were asked how often they completed a coloring activity online versus by hand.

Procedures — Each participant signed an online consent form and was randomly assigned to one of the three interventions (mindfulness meditation, adult coloring, or psychoeducation). Researchers randomly assigned participants by drawing a slip of paper. All participants signed up for an initial 60-minute group Zoom intervention session with two undergraduate research assistants. Groups contained anywhere from one to five research participants at a time. First, the research assistants gave a general overview of the research study and explained that the purpose

of the study was to examine stress levels in college students. Participants then completed pre-treatment measures on Qualtrics.

Participants were then taught specific stress coping techniques. Participants receiving the mindfulness intervention were taught two mindfulness exercises. First, they used their five senses to observe the room in which they were physically. Second, they practiced a five-minute breathing meditation. Meanwhile, participants receiving the adult coloring intervention virtually colored both a simple and complex mandala design using an online website. Participants receiving the psychoeducation intervention were given two general stress reduction tips: to create a schedule in order to prioritize activities and to make the effort to connect with other people socially.

At the end of this Zoom session, participants were given instructions for the next two weeks. Participants in the mindfulness and adult coloring interventions were asked to practice their exercises at last five minutes per day. Participants in the psychoeducation intervention were told that it was their choice whether to incorporate any of the tips into their daily lives. All participants were then sent periodical emails (5 total) containing additional information and/or tips during the next two weeks. Participants in the mindfulness intervention were sent emails that contained an array of mindfulness exercises (e.g., links to audio files and YouTube videos). Participants in the adult coloring intervention received a variety of adult coloring exercises that ranged from simple to complex mandala designs. Some exercises included pictures for them to color online with their mouse and/or pictures to print out and then color by hand. Participants in the psychoeducational intervention received additional general stress reduction tips. Examples of these tips were journaling, yoga, and eating healthier. At the two-week mark, participants completed online post-treatment measures on Qualtrics.

Results

Mixed analyses of variances (ANOVAs) were conducted to determine if there were any significant differences in the dependent variables between conditions from pre- to post-treatment. For the Perceived Stress Scale (PSS), our results found a significant reduction in perceived stress for all the conditions combined (main effect), $F(1, 71) = 19.67$, $p < .001$, $\eta^2 = .217$. However, there was no significant difference in stress level reductions between the conditions (no interaction), $F(2, 71) = 1.08$, $p = .346$, where "F" is defined as a value on the F distribution (*F Value*). This "F" value can be obtained by dividing the two mean squares and can also be used to determine whether the test is statistically significant or not (*F Value*).
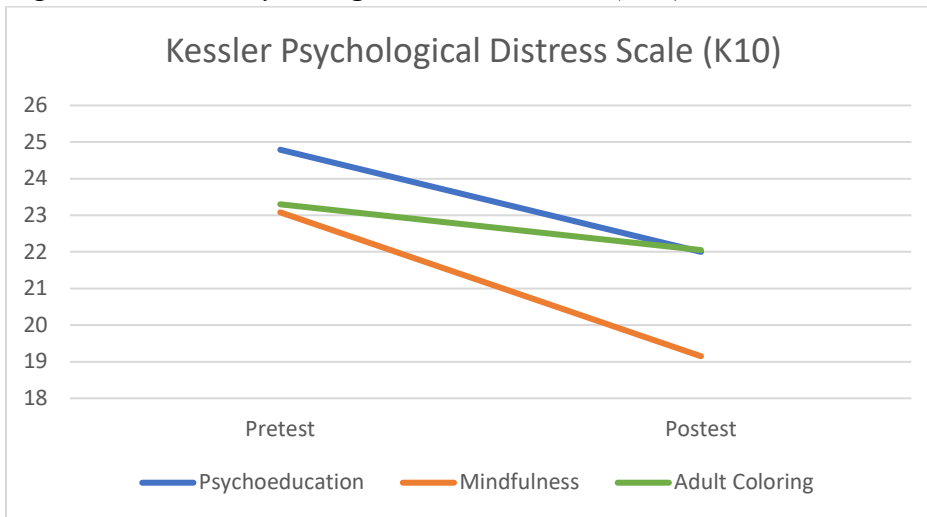
Figure 1: *Cohen Perceived Stress Scale (PSS) Results*
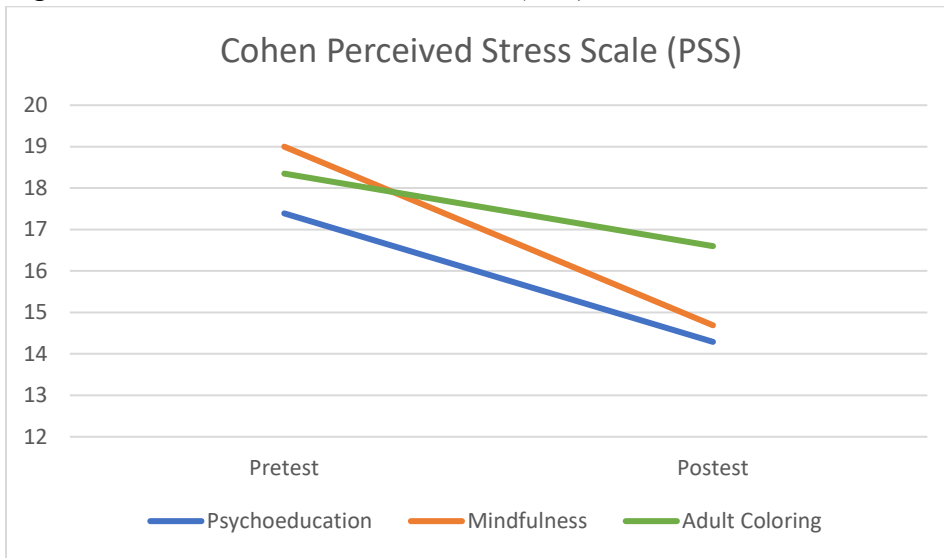
All three interventions significantly reduced stress levels. However, there were no significant differences in the effectiveness amongst the interventions.

Likewise, our results for the Kessler Psychological Distress Scale (K10) demonstrated an overall significance in effect for pre-to-post reduction of psychological stress, $F(1, 71) = 10.73$, $p = .002$ $\eta^2 = .131$, but no significant differences in effectiveness between the conditions from pre- to post-treatment, $F(2, 71) = 0.85$, $p = .432$.

Figure 2: *Kessler Psychological Distress Scale (K10) Results*

All three interventions significantly reduced psychological distress. However, there were no significant differences in the effectiveness amongst the interventions.

For the Beck Anxiety Inventory (BAI) scale, our results demonstrated a significant interaction between time and condition for anxiety levels, $F(2, 71) = 3.17$, $p = .048$, $\eta^2 = .082$.

Post-hoc tests determined that there was no significant difference between the psychoeducation versus mindfulness conditions ($p = .810$), but there was a significant difference between the mindfulness versus adult coloring condition ($p = .010$) and the psychoeducation condition versus adult coloring condition ($p = .027$).

Figure 3: *Beck Anxiety Inventory (BAI) Results*
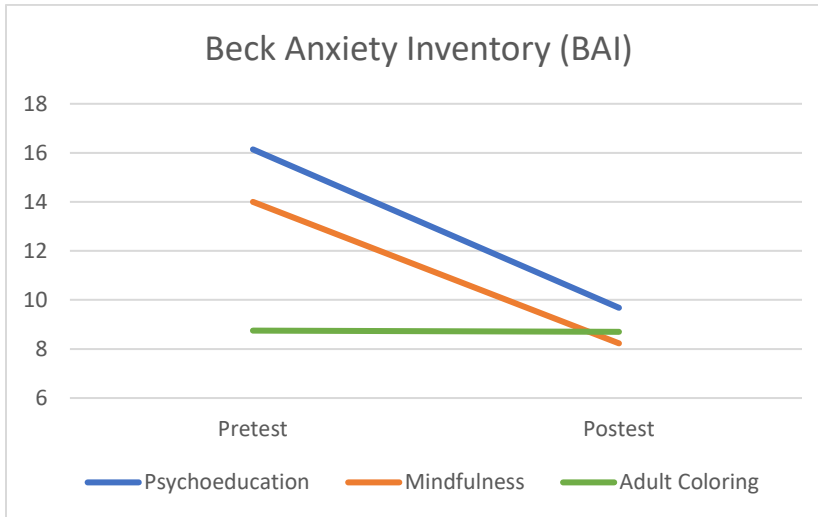
Anxiety significantly decreased for the mindfulness and psychoeducation interventions, but there was no significant change for the adult coloring intervention.

For the Mindful Attention Awareness Scale (MAAS), our results found a significant interaction between time and condition for mindfulness levels, $F(2, 71) = 3.76$, $p = .028$, $\eta^2 = .096$. Post-hoc tests demonstrated that there was a significant difference between the psychoeducation versus mindfulness conditions ($p = .021$), and between the psychoeducation versus coloring conditions ($p = .019$), but not for the coloring versus the mindfulness conditions ($p = .50$).

Figure 4: *Mindful Attention Awareness Scale (MAAS) Results*
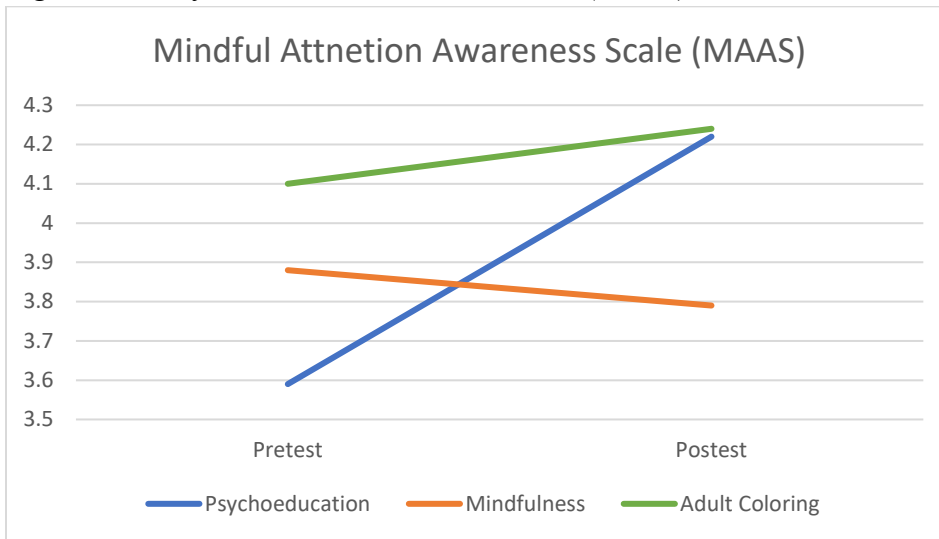
Mindfulness levels significantly increased for the psychoeducation intervention, but there was no significant change for the adult coloring or mindfulness interventions.

Regarding our satisfaction survey results, when participants were asked to rate the effectiveness of the intervention in reducing their stress levels, there were no significant differences amongst the conditions, $F(2, 71) = 1.00$, $p = .372$. Likewise, when participants were asked to rate the effectiveness of the intervention in helping them cope with stress, there were no significant differences amongst the conditions, $F(2, 71) = 1.46$, $p = .239$.

Participants reported a variety in the number of days they spent practicing exercises during the two-week intervention period. The percentage of participants who practiced exercises on 7 or more days was 54% for the mindfulness condition, 70% for the adult coloring condition, and 43% for the psychoeducation condition. There was also a variety in the number of hours spent practicing exercises during the two-week period. The percentage of participants who spent over an hour total practicing exercises was 38% for the mindfulness condition, 50% for the adult coloring condition, and 54% for the psychoeducation condition. The majority of participants in the adult coloring condition (60%) reported that they did all their coloring exercises online, as opposed to also printing out pages to color by hand. The most helpful psychoeducation tips, as rated by the psychoeducation group, were to improve sleeping habits, listen to music, stay active, and create a schedule.

Discussion

The current study investigated the effectiveness of three alternative interventions for reducing stress among college students. We hypothesized that mindfulness meditation would produce the greatest effects on stress, psychological distress, anxiety, and mindfulness, and that the psychoeducation tips would have the least positive effects. Our results did not support our hypotheses. First, all three interventions were equally effective in reducing stress and psychological distress in college students. Second, both the psychoeducation and the mindfulness

interventions led to a significant decrease in anxiety levels compared to the adult coloring intervention. Third, participants in the psychoeducation intervention had a significant increase in mindfulness levels compared to the mindfulness and adult coloring intervention.

In the psychoeducation intervention, participants received general stress reduction tips that have the potential to be helpful in reducing stress and anxiety. It is therefore not surprising that positive outcomes were observed in the psychoeducation group. There are several possible reasons for why the psychoeducation intervention led to the greatest increase in mindfulness levels. Perhaps the psychoeducation tips led to participants becoming more informally mindful in their daily activities. In addition, due to our study being conducted remotely, participants in the mindfulness intervention did not have regular guidance in practicing mindfulness. This lack of guidance could perhaps explain why those in the mindfulness intervention did not experience an increase in mindfulness levels. As for the adult coloring intervention, past research suggests that many individuals may not naturally practice mindfulness when engaged in adult coloring, but rather engage in the activity in a "mindless" manner (Ashdown et al., 2018; Flett et al., 2017). This past finding is consistent with our results that participants in the adult coloring intervention did not have a significant increase in mindfulness levels.

There are also possible explanations for why participants in both the psychoeducation and mindfulness interventions had a significant decrease in anxiety levels compared to the adult coloring intervention. Many participants in the adult coloring intervention stated that they viewed their intervention as a "school assignment," "distraction," or a "short-term coping mechanism." Furthermore, participants may have experienced frustration with the user interface when attempting online coloring activities on various websites. Some participants may also have preferred to hand-color pictures on paper instead of using websites. These possibilities could contribute to why those in the adult coloring intervention did not experience a significant decrease in anxiety symptoms.

A strength of our study is that it utilized random assignment and had an experimental design, which increases our ability to make causal claims. Another strength is that this study delivered all interventions remotely to make them accessible to students during the COVID-19 pandemic. However, our study lacked consistency in environment. While we asked participants to engage in their assigned interventions in a quiet environment, we were not able to ensure that students did so. Other limitations of our study were small sample size and limited external validity because our participants included only General Psychology students at The University of Tampa. It would be important to explore the effects of these interventions with a greater variety of college students.

Overall, our results are consistent with past research supporting the use of mindfulness mediation for coping with stress (Bamber & Schneider, 2016). However, it is unclear from our results whether a brief two-week mindfulness intervention delivered remotely could provide enough guidance and time for students to understand and experience the benefits of mindfulness fully. Other studies that delivered a four-week mindfulness intervention program found greater benefits for the intervention compared to an active control, such as adult coloring, whereas our

study did not find great benefits for mindfulness compared to psychoeducation and adult coloring (Dark-Freudeman et al., 2021; Shearer et al., 2016). Future research could replicate this study with a face-to-face format, rather than an online format, and the duration of the interventions could be lengthened. A future study could investigate the optimum amount of ongoing guidance for those in the mindfulness intervention. Furthermore, future research could replicate this research study with a greater number of participants and with a variety of backgrounds. It would be interesting to compare how individuals of different ethnicities or genders respond differentially to the various treatments. In conclusion, our study found that alternative interventions such as mindfulness meditation and adult coloring, as well as psychoeducation tips, could benefit college students in reducing their levels of stress. It is important for researchers to continue to explore alternative methods and formats of helping college students with psychological distress.

Figure 5: *Pie Graph demonstration of Ethnicity percentages in present study*
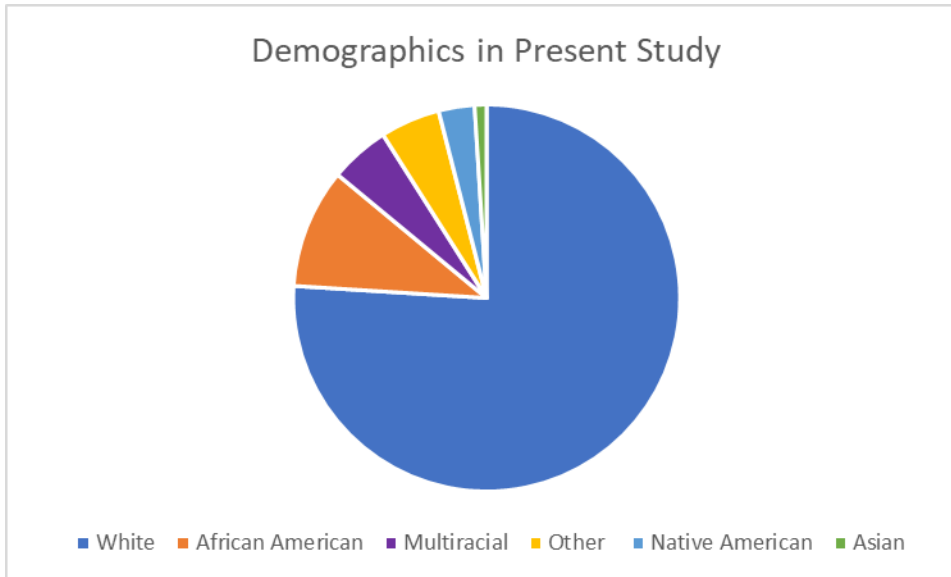
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Identity, Belonging, and Christian Community in Protestant Responses to the Aryan Paragraph in Nazi Germany

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Introduction

Questions regarding Jewish identity and belonging have been asked as far back as the Roman Empire. Such questions probed their legal status vis-à-vis the state and how they were to be woven into the economic and social fabric of society. In medieval Spain, for example, the question of who a Jew is surfaced as early as 1391 and contained with this question the boundaries of Christian community.[1] As Jews faced widespread antisemitic attacks from Christians, many converted to Christianity to protect themselves from harm.[2] Thus, being part of a Christian community in medieval Spain cancelled out one's Jewish identity and offered protection from antisemitic attacks. These same issues regarding Jewish identity, belonging, and the extent of Christian community surfaced in Nazi Germany with Adolf Hitler's rise to power in 1933 in the form of the "Jewish Question" and the Aryan paragraph.

While some European and American writers, philosophers, and theologians confronted what was termed the "Jewish Question" before the Nazis claimed power in Germany, the Nazis took a more legal, and then an increasingly more violent, approach to "solve" the question. The "Jewish Question" regarded the presence of a Jewish minority within Europe as a problem needing to be fixed.[3] Some individuals like Karl Marx and Louis D. Brandeis proposed solutions, but none proposed the response that the Nazis took.[4] As early as April 1933, the Nazi government enacted antisemitic laws that stripped rights and citizenship from Jews, basing it upon the so-called Aryan paragraph.[5] This paragraph first appear in the Law for the Restoration of the Professional Civil Service and defined what it meant to be non-Aryan. According to the paragraph, being non-Aryan

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[1] David Nirenberg, "Conversion, Sex, and Segregation: Jews and Christians in Medieval Spain," *The American Historical Review* 107, no. 4 (2002): 1066.

[2] Ibid., 1078.

[3] United States Holocaust Memorial Museum, "The 'Jewish Question'," Holocaust Encyclopedia, last modified November 26, 2019, https://encyclopedia.ushmm.org/content/en/article/the-jewish-question.

[4] Karl Marx, "On the Jewish Question," in *The Marx-Engels Reader*, ed. Robert Tucker (New York: Norton & Company, 1978), 26–46. http://fs2.american.edu/dfagel/www/Class%20Readings/Marx/Marx,%20_On%20the%20Jewish%20Question_Edited%20version%20from%20Tucker.pdf.
Louis D. Brandeis, "Speech to the Conference of Eastern Council of reform Rabbis, April 25, 1915," Louis D. Brandeis School of Law Library, accessed November 6, 2022, https://louisville.edu/law/library/special-collections/the-louis-d.-brandeis-collection/the-jewish-problem-how-to-solve-it-by-louis-d.-brandeis.
Different solutions to the "Jewish Question" often debated the emancipation of Jews in Europe, particularly after leaders in France, Württemberg, Hessen, Hannover, and Prussia granted rights to Jews in the late eighteenth century and early nineteenth century. However, others opposed these rights because of religious or societal grounds, with many philosophers, political leaders, or theologians debating how to view and treat Jews in Europe. To learning more about this debate, see Ido de Haan, "Judenfrage," *Krisis: Journal for Contemporary Philosophy* 2018 no. 2 (2018): 91–94.

[5] Deborah Dwork and Robert Jan van Pelt, *Holocaust: A History* (New York: W.W. Norton, 2002), 71.

largely meant being Jewish or having non-Aryan (Jewish) parents and/or grandparents, instituting the narrow definition of Jewish identity as a biologically heritable identity.[6] The paragraph stipulated that those who came from a "non-Aryan origin" could no longer participate in German political and social life, directly targeting those whom the Nazi government considered non-Aryan: Jews.[7] Thus, the Nazis' solution to the "Jewish Question" was originally to strip their civil rights away.

The reach of the Aryan paragraph would extent to the religious life of Germans, leading many Protestants to debate where Jewish converts to Christianity fit within German churches. Protestants questioned whether being a Christian while also being ethnically Jewish was enough to merit belonging in the Protestant church, and thus, merit Christian protection. Also up for debate was the response, if any, Protestants and Protestant groups would generate to the larger questions of belonging and identity posed in German society. Thus, this thesis explores how Protestants and Protestant groups responded to the Aryan paragraph as it related to baptized Jews and how their responses situated Protestants within the larger questions of belonging and identity.

The horrors Nazi Germany perpetrated towards Jews, Roma, Poles, the disabled, homosexuals, and perceived inferior races testifies to the importance of belonging. Belonging to the "wrong" group, whether political, social, religious, ethnic, or otherwise, could and did make one a target for discrimination, persecution, and genocide. However, these actions against "wrong" groups began with identity. Identity mattered because it indicated the extent to which one belonged. Thus, asking whether Jewish converts to Christianity—baptized Jews—belonged in the church reveals deeper questions. Asking the approximately forty million Protestants in the Third Reich who belonged in the Protestant church really asked who belonged in German society.[8] Thus, exploring how Protestants responded to these questions of identity and belonging for their Jewish members indicated how they might respond to questions of identity and belonging more broadly.

Four Protestant response to the Aryan paragraph were chosen for analysis based on their availability in the English language, their affiliations to different Protestant denominations and groups, and their chronological sequence. These responses originate from the Lutheran pastor, Dietrich Bonhoeffer, the General Synod of the Protestant Church of the Old Prussian Union, the faculty of theology at the University of Marburg, and the German Christian movement. Analyzing four Protestant or Protestant group's response to the Aryan paragraph in 1933 and the language they utilized for defining what made one a Jewish Christian, what being Jewish meant, and who was included within the larger Christian community reveals a Protestant church which could not agree on the identity and belonging of baptized Jews within Protestant churches. Their lack of

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[6] "First Regulation on the Implementation of the Law for the Restoration of the Professional Civil Service," in *The Persecution and Murder of the European Jews by Nazi Germany, 1933-1945,* Vol. 1: *German Reich 1933-1937,* ed. Wolf Gruner and Caroline Pearce (Munich: De Gruyter, 2019), 155.

[7] Dwork and van Pelt, *Holocaust*, 71.

[8] United States Holocaust Memorial Museum, "The German Church and Nazi State," Holocaust Encyclopedia, accessed November 21, 2022. https://encyclopedia.ushmm.org/content/en/article/the-german-churches-and-the-nazi-state.

unity regarding baptized Jews made them unprepared to answer the larger questions of belonging and identity posed by their society.

Historiography

Historians of Nazi Germany have long debated the extent to which institutional Protestant Christianity and individual Protestants opposed Hitler's regime and Nazism. An early trend in scholarship emphasizes the differences between Christianity and Nazism by exploring the basis of both and their mutual opposition of each other. This early trend also evaluates the differences between Protestantism and Nazism by looking at the existence of strong oppositional figures and declarations and Nazi persecution of the churches as evidence of a strong Protestant opposition. The first trend stemmed from German historians directly following the end of World War II and dominated the narrative until the next generation of historians began to question this dichotomy between Christianity and Nazism. However, English scholarship seized this trend and propagated it into the 1960s. A second and later trend explores Christians' receptivity to the Nazi government and ideology by evaluating their opposition as debating church autonomy, highlighting the existence of the Pro-Nazi German Christian Movement, and exploring Christian intellectuals' struggle to vocalize opposition to Nazism. This trend and ones following it immerged in the later 1990s and early 2000s. Historians of another trend add a nuanced definition of the Confessing Church's opposition by analyzing women's participation in the movement and the scope of the leaders' resistance. A fourth trend explores Protestants' response to the persecution of Jews to evaluate their opposition to Nazism, finding that these individuals often held ambiguous views on the persecution of Jews, or they expressed antisemitism themselves.

One of the first trends put forth by historians positions Christianity against Nazism because of their irreconcilable differences. This trend examines the neo-pagan and pseudo-religious basis of Nazism, in addition to its emphasis on Nordic mythology, and contrasts it with Christian beliefs, highlighting the two ideology's differences.[9] E. H. Robertson's *Christians against Hitler* (1962) identifies leading Confessing Church pastors such as Dietrich Bonhoffer and Martin Niemöller and points to their suffering and imprisonment at the hands of the Nazis as proof of a vocal Protestant opposition.[10] Arthur C. Cochrane's *The Church's Confession Under Hitler* (1962) details the creation of the Barmen Declaration—a theological stance taken by Protestant pastors from Lutheran, Reformed, and United Churches that reaffirmed their faith in Christ and rejected contrary doctrines—and highlights the theological and ideological differences between National Socialism and Protestant Christian faith.[11] J. S. Conway's *The Nazi Persecution of the Churches, 1933–1945* (1968) emphasizes Hitler's hostility to Christianity and acceptance of the German Christian Movement as confirmation of Nazi persecution of the churches, and thus Protestants'

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[9] Brian Stanley, *Christianity in the Twentieth Century: A World History*, Princeton History of Christianity 1 (Princeton: Princeton University Press, 2018), 156, ProQuest Ebook Central.

[10] E. H. Robertson, *Christians against Hitler* (London: SCM Press, 1962).

[11] Arthur C. Cochrane, *The Church's Confession Under Hitler* (Philadelphia: Westminster Press, 1962).

strong opposition.[12] This early trend positioned Christianity strongly against Nazism, and vice versa.

Opposed to the idea that Christians raised strong opposition to Nazism based on their irreconcilable differences are later scholars who explore Christians' receptivity to the Nazi government and ideology as an indication of their opposition of, and compatibility to, Nazism. Theodore S. Hamerow's *On the Road to the Wolf's Lair: German Resistance to Hitler* (1997) maintains that Protestant opposition to Nazism was originally and largely non-existent, and when it did materialize, it took the form of debating church autonomy.[13] Doris L. Bergen explores the pro-Nazi German Christian Movement in her book, *Twisted Cross: The German Christian Movement in the Third Reich* (1996), and argues that instead of being the product of Nazi higher-ups, Protestants created the movement to assimilate Nazism with Christian theology.[14] Franklin and Marcia Littell argue in their article, "The Church, Theology, and the Holocaust" (2011), that Christian intellectuals' opposition to Nazism struggled to materialize due to centuries-old antisemitism in the church, previously undefined obligations to resist, and poor preaching, teaching, and theological instruction.[15] All three works question the idea of early resistance to Nazism by pointing to Christians' receptivity to Hitler's regime or in the German Christian Movement's case, their enthusiasm for Nazi ideology.

Another trend in scholarship reevaluates those involved in Protestant opposition to Nazism, specifically those within the Confessing Church, and adds a nuanced definition and scope to that opposition. Theodore N. Thomas' book, *Women Against Hitler: Christian Resistance in the Third Reich* (1995), highlights the important work of female church secretaries, teachers, hostesses, and spiritual leaders in the Confessing Church's survival, challenging the view that only men participated in the Confessing Church.[16] Richard L. Rubenstein's comparison of Dietrich Bonhoeffer and Pope Pius XII in his article, "Dietrich Bonhoeffer and Pope Pius XII" (2002), reveals that even those who actively opposed Nazism held doctrinally based antisemitism.[17] Matthew D. Hockenos' revisionist biography of Confessing Church leader Martin Niemöller in his book, *Then They Came for Me* (2018), details Niemöller's opposition as a defensive stance and highlights his early contempt for Communists, Socialists, and Jews arrested by the Nazi government.[18] This biography questions the scope of Niemöller's opposition and adds nuance to

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[12] J. S. Conway, *The Nazi Persecution of the Churches, 1933-1945* (Toronto: Ryerson Press, 1968).

[13] Theodore S. Hamerow, *On the Road to the Wolf's Lair: German Resistance to Hitler* (Cambridge: The Belknap Press of Harvard University Press, 1997).

[14] Doris L. Bergen, *Twisted Cross: The German Christian Movement in the Third Reich* (Chapel Hill: University of North Carolina Press, 1996).

[15] Franklin Hamlin Littell and Marcia Sachs Littell, "The Church, Theology, and the Holocaust," in *The Routledge History of the Holocaust*, ed. Jonathan C. Friedman (Oxford: Routledge, 2011).

[16] Theodore N. Thomas, *Women Against Hitler: Christian Resistance in the Third Reich* (Westport, CT: Praeger Publishers, 1995).

[17] Richard L. Rubenstein, "Dietrich Bonhoeffer and Pope Pius XII," in *The Century of Genocide: Selected Papers from the 30th Anniversary Conference of the Annual Scholars' Conference on the Holocaust and the Churches*, ed. Daniel J. Curran Jr., Richard Libowitz, and Marcia Sachs Littell (Merion Station, PA: Merion Westfield Press International, 2002).

[18] Matthew D. Hockenos, *Then They Came for Me* (New York: Basic Books, 2018).

an otherwise dichotomous opposition. These scholarly works reevaluate those who opposed Nazism in the Confessing Church and redefine the scope of that opposition.

A fourth group of historians examines Protestants' response to the persecution of Jews as an indication of their opposition to Nazism and Hitler's regime. Wolfgang Gerlach's *And the Witnesses Were Silent: The Confessing Church and the Persecution of the Jews* (2000), analyzes Confessing Church letters, confessionals, and pamphlets and demonstrates that they did little to nothing to stop or oppose the Nazi government's treatment of Jews. His book highlights the limited scope of Confessing Church opposition to Nazism and emphasizes their ideological, rather than active, opposition.[19] In his book, *Demonizing the Jews: Luther and the Protestant Church in Nazi Germany* (2012), Christopher J. Probst argues that the writings of Martin Luther—a prominent leader in the German Protestant Reformation—influenced antisemitism among individual members of the Confessing Church, German Christian Movement, and those in the unaffiliated middle, and rendered their opposition contradictory.[20] William Skiles' article, "'The Bears of Unholy Potential': Confessing Church Sermons on the Jews and Judaism" (2016), argues that Confessing Church pastors' utilized antisemitic language to highlight Christianity's tie to Jewish history or values, conserve German theology, or even criticize the Nazi government based on Jewish tropes. Skiles reveals the pastors' diverse, and oftentimes ambivalent, stance on Jews and the Nazis' treatment of them.[21] The works of these historians demonstrate that Protestants often held ambiguous views on the persecution of Jews, or they expressed antisemitism themselves.

The four historiography trends listed above demonstrate the shifting nature of the debate over Protestant opposition to Nazism and Hitler's regime, as well as illustrate that the bulk of scholarship published in English has occurred over the past thirty years. This time distance from World War II has helped sever emotional ties regarding Nazi Germany and the Holocaust and enabled historians to view Christianity more objectively. Historians not directly tied to Nazi Germany have benefited from their emotional distance to this era, as well as to the higher availability of German sources in the past thirty years. The first historiographical trend focused on the differences between Protestantism and Nazism coincides with the limited availability of German archives to scholars on both sides of the Cold War, resulting in the minimal amount of scholarship published from the end of World War II to the collapse of the Soviet Union. The explosion of published scholarship in English in the 1990s and beyond demonstrates the newfound access to sources in Germany and coincides with the other three historiography trends.

Following the historiographical trend of evaluating Protestant responses to the persecution of the Jews as exemplified by Wolfgang Gerlach, Christopher J. Probst, and William Skiles, this thesis examines the language of four Protestants or Protestants groups within Germany in their response to the "Jewish Question" and the Aryan paragraph. Examining how these responses

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[19] Wolfgang Gerlach, *And the Witnesses Were Silent: The Confessing Church and the Persecution of the Jews* (Lincoln: University of Nebraska Press, 2000).

[20] Christopher J. Probst, *Demonizing the Jews: Luther and the Protestant Church in Nazi Germany* (Bloomington: Indiana University Press, 2012).

[21] William Skiles, "'The Bears of Unholy Potential': Confessing Church Sermons on the Jews and Judaism," *Studies in Christian-Jewish Relations* 11, no. 1 (2016).

defined what it meant to be a Jewish Christian had implications on whether Jewish converts to Christianity belonged in the Christian church and community and warranted Christian protection against antisemitism. These responses also demonstrate that Protestants were unable to agree mutually on which identity—Jewish or Christian—mattered more to them. This disunity meant that they were unprepared to answer larger questions of identity and belonging posed by their society.

Dietrich Bonhoeffer

Evident in one of the first Protestant responses to the Aryan paragraph, authored by German Lutheran pastor Dietrich Bonhoeffer, is Bonhoeffer's use of a religious and legal framework for defining Jews and examining the extent of Christian community. Bonhoeffer, a trained theologian, wrote his response, an essay entitled "The Church and the Jewish Question," in April of 1933, the same month laws were issued in Germany that prohibited Jews from civil and state positions.[22] His essay uses religion and law to confer Jewish identity, which he then utilizes to define the extent of Christian community. The extent to this Christian community informs his ultimate view about the Aryan paragraph. Bonhoeffer's use of a religious and legal framework to define Judaism and presenting an ideal Christian community positioned Protestants in the middle of the debate over identity and belonging occurring within Germany.

Central to Dietrich Bonhoeffer's response to the Aryan paragraph was his attempt to define Jews in religious terms. Bonhoeffer defined Jews through their identity as God's "chosen people" and the "people of Israel," arguing that Jews for the church is "never a racial concept but a religious one."[23] Religion, to Bonhoeffer, was what separated the "people of God" from the "biologically questionable entity of the Jewish race," thereby separating the issue of the "Jewish Question" into two sectors: state and church.[24] Bonhoeffer left the issue of Jews as a biological identity to the state. He expressed his doubts in this kind of marker for identity by calling it "questionable," but left no further comments on this biological identity.[25] The church's problem with the "Jewish Question" differed from the state's problem because the church focused on Jewish identity via religion, leading Bonhoeffer's response to center on the realities of the baptized Jews—Jewish converts to Christianity.[26] Because he made a distinction between the religious and biological characteristics of Jews before formulating his opinion about baptized Jews, Bonhoeffer only focused on the religious characteristics of what made one a Jew.

Using his religious framework for defining Jews, Bonhoeffer contextualized the "Jewish Question" and his proposed answer for the Protestant church. Though crafting a response for one

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[22] Victoria Barnett, "Dietrich Bonhoeffer: 'The Church and the Jewish Question'," United States Holocaust Memorial Museum, accessed November 11, 2022, https://www.ushmm.org/information/exhibitions/online-exhibitions/special-focus/dietrich-bonhoeffer/church-and-jewish-question.

[23] Dietrich Bonhoeffer, "The Church and the Jewish Question," in *No Rusty Swords: Letters, lectures, and Notes 1928-1936*, vol.1, *The Collected Works of Dietrich Bonhoeffer*, ed. Edwin H. Robertson, trans. Edwin H. Robertson and John Bowden (New York: Harper and Row: 1965), 226–227.

[24] Ibid., 227.

[25] Ibid.

[26] Ibid.

subset of Jews—baptized Jews—inevitably raises the question of why the exclusion, framing the response within this light allowed Bonhoeffer to claim an absolute response to this particular version of the "Jewish Question." Because Bonhoeffer saw baptized Jews through a religious framework, he considered the exclusion of these Jews within the church to be "impossible for the church."[27] Bonhoeffer considered baptized Jews to be fully Christian. Using religion to define Jews also contextualized the Aryan paragraph for potentially disinterested Protestants. Referring to Jews as the "people of Israel," God's "chosen people," and even "baptized Jews" utilized a language more familiar to his Protestant audience, highlighting the history of Jews within the church and the relevancy of the antisemitic laws to Protestants.[28] Thus, Bonhoeffer utilized religious terms to define Jews to present his absolute response and contextualize the "Jewish Question" for the Protestant church.

In his response to the Aryan paragraph, Dietrich Bonhoeffer also utilized law in defining a Jewish Christian, demonstrating the changeable nature of this identity and the belonging that accompanied it. Bonhoeffer demonstrated that a Jewish Christian—the category of people under dispute regarding Protestants and the Aryan paragraph—was not a baptized Jew, but one who "lets membership of the people of God...be determined by the observance of a divine law."[29] To Bonhoeffer, being a Jewish Christian had nothing to do with one's biological or religious identity. Being a Jewish Christian meant that one valued the observance of a law as the most important aspect of their faith. Bonhoeffer later gives observance to racial purity as an example of this observance of law.[30] He argued that what made one a Jewish Christian was not a racial identity, but a changeable behavior—observance to a divine law. Bonhoeffer invoked law as a framework for defining what makes one a Jewish Christian, arguing that those who place utmost importance on law are Jewish Christians, whether they are ethnically Jewish or not.[31] This convoluted argument highlights the fluid nature of Bonhoeffer's view regarding Jewish identity since observance to law can change, as can law itself, but racial identity cannot change. Thus, Jewish identity, as understood through this legal framework, can change according to Bonhoeffer, causing one's belonging in the church to change.

Bonhoeffer also utilized a legal framework to demonstrate the extent to which a Christian community should tolerate outside versions of identity and belonging. Based upon his previous argument that a Jewish Christian was one which allowed observance to a divine law to determine church membership, Bonhoeffer argued that those who cannot tolerate racial differences in the church are observing a divine law.[32] He stated that these Jewish Christians, as defined by their observance to a divine law, separate themselves from church fellowship, and more broadly, the Christian community.[33] He applied the legal framework of Jewish identity to oust those who

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[27] Ibid., 227–228.
[28] Ibid., 221–229.
[29] Ibid., 227–228.
[30] Ibid., 228.
[31] Ibid.
[32] Ibid., 228–229.
[33] Ibid.

attempt to separate the church over racial differences or force others to separate. Bonhoeffer went as far as to question whether such separation would be a "tolerable schism."[34] Separation from the Christian church and Christian community entailed the end of one's belonging in the church until the church at large and the individual agreed upon the belief in question. Thus, Bonhoeffer adopted a legal framework of the idea of a Jewish Christian to convey the extent to which a Christian community should tolerate outside attempts to create distinct identities within the church and force separation. Bonhoeffer believed that those who value racial distinction in the church are the only people who believe that baptized Jews are not fully Christian and should be separated from the rest of the Protestant church. To him, one's ethnic identity as a Jewish person did not matter; they belonged in the church.

By employing both a religious and legal framework for defining Jews, Dietrich Bonhoeffer situated Protestants in the middle of the debate over identity and belonging occurring within Germany and argued that baptized Jews belonged in the Protestant church. While Bonhoeffer explicitly affirmed in the beginning of his essay that the church should neither criticize nor praise state affairs, his response to the April 1933 laws invoked Protestants to action.[35] He called Protestants to allow these baptized Jews continued participation in the church.[36] This framework and the reality that state law would dictate church membership placed Protestants within the discussion of what made one a Jewish Christian, what being Jewish meant, and who belonged in the church, demonstrating the central questions of identity and belonging being posed in Germany at that time. However, Bonhoeffer argued that the church, not the state, should dictate church membership. Bonhoeffer's response highlights that fact that he saw the question of identity as only relevant for the church, thus narrowing the scope of Protestants' involvement with answering questions of identity in their society.

Bonhoeffer's response to the Aryan paragraph demonstrates that he not only wanted Protestants to employ their own ideas about identity and thus, who belongs in the church, but also that ethnic identity should not matter more than religion. Bonhoeffer saw a baptized Jew's identity as hinging on their Christian identity, not their Jewish identity. However, as illustrated in the remaining Protestant responses, not all Protestants agreed with Bonhoeffer's conclusions about identity.

The Protestant Church of the Old Prussian Union
The second response evaluated originated from the Protestant Church of the Old Prussian Union whose alignment with Reich law and hesitancy to enforce absolute exclusion demonstrates Protestants seeking a tenuous alignment with the Nazi government. This response reveals that Protestants within the organization were struggling to offer an unmitigated answer to the question of who belonged in German society. The forerunner to the Protestant Church of the Old Prussian Union, called the Prussian Union of Churches, had been created by King Frederick William the III

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[34] Ibid., 229.
[35] Ibid., 222-223, 227.
[36] Ibid.

of Prussia in 1817 to unify previously separate Lutheran and Calvinist/Reformed churches, placing them under one governing body.[37] Under this governing body, they could legislate church law in their General Synod, which then applied to all churches within the organization. The Protestant Church of the Old Prussian Union's response to the Aryan paragraph culminated on September 6, 1933, when their General Synod enacted new church law which employed Nazi legal terminology and nationalistic sentiment to define a Jewish Christian and the boundaries of a Christian church.

The Protestant Church of the Old Prussian Union sought to replicate the laws of the Reich within the Protestant church through adopting Nazi legal terminology for Jews, demonstrating how they accepted Nazi law and sought to align with the Reich. The second provision of the first section of the laws established in the September 1933 General Synod stated that "anyone who is of non-Aryan descent or is married to a person of non-Aryan descent may not be appointed to serve as a clergyman or an official of the general Church administration."[38] The law further stated in section three that officials and clergy in the church of "non-Aryan descent" could be forced to retire.[39] While this provision does not explicitly define what a non-Aryan is, it bases its definition on the "provisions of the laws of the Reich."[40] This is a reference to the Aryan paragraph which defined non-Aryan as a biologically heritable identity.[41] The church organization clearly displayed how they accepted Nazi ideology within the Protestant church. To the Protestant Church of the Old Prussian Union, one's Jewish identity, as outlined by the Reich's non-Aryan definition, excluded one from participating in the church. Thus, the Protestant Church of the Old Prussian Union's use of Nazi legal terminology to define Jews demonstrates their whole-hearted adoption of Reich laws and their willingness to fall in step with Nazi ideas of Jewish identity.

Nationalistic sentiment expressed by the Protestant Church of the Old Prussian Union's church laws indirectly marked the definition of Jewishness as unpatriotic, further deepening the gap of belonging for Jews in the Protestant church and signaling the church organization's approval of the Reich. One provision for holding office within the church organization required candidates who "unreservedly [support] the national state," while another provision allowed clergy or officials in the church who "[provide] no guarantee that they unreservedly support the national state and the German Protestant Church at all times" could be forced to retire.[42] Loyalty to the state, and more specifically, the Reich, dictated acceptance in the church organization, illustrating again how the Protestant Church of the Old Prussian Union embraced the Reich. However, this show of solidarity to the Nazi government further added to their definition of Jewishness because it equated them with being non-nationalistic. The church organization could point any Jews who might protest this church law to Reich law, arguing that the origin of their protest lay with the Nazi

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[37] Kenneth G. Appold, "Lutheran-Reformed Relations: A Brief Historical Overview," *The Journal of Presbyterian History* 95, no. 2 (2017): 59.

[38] "Church law on the legal status of the clergy and Church officials, 6 September 1933," in *The Persecution and Murder of the European Jews by Nazi Germany, 1933-1945,* Vol. 1: *German Reich 1933-1937,* ed. Wolf Gruner and Caroline Pearce (Munich: De Gruyter, 2019), 261.

[39] Ibid.

[40] Ibid.

[41] "First Regulation on the Implementation of the Law for the Restoration of the Professional Civil Service," 155.

[42] Ibid.

government. The protest of church law would be protesting the government's law. Thus, any protest of the church's law would be unpatriotic and non-nationalistic, according to this line of thought. Because the church law stipulated that church officials must always prove their support of the national state, this doubly disenfranchised the Jews within the Protestant church and excluded them from the Protestant Church of the Old Prussian Union. Therefore, the nationalistic sentiment expressed in the church laws of the Protestant Church of the Old Prussian Union not only demonstrated their approval of the Nazi state, but also added another layer of exclusion for Jews.

Even with their show of solidarity to the Reich, the Protestant Church of the Old Prussian Union hesitated to enforce absolute exclusion of the Jews from their churches, demonstrating how uncertain they remained about their answer to societal questions of identity and belonging. The September 1933 church laws established by the General Synod contained exceptions to their exclusion of baptized Jews. One stated that those who had rendered "special services...to the development of the Church in the German spirit" could be excluded from the previous provisions against baptized Jews.[43] Another allowed exclusion for those who had served in the church since August 1, 1914—the beginning of World War I—served on the front in World War I, or had family killed in action during that war.[44] This regard for service to the church and state, while hardly comforting for laws that were antisemitic in nature, demonstrates a slight hesitancy to enforce an absolute policy against the Jews. This hesitancy is more pronounced in section twelve of the laws, which allowed "higher remuneration or temporary allowance" to be granted "should undue hardship result from the implications of this law."[45] The existence of this section of the law demonstrates that the church organization foresaw undue hardships with the implementation of the church law and remained uncertain of the extent to which they wanted to implement the law. Even in their desire to align with the Reich, the Protestant Church of the Old Prussian Union hesitated to implement absolute exclusion of Jews, hinting at an internal ambivalence which rendered their answers to the questions of identity and belonging both antisemitic and uncertain.

The Protestant Church of the Old Prussian Union's alignment to the Reich and their hesitancy to enforce absolute exclusion of baptized Jews in their response to the Aryan paragraph highlights how they both accepted the Nazi government and struggled to assert an unmitigated response to who belonged in German society. Their exclusion of the Jews from unhindered participation in the church stemmed from their adoption of Reich legal terminology and demonstrates their alignment with the Nazi government. The church organization expressed nationalistic sentiments in the church law and thereby doubly excluded baptized Jews by implying their supposed lack of patriotism. The church organization demonstrated their uncertainty to establish absolute exclusion of the Jews from the Protestant church in their laws as well. This uncertainty hints at an uneasiness with their antisemitic measures, and by extension, their answer to larger questions of identity and belonging. The Protestant Church of the Old Prussian Union

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[43] Ibid.
[44] Ibid., 261.
[45] Ibid., 262.

conveyed both their acceptance of the Nazi government and their hesitancy to establish absolute exclusion in their response to the Aryan paragraph, revealing both a tenuous alignment with the Reich and their lack of a definite answer of who belonged in German society.

Unlike Dietrich Bonhoeffer's conclusions that one's religious identity mattered more than one's ethnic identity, the Protestant Church of the Old Prussian Union demonstrated their acceptance of a heritable, ethnic identity for baptized Jews. Not only do these two responses demonstrate a different basis for identity, but they also imply two different courses of action based on those identities. Between April and September of 1933, Protestants' different ideas about identity began to emerge which would inform their ideas about who belonged in their churches. Thus, the different ideas between Protestants about which identity mattered more—a Christian identity or a Jewish identity—begin to reveal their inability to sponsor a unified answer to questions of identity and belonging. These differences would further manifest themselves in the following responses.

The Faculty of Theology at the University of Marburg

The third response to the Aryan paragraph came from the faculty of theology at the University of Marburg. They voiced their opposition to the paragraph and firmly declare the oneness of the church, but the theological framing of their response and their refutation of reasons for excluding the Jews demonstrates that Protestants were both deeply fractured on this point and unprepared to provide a unified answer. The faculty's opinion came as a response to one clergy in Marburg—a man named Gottfried Schmidmann—who petitioning them for a "formal and responsible instruction" regarding the compatibility of the Aryan paragraph in the church.[46] The petition specifically noted the laws issued from the General Synod of the Protestant Church of the Old Prussian Union.[47] The faculty's response, issued September 20, 1933, centers on the incompatible nature of the paragraph with true Christian faith, the infringement of rights for church clergy and officials as defined by what it means to be a Jew and the extent of a Christian community, and the oneness of the church. Their response illustrates how they redefined Jewish identity and saw baptized Jews as belonging within the church.

Central to the faculty of theology's response to the Aryan paragraph, as expressed by the General Synod of the Protestant Church of the Old Prussian Union, were statements of the laws' incompatible nature with a Christian faith, demonstrating their theological opposition to the paragraph and the limited scope of this opposition. The faculty saw the laws from the General Synod as inconsistent with the Scripture's authority, the gospel, and the creeds of the Reformation.[48] They drew upon church history and the contemporary concordat with the Catholic church to challenge the laws' compatibility with the church.[49] They resisted what they termed the "politicization of the spiritual" as they viewed the origins of the laws as a political preference of

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[46] "The Aryan Paragraph in the Church. Expert opinion of the Faculty of Theology at the University of Marburg," in *The Persecution and Murder of the European Jews by Nazi Germany, 1933-1945,* Vol. 1: *German Reich 1933-1937,* ed. Wolf Gruner and Caroline Pearce (Munich: De Gruyter, 2019), 272.

[47] Ibid.

[48] Ibid., 273–276.

[49] Ibid.

higher ups and church groups.[50] The faculty of theology challenged the application of the Aryan paragraph within the Protestant church, but their framing of this challenge in terms of the paragraph's ideological nature versus the nature of the Christian faith demonstrates that they viewed the problem within the church's realm. This framing of the question aligns with Dietrich Bonhoeffer's framing because both the faculty and Bonhoeffer saw the issue through the lens of the church, and thus, as a church problem. This framing is also significant because it assumed that other church bodies, and the Protestant Church of the Old Prussian Union more specifically, bought in ideas of the political, and that challenging this politicization would solve the problem of the Aryan paragraph for the Protestant church. While this view may contain truth, it displays that the faculty situated their answer only as far as it concerned the Protestant church. Thus, the faculty's statements regarding the incompatible nature of the Aryan paragraph for the Protestant church both provided a definite response to the paragraph and limited the scope of their opposition.

The faculty at Marburg focused on the infringement of rights for church clergy and officials in their response by defining Jewishness and reaffirming Jews' place within the Protestant church, confirming their version of identity and belonging. The faculty claimed that the Aryan paragraph, as applied by the Protestant Church of the Old Prussian Union, jeopardized the independence of the clergy, an independence they linked to God's word.[51] By implication, those who jeopardized the independence of the clergy risked disobeying God's word, demonstrating again their view that the paragraph and Christian faith were incompatible. This infringement on the right to independence was later extended to the right to equality as the faculty focus more squarely upon the exclusion of baptized Jews from the Protestant church and the oneness of the church. They stated that church members are "brothers among themselves" and argued that the definition of Jew must be understood in their lack of acknowledging Jesus as the Messiah, and not race.[52] This thinking mirrored Bonhoeffer's response to the Aryan paragraph, in that they no longer considered a person Jewish once they converted to Christianity.[53] However, unlike Bonhoeffer, the faculty stated plainly that a Christian community was "a community of those who believe in Christ and are baptized in his name, and nothing more."[54] Infringing upon the rights of baptized Jews within the Protestant church was not a matter of race, the faculty argued, but an infringement on the rights of the church since Jews were considered a part of the Christian community. This framing of both the definition of a Jew and the Christian community reaffirmed baptized Jews' place in the Protestant church and emphasizes their version of belonging and identity.

The faculty of theology at the University of Marburg also refuted some of the arguments for excluding Jews from the Protestant church, but their need to address these arguments testifies that Protestants were deeply fractured on this point and could not come to a consensus on the matter. In addressing the argument that Christian oneness applied to the church invisible rather than visible, the faculty demonstrate that some Protestants viewed Jews within the church as a

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[50] Ibid., 274.
[51] Ibid.
[52] Ibid., 274–275.
[53] Ibid., 275.
[54] Ibid.

weakness which must be separated from the rest of the church.[55] By addressing the argument that race and national character followed the "orders of creation," they display that Protestants viewed these factors as unchangeable differences that had been created by God.[56] By disputing examples of church communities outside of Europe that restricted membership based on race, the faculty indicated that Protestants saw other forms of segregation as justification for excluding the Jews from the Protestant church in Germany.[57] Thus, the very act of disputing reasons for excluding the Jews asserts that Protestants held diverse views on the issue. The diversity of these views indicates that Protestants were not able to offer a unified response to the issue of baptized Jews belonging in the church. Thus, Protestants would not be able or prepared to offer a unified response to questions of identity and belonging posed by German society at large.

The response from the faculty of theology regarding the Aryan paragraph indicates their opposition to the exclusion of the Jews from the Protestant church and their belief in the oneness of the church. However, the theological framing of their response and their refutation of pro-exclusion arguments displays how fractured Protestant responses were to the issue and how unprepared they were to offer a unified response. The faculty focused on the incompatible nature of the Aryan paragraph to a Christian faith, demonstrating their theological opposition to the paragraph and the limited scope of that opposition. The faculty argued against the infringement of clergies' and church officials' rights by defining what a baptized Jew was and reaffirming their place within the Protestant church, thereby confirming their version of identity and belonging. The faculty at the University of Marburg also refuted some pro-exclusion arguments, but the exigency of addressing these arguments testifies that Protestants were fractured on questions of identity and belonging both within the Protestant church and in German society.

The response generated by the faculty of theology at the University of Marburg demonstrates the further disunity among Protestants about how to define the identity and belonging of baptized Jews. Their response agreed with Dietrich Bonhoeffer's overall conclusions about identity and they advocated that baptized Jews remain in Protestant churches. Unlike Bonhoeffer, however, the basis of their argument stemmed from a political and theological stance which limited the scope of the questions about identity and belonging to political and theological bodies. Both the faculty and Bonhoeffer hesitated to apply their conclusions about identity and belonging outside the church. Thus, not only did Protestants struggle to provide a unified answer to the identity of baptized Jews, but their responses also demonstrate an uneasiness to extent their ideas beyond the church. To complicate their disunity, the German Christian Movement's outspokenness about definitions of identity and belonging complete the picture of the Protestant church.

The German Christian Movement
The fourth and final response to the Aryan paragraph examined in this thesis comes from the German Christian movement which unequivocally called for the exclusion of baptized Jews from

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[55] Ibid., 275.
[56] Ibid.
[57] Ibid., 276.

the Protestant church. Those within the movement drew from Nazi ideas of struggle and supposed Jewish foreignness to shape their views on Jewish identity and Christian belonging. The German Christian movement grew out of the fusion between Christianity and National Socialist ideology and sought to rid Christianity of Jewish influence and create a strong Reich church.[58] Members of the German Christian movement issued a response to the Aryan paragraph on November 13, 1933, in which they formed a resolution to implement the paragraph within their churches. They saw themselves engaged in a struggle for a new Reich church, displaying their alignment with the Nazi government and their frustration with other Protestants who had hesitated to implement the Aryan paragraph fully. They viewed Jews as foreigners, reenforcing their call for their exclusion and leaving ambiguity in their definition to justify further antisemitic measures against Jews. Their response demonstrates that they did not accept baptized Jews in their ideas of Christian community.

The German Christians seized the ideology of National Socialism, also known as Nazism, and saw themselves as champions of the Reich and its Aryan paragraph, displaying their enthusiastic alignment with the Nazi government and their frustration with other Protestants who had hesitated to implement the Aryan paragraph. They identified themselves as "National Socialist fighters" who were employed in shaping a new German church.[59] They claimed that only by removing or transferring pastors who hesitated to "play a leading role in the religious renewal of our people" could a lasting peace ensue for the Protestant church in Germany.[60] The German Christians saw it as their duty to implement the Aryan paragraph "immediately and without watering it down," implying other Protestants' wavering commitment to enforce the paragraph fully.[61] They painted their campaign for the implementation of the paragraph as a struggle to remove mistrust between the community and the church.[62] They viewed the paragraph not as an infringement of rights, but as a way to create the church for which they longed.[63] Thus, the language they appropriated from the Nazis indicates not only their alignment with them, but also their frustration with other Protestants who did not share their sentiments. This means that Protestant responses to the Aryan paragraph were by no means equal and their answers to questions of who belonged were fractured.

The German Christians' response employed ideas of supposed Jewish foreignness which both enforced their call for the exclusion of Jewish converts to Christianity from the Protestant church, and left ambiguity in their definition of a Jewish identity for further antisemitic actions. The German Christians saw Jews as "foreign blood" and desired that "un-German" influences be eliminated from their churches, advocating instead for a separate Jewish Christian church.[64]

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[58] Doris L. Bergen, *Twisted Cross: The German Christian Movement in the Third Reich* (Chapel Hill: University of North Carolina Press, 1996), 18–26.
[59] "Resolution of the 'German Christians'," in *The Persecution and Murder of the European Jews by Nazi Germany, 1933-1945*, Vol. 1: *German Reich 1933-1937*, ed. Wolf Gruner and Caroline Pearce (Munich: De Gruyter, 2019), 290.
[60] Ibid.
[61] Ibid.
[62] Ibid.
[63] Ibid.
[64] Ibid., 291.

Christianity's tie to the Judaic Old Testament and law was deemed an "Oriental distortion," which further demonstrates the German Christians' unashamed alignment with the Nazi government and their adoption of Nazi ideology to justify their disenfranchisement of baptized Jews.[65] By painting Jews as foreigners, the German Christian movement implied that Jews were not only different, but also not deserving of German rights. Not having rights in one's own society left baptized Jews exposed to the whims of an antisemitic government. The German Christians clearly did not extend belonging to baptized Jews within the movement. This strongly suggests their wish to exclude everyone of Jewish ethnicity, whether baptized or not, as they believed in a Jew-free German society. Thus, employing language that targeted Jews as foreigners enforced the German Christian movement's exclusion of all Jews, baptized or not, and left room for further antisemitic action against Jews.

The German Christian movement utilized ideas of struggle and supposed Jewish foreignness to inform their views on Jewish identity and Christian belonging, and in the process, called for the full implementation of the Aryan paragraph. They viewed their campaign for the full implementation of the Aryan paragraph in their churches as a struggle for creating a Reich church, displaying their alignment with the Reich and their frustration with other Protestants who did not share their enthusiasm or total commitment to the whole Aryan paragraph. The German Christian movement defined Jews as foreigners who should be excluded from their churches because they believed Jews were not German enough. The German Christian movement valued this German identity more than a shared Christian identity. This definition left ambiguity for further antisemitic measures again Jews and demonstrated the movement's belief that baptized Jews did not warrant support or protection in German society. Baptized Jews did not belong in their ideas of Christian community, displaying a trend towards the exclusion of all Jews within German society.

The German Christian Movement completes the picture of disunity and difference among Protestants in their definitions of Christian Jews. While the Protestant Church of the Old Prussian Union and the German Christian Movement both called for the removal of baptized Jews from their churches, their definitions of what made one a Jewish Christian employed different emphasis on what being a Jewish person meant. For the German Christians and the Protestant Church of the Old Prussian Union, one's Jewish identity meant that one was not fully a Christian while Bonhoeffer and the faculty of theology believed that one's Christian identity mattered more than one's Jewish identity. These opposing ideas about the identity of baptized Jews meant that the Protestants disagreed on whether they belonged in the church. Their disagreement stagnated into inaction. Thus, Protestants displayed their inability to answer the question of identity and belonging as it related to their own churches, and thus, were unprepared to answer the questions of belonging and identity more broadly within their society.

Conclusion
By exploring four Protestant responses to the Aryan paragraph that were authored in 1933 and evaluating the language employed within these responses, this thesis explains how Protestants and

[65] Ibid.

Protestant groups defined what a Jewish Christian was, what it meant to be Jewish, and the extent to which they included baptized Jews in their ideas of Christian community. This contribution to scholarship is significant because instead of debating the differences between these responses as scholars customarily do, the emphasis here lies on how the Protestant church tried to frame what it meant to be both Christian and Jewish and how that identity fit within their Christian community. Protestants like Dietrich Bonhoeffer viewed the question of whether a baptized Jew belongs in the Protestant church as a religious problem that could be solved with a correct understanding of a Jewish Christian identity. Bonhoeffer believed that one's Jewish identity did not matter once they were Christians and thus, baptized Jews belonged in the Protestant church. The faculty of theology at the University of Marburg concurred with Bonhoeffer that baptized Jews were Christians and that they should belong in the Protestant church. However, both Bonhoeffer and the faculty framed their responses only as it related to the church, and thus, did not account for larger questions of identity within their society. The Protestant Church of the Old Prussian Union's use of Nazi terminology and nationalistic sentiment made evident their alignment with the Reich and their decision to exclude baptized Jews. They believed that one's Jewish identity trumped all else, overlooking their Christian identity. However, lurking in their response remained a hesitancy to enforce the Aryan paragraph for all baptized Jews as they created exceptions for war veterans or those involved in World War I. The German Christian movement displayed none of the hesitancy of the Protestant Church of the Old Prussian Union in calling for the exclusion and separation of all baptized Jews from Protestant churches. The German Christians also did not hesitate to employ ideas of struggling for a Reich church and supposed Jewish foreignness to inform the extent of their Christian community. For the German Christians, one's Jewish identity meant that one was not fully a Christian.

Central to all these responses is how they viewed baptized Jews, and more importantly, how unprepared they were to answer larger questions of identity and belonging. The identity of baptized Jews as both Jews and Christians placed them within the dialogue of Protestants, but Protestants could not mutually agree on which identity—Jewish or Christian—mattered more for them. These responses further point out that Protestants could not conceive of a hybrid identity where baptized Jews could be both Christian and Jewish without cancelling out one component or another. Protestants were unprepared to view all baptized Jews as full members of their churches and, likewise, were unprepared to offer any protection to these baptized Jews from an antisemitic regime. Being a Christian did not guarantee that Protestants would offer protection from a government that instituted the death of millions. Because Protestants could not formulate a unified answer to the question of what makes one a Jewish Christian—a baptized Jew—they could not formulate a unified response to the persecution and exclusion of these people from their own churches.

However, Germans were not only questioning the identity of baptized Jews, but also the identity other groups of people such as Jews more broadly, Roma, and homosexuals, among others. Germans in 1933 were forming conclusions about who belonged in German society. Protestants' lack of a unified response of whether a baptized Jew was a Christian and whether they belonged

in the Protestant church demonstrates just how deeply debated and misunderstood these questions of identity and belonging were. Yet, the danger of providing no unified answer allowed the ambiguity of the issues to stagnate into inaction. Inaction bred Protestants' allowance for further restrictive measures in the Third Reich and later, further discrimination, persecution, and finally, genocide.

The four Protestant responses to the Aryan paragraph display the need to be prepared first to identify those targeted by antisemitism and ethnic and religious hate of any kind, and then to include and protect those people. Protestants at large in the Third Reich failed to identify baptized Jews as Christians, let alone continue to include and protect them. Failing to view baptized Jews as fully Christian, or fully Christian and fully Jewish, needlessly exposed them to the injustice and hatred of Nazi Germany. Identity, sometimes even perceived identity, informed the extent to which these people belonged. Thus, being prepared to answer questions of identity and belonging matter. Clear in these responses to the Aryan paragraph is the need to be prepared to answer these questions. Clear is the need to maintain religious unity, to view all people as people, and to treat all ethnicities as equal. Only in a firm preparation to send a unified response against antisemitism and other hatred and stand with those targeted for discrimination and persecution can these evils be checked.

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