

UNVEILING MICROAGGRESSIONS ON CAMPUS: LGBTQ COLLEGE STUDENTS' PERSPECTIVES AND RESPONSES

By

Haiden Hice

July, 2024

Director of Thesis: Mary Cate Komoski, Ph.D.

Major Department: Human Development and Family Science

Previous research has emphasized how addressing microaggressions on college campuses significantly impacts individuals' collegiate experiences, highlighting the negative effects these microaggressions have on mental health. There is a notable gap in understanding how these factors intersect specifically for LGBTQ college students. This study seeks to bridge this gap, guided by Minority Stress Theory (Meyer, 2003) and the Students with Minority Identities in Campus Contexts Model (Vaccaro, 2015), by exploring LGBTQ microaggressions and campus climate perception, investigating their influence on stress, depression, and anxiety levels among LGBTQ students. The findings suggest there is a relationship between negative campus climate perceptions and mental health issues, in addition to experiencing harmful microaggressions, which is indicative of a persistent challenge for LGBTQ students within collegiate environments. Our study aligns with existing literature, emphasizing the need for college officials to prioritize measures aimed at mitigating microaggressions to foster inclusive and supportive campus environments.

UNVEILING MICROAGGRESSIONS ON CAMPUS: LGBTQ COLLEGE STUDENTS'
PERSPECTIVES AND RESPONSES

A Thesis

Presented to the Faculty of the Department of Human Development and Family Science

East Carolina University

In Partial Fulfillment of the Requirements for the Degree
Master of Science in Human Development & Family Science

By

Haiden Hice

July, 2024

Director of Thesis: Mary Cate Komoski, Ph.D.

Thesis Committee Members:

Eboni Baugh, Ph.D.

Courtney Baker, Ph.D.

© Haiden Hice, 2024

ACKNOWLEDGMENTS

I would like to express my sincere gratitude to my advisor, Dr. Mary Cate Komoski. Your invaluable support, expert guidance, and insightful feedback have not only shaped the direction of this study but have also enriched my academic growth and development. Your dedication to excellence and passion for mentorship have served as a constant source of inspiration, motivating me to strive for excellence in my work. I am so fortunate to have had the opportunity to learn from your expertise and am profoundly thankful for your contributions to this project and my own personal academic journey as I go to the next stage of my life. I truly am going to miss our time together.

I am also deeply thankful to my committee members, Dr. Eboni Baugh, and Dr. Courtney Baker, for their expertise and encouragement. Their mentorship has been instrumental in shaping the direction and depth of this research, and I am truly thankful for their dedication to my academic growth and success.

I am immensely thankful to the entire ECU HDFS department for their support and resources, which have been instrumental in facilitating this research over the past two years as I continued my education in graduate school. I will forever miss ECU and the guidance I received from everyone.

A special acknowledgment goes to my best friend Wren Holbrook, whose encouragement, empathy, and unwavering belief in me have been a source of strength and inspiration.

Lastly, I extend my heartfelt appreciation to my family for their unconditional love, encouragement, and understanding throughout these endeavors.

TABLE OF CONTENTS

TITLE PAGE.....	i
COPYRIGHT.....	ii
ACKNOWLEDGMENTS	iii
LIST OF TABLES.....	vi
CHAPTER 1: INTRODUCTION.....	1
CHAPTER 2: LITERATURE REVIEW.....	4
Categories of LGBTQ Microaggressions.....	4
Response to LGBTQ Microaggressions.....	9
Impact to LGBTQ Microaggressions.....	10
Campus Climate	13
LGBTQ Campus Climate	15
Theory.....	19
CHAPTER 3: METHODOLOGY.....	23
Research Questions and Hypotheses	23
Procedures	24
Measures	24
Demographic Data	24
Depression Anxiety Stress Scale-21	26
Microaggressions Scales	26
Assessment for Campus Climate for LGBT Persons	27
CHAPTER 4: RESULTS	31
CHAPTER 5: DISCUSSION	49
Implications	53
Future Directions	55
Limitations	56
Conclusion.....	57

REFERENCES	58
APPENDIX A: IRB Approval Form	70
APPENDIX B: Sexual Orientation Microaggressions Scale	72
APPENDIX C: Gender Identity Microaggressions Scale	76
APPENDIX D: Assessment for Campus Climate for LGBT Persons	79
APPENDIX E: Depression Anxiety Stress Scale-21.....	82

LIST OF TABLES

1. Descriptive Analysis of Data	31
2. University Location	33
3. Demographics	33
4. Student Classification	33
5. Sexuality and Gender	34
6. Harassment Type, Location, and Source	36
7. Linear Regression Models for SOMS and GIMS Predicting Depression	38
8. Linear Regression Models for SOMS and GIMS Predicting Anxiety	36
9. Linear Regression Models for SOMS and GIMS Predicting Stress	40
10. Linear Regression Models for SOMS and GIMS Predicting Beliefs.....	41
11. Linear Regression Models for SOMS and GIMS Predicating Responses.....	43
12. Linear Regression Models for SOMS and GIMS Predicating Feelings.....	44
13. Correlations.....	45

CHAPTER 1: INTRODUCTION

Emerging adulthood, the developmental period during which many attend college, is generally regarded as a unique time in an individual's lifespan (Arnett, 2000). This period is crucial for individuals to develop their sense of personal identity and understand how they can contribute as members of society (Hoare, 2002). According to Erikson (1968), developing one's identity allows individuals to have a "sense of well-being, a sense of being at home in one's body, a sense of direction in one's life, and a sense of mattering to those who count" (Erikson, 1968, as cited in Sokol, 2009, p. 142). Within our understanding of emerging adulthood, it is vital to acknowledge the unique, persistent struggles of minority emerging adults, including the Lesbian, Gay, Bisexual Transgender, and Queer (LGBTQ) community. In a society where progress is being made, there are still ongoing challenges they face, both in terms of legal and personal discrimination, impacting their well-being and sense of belonging.

Minority individuals, including LGBTQ individuals, have experienced criminalization, discrimination, and victimization for many decades. Homosexual acts were illegal in the United States until 2003 (Weinmeyer, 2014). The American Psychiatric Association viewed homosexuality as a mental disorder until 1973 (Nadal, 2023). As time goes on, the (LGBTQ) community has dealt with an increasing amount of hostility and an unwelcoming political climate. According to the Human Rights Campaign (n.d.), in 2022, 315 anti-equality bills were introduced in state legislatures in the United States and 29 were signed into law. 2023 was one of the worst years for LGBTQ equality with 496 anti-LGBTQ bills in the U.S. currently introduced and 84 of them passed into law (ACLU, 2023). This anti-queer rhetoric does not stop with policies and laws. Over 70% of queer individuals have experienced a multitude of hurtful,

discriminatory words and actions in their immediate and personal lives (Casey et al., 2019; GLAAD, 2023).

College attendance has grown to over 33% in the past century with a growing number of emerging adults enrolled in colleges and universities nationwide (Hanson, 2022). The college provides a distinct environment during this period of life where individuals can explore their own identity, gain independence, engage in personal growth opportunities, navigate academic challenges, and participate in fun social experiences. College is often a transformative experience that can shape various aspects of one's identity, skills, and perspectives. For LGBTQ individuals, college often allows them the freedom and support to explore their sexual orientation and gender identity more openly (Garvey & Rankin, 2015). However, this experience is not universal, as some may have highly positive and affirming experiences, while others may face microaggressions, hostility, discrimination, and challenges (Garvey & Rankin, 2015).

Dealing with microaggressions on campus can influence an individual's collegiate experiences as well, negatively impacting their comfort level within the classroom (Crane et al., 2022), limiting future career aspirations (Kulick et al., 2017), and lower social acceptance and student engagement (Woodford & Kulick, 2015). One study by Gnan et al. (2019) found that colleges where LGBTQ issues were constantly being ignored and disrespected were significantly associated with having a mental health problem. Garvey et al. (2018) found that students with poorer campus climate comfort had significantly lower reports of academic success. Therefore, it is crucial for colleges to address and reduce these microaggressions which can help create safer and more affirming environments for all individuals, regardless of their sexual orientation or gender identity.

Looking at previous literature, there is a significant gap in which all of these factors come together to provide a holistic understanding of the intersection of LGBTQ microaggressions and campus climate. Using Minority Stress Theory (Meyer, 2003) and Students with Minority Identities in Campus Contexts Model (Vaccaro et al., 2015) as a guide, the purpose of the following quantitative study is to explore experiences of LGBTQ microaggressions and individual campus climate perception while understanding how both influence one's stress, depression, and/or anxiety levels. Given this information, the present study seeks to explore whether microaggressions on college campuses would result in higher levels of depression, anxiety, and stress among LGBTQ students. Second, we attempt to understand if microaggressions on college campuses influence the perception of the college climate among LGBTQ students. Third, we explored the relationship between the perception of campus climate and the levels of depression, anxiety, and stress experienced by LGBTQ students.

CHAPTER 2: LITERATURE REVIEW

Harvard psychiatrist and professor, Dr. Chester Pierce first used the term “microaggression” to highlight the discrimination felt by Black Americans in the 1970s (Solorzano et al., 2000). The term became more popular in contemporary social science research in 2007 when Dr. Derald Wing Sue and colleagues began to research racial microaggressions. Microaggressions are defined as subtle, indirect, or unintentional acts of discrimination or bias directed toward individuals based on their membership in a marginalized group (Sue et al, 2007). Thomas and Skowronski (2019) added two more parts to this definition:

“(1) the discrimination is perceived (by the recipient, and perhaps by an audience) to denigrate the minority group or its members via perceived negative messages conveyed by interpersonal communications or interpersonal behavior and (2) this perception then produces some form of negative reaction in the recipient” (p. 46).

The definition of microaggressions has evolved over the years as scholars research microaggressions in various marginalized communities. Contemporary research on microaggressions has expanded to include a multitude of marginalized identities that have experienced microaggressions. Examples have included LGBTQ people, people of color, people with disabilities, and/or religious minorities.

Categories of Microaggressions

Sue et al.’s (2007) work to define racial microaggressions resulted in 3 categories: assaults, insults, and invalidations. These can be verbal, nonverbal, or environmental microaggressions. Microassaults are explicit and intentional acts, comments, or behaviors that are discriminatory and offensive to target a victim. Microinsults are used to dismiss, belittle, or invalidate the person or their identity. They are used to convey rudeness, insensitivity, or

disregard for a person's identity, experiences, or background. Microinvalidations refer to subtle, often unconscious actions or comments that negate, dismiss, or invalidate the experiences, identities, and feelings of marginalized individuals or groups.

Sue (2010) believed that microaggressions are manifestations of societal perceptions of marginalized groups, acting as virtual reflections of hate and prejudice. Microaggressions typically arise at the interpersonal level, forming from an individual's own beliefs and attitudes (Sue & Spanierman, 2020). They also are context-specific (Williams, 2020). For example, suppose someone asks, "When are you planning to start a family?" One person might believe that this seemingly innocent question was just someone's genuine curiosity. Someone else might argue that this question not only invades personal space and assumes that they want to share their family planning details. It can also cause significant harm to individuals who are unable to conceive a child naturally, or to those who feel pressured to expand their family by adding a baby, despite being satisfied with their current family situation.

Microaggressive actions and comments can be shown from individuals who are explicitly trying to show harm, but they can also arise from people who don't intend harm to the individual. These unintentionally harmful comments may stem from their own unconscious bias and prejudices (Thomas & Skowronski, 2019). Other examples of microaggressions are often deeply rooted in stereotypes and prejudices. For example, a person talking about a coworker states, "He's so old-fashioned; he probably won't understand the latest technology". The person might have not meant any harm by this comment, but it still is derived from an age-related bias, assuming that older individuals are not capable of adapting to or understanding modern technology. Because of this unintentional harm, microaggressions are typically labeled differently than some actions/comments that explicitly say or do harmful things. The idea of

microaggressions exists because of this unintentional harm. Whether individuals realize it or not, their implicit bias can lead to hurtful comments or reactions even if they very much want to be an open-minded and accepting person.

Williams (2020) brought to attention the overlap and the difference between microaggressions and everyday discrimination. They argued that everyday discrimination often does not take into consideration the “social exclusion or environmental assaults” (pg.7) of those marginalized individuals. Thomas and Skowronski (2019) proposed that the definition of microaggression be changed to only label it as such if the action/comment can be “linked to stereotypes or prejudice” (p. 51). With this caveat, it can be difficult to measure microaggressions as it relies on the individual’s perception of the microaggressive act. Does the recipient believe that the comment comes from stereotypes or prejudice? Do they actually perceive the comment to be negative? Do they actually perceive the comment to be a microaggression? Because of this self-report aspect, it is also extremely difficult to determine the direction of the casualty between the prejudice and microaggression. It can be difficult to understand reports of microaggression from the microaggression itself or its symptoms from other forms of discrimination (Thomas & Skowronski, 2019).

Macroaggressions

While environmental microaggressions were part of Sue et al.’s (2007) original taxonomy, further research has expanded it to become its own category called environmental macroaggressions. Environmental microaggressions are interchangeably labeled as macroaggressions. This upgrade in language was due to the fact many environmental microaggressions are the direct result of years of “institutional & societal policies and practices” (pg. 37), not as a result of one specific person’s comment or actions (Sue & Spanierman, 2020).

The prefix “micro” has been the source of many critiques of microaggressions. A widely known critic of microaggressions, Scott Lilienfeld (2017), believed that the prefix “micro” in microaggression held the assumption that it is “barely visible or at least challenging to detect” (p. 158). Microaggressions are focused more on the individual and were written to contrast macroaggressions. While they overlap, both terms are very different. Macroaggressions are often aimed at entire groups of people (Sue, et al., 2020). Macroaggressions, as defined by Osanloo et al., (2016), are more at the structural level and are the discrimination actions or words towards certain individuals or groups. They also argue that macroaggressions are “purposeful, deliberate, and blatantly damaging acts that make an impact at the individual level” (pg. 7). Therefore, it is essential to separate microaggressions from macroaggressions. To avoid confusion, in this article, we will be using macroaggressions as a way to understand environment microaggression.

LGBTQ Microaggressions

Using their own lived experiences as LGBTQ individuals, Dr. Kevin Nadal with two doctoral students, Drs. David Rivera & Melissa Corpus (2010), are credited with creating the microaggression taxonomy of examples specifically for categorizing and understanding LGBTQ microaggressions. This taxonomy was developed using previous literature on racial microaggression and the researcher’s own lived experiences as an LGBTQ individual. The eight original categories are defined as:

1. Use of heterosexist or transphobic terminology (e.g., shouting common slurs or sayings)
2. Endorsement of heteronormative or gender-normative culture and behaviors (e.g., only having gendered bathrooms on campus)

3. Assumption of universal LGBTQ experience (e.g., All lesbians dress masculine and have short, buzzed hair, all gay men are effeminate and flamboyant)
4. Exoticization (e.g., assuming all LGBTQ people just want to have sex)
5. Discomfort/disproval of LGBTQ experience (e.g., telling LGBTQ people that they aren't welcome here.)
6. Denial of the reality of heterosexism or transphobia (e.g., telling LGBTQ people to calm down and dismissing their feelings.)
7. Assumption of sexual pathology/abnormality (e.g., Trans people are child molesters, LGBTQ people are trying to indoctrinate children)
8. Denial of individual heterosexism (e.g., I am not homophobic, my friend/coworker is gay)

Similarly, to what Dr. Derald Sue and colleagues (2007) did with their research on microaggressions, as they used the original three types of microaggression (assaults, insults, and invalidations) to include both interpersonal and environmental microaggressions, Nadal et al. (2012) expanded their original taxonomy to separate out environmental microaggression as its own category. To achieve this, Nadal et al. (2012) conducted a study group with trans individuals and as a result, added extra categories to further capture LGBTQ microaggressions. They added the following categories: “denial of bodily privacy,” “familial microaggressions,” and “systemic and environmental microaggressions” (p. 64). The researchers also decided to further elaborate on the environmental microaggressions category by subdividing it further: (1) only having binary public restrooms, (2) the criminal legal system, (3) health care, and (4) government-issued identification. This led to a total of 12 categories created by Nadal and his research team.

Response to Microaggressions

The response to microaggressions is unique to each individual and experience. No two microaggressions and the individual response are the same. Documented cases of microaggressions may be severely underreported due to the perceived repercussions of opening up. The emotional turmoil of microaggressions may be revisited when retelling the story which may lead to emotions like shame, guilt, embarrassment, and fear (Nadal, 2023). In the context of LGBTQ microaggressions, reporting the microaggression might reveal information about their identity that the individual wants to keep private.

Response by the Individual

Nadal et al. (2011) described three aspects of the reaction in response to microaggressions: behavioral reactions, cognitive reactions, and emotional reactions. The behavioral response to microaggression is context-specific but generally is based on four categories (Nadal, 2023): addressing and confronting the individual, ignoring them completely and walking away, a combination of both by picking your battles by only confronting the individual if deemed worth it, and, lastly, educating the person on why the microaggression was hurtful and how to improve for next time. Cognitive reactions include two areas: resilience and confirmation. Many participants reported that experiencing a microaggression made them feel stronger personally and in their LGBTQ identity (Nadal et al., 2011). For some, it had the opposite effect-- it made them want to conform to the harsh things people said for their own safety. Finally, there was a wide range of emotional reactions but mostly negative. Many students reported feelings of “discomfort and lack of safety, anger and frustration, sadness, embarrassment and shame, and effects on mental health” (pg. 30).

Response by the Institutions

It is important to understand the implications of social power when it comes to LGBTQ individuals and their response to microaggressions. The microaggression may come from a person from a higher power over the individual and, if reported, there may be fear of being retaliated against. Munro (2019) briefly discusses the implications of this social hierarchy that can be created from privilege. For example, anyone who benefits from heterosexual and cisgender privilege has power over LGBTQ individuals in their everyday lives and environment. These privileges are often unearned and come from the societal norms that prioritize and favor heterosexuality and cisgender identity. Heterosexual and cisgender identities are often more readily accepted within societal norms. Individuals who deviate from these norms may face microaggressions, discrimination, stigma, or prejudice. This societal acceptance can impact various aspects of life, from family relationships to professional opportunities.

Impact of Microaggressions

Such actions or comments may seem minor on the surface, but they can have a significant impact on the well-being and sense of belonging of those who experience them. Previous literature has established these seemingly minor acts can lead to increased stress, anxiety, depression, and feelings of isolation and invalidation (Kelleher, 2009; Woodford et al., 2018). Using qualitative study techniques, Nadal et al. (2011) researched the behavioral cognitive, and emotional reactions in response to microaggressions. The research team also wanted to understand how LGBTQ individuals process and cope with microaggressions (Nadal et al., 2011). LGBTQ individuals deal with daily microaggressions against their already stigmatized identity (Birkett et al., 2015; Gnan et al., 2019). The combined stress of the microaggressions with their stigmatized identity can lead to significant mental health impacts like stress, anxiety, and depression (Meyer, 2015) with even stronger effects for LGBTQ people of color (Balsam et

al., 2011). Understanding and addressing LGBTQ microaggressions is crucial to improving the well-being of LGBTQ individuals.

Impact of LGBTQ Microaggressions

The impact of LGBTQ microaggressions depends on the type, depth, and importance of the relationship from which the comment or action took place. The context of the microaggression can sometimes impact the individual more such as when the derogatory comments are made within a space that was supposed to be a safe and/or supportive environment (such as the person's home or university) or from a person that was supposed to be supportive (such as a peer or a parent) (Munro, 2019). For example, a mother might say something like, "When are you going to get a boyfriend?" to a lesbian. The LGBTQ person might feel more hurt as they have a deeper connection to their parents and want to maintain that relationship. In comparison, if a random stranger at the grocery store misgenders a trans person, it might still hurt but not be as impactful as it is a stranger who has little to no meaning to the trans person. The perceived impact might also depend on the person's need to maintain that relationship as they may be dependent on them for survival. For example, if a parent makes a homophobic comment, the LGBTQ individual might refrain from reacting in fear of getting kicked out of their home.

Within Group Differences

Some studies have shown mixed perceptions of microaggressions for different LGBTQ individuals. Not only is the microaggression perceived differently by different subgroups when it comes from outsiders, but there are also within-group microaggressions between members of the LGBTQ community. For example, members of one subgroup can make comments against another subgroup as a way to invalidate their identity. Tran et al., (2023) described this

phenomenon as lateral violence where “both the perpetrator and the target are of equal or similar power status” (pg. 1311) While many LGBTQ individuals share a similar status, other within-group marginalized identities (labels, binary, monosexual, race) do not have the same perception. Individuals may not even be consciously aware of their privilege when regarding intersectional identities (Gnan et al., 2019). BrckaLorenz et al. (2021) found that LGBTQ white individuals reported lower levels of belongingness compared to people of color. They hypothesized that white LGBTQ students may not be consciously aware of the privilege that they have and only focus on the oppression of their LGBTQ status. This can further develop into a hierarchy based on the power dynamic of those intersecting identities.

LGBTQ people of color (POC) have multiple marginalized identities which can severely impact their perception of microaggression as they may experience both outside and within group racial and LGBTQ microaggressions. LGBTQ POC have repeatedly stated that many organizations and individuals do not even acknowledge their intersectional identities, further pushing the monolithic and white queer experience (Sadika et al., 2020) For example, POC has stated that Queer environments are often only welcoming to white people. Many LGBTQ POCs feel as if they are not welcome or are treated as “second-class citizens” in those spaces (Balsam et al., 2011). This is not surprising given that some individuals within the LGBTQ community deny that racism even exists within the community (Nadal, 2013). This extremely hurtful narrative further suppresses and negates people of color’s own experiences to reinforce the dominant white culture (Tran et al., 2023).

Other LGBTQ identities experience both outside and within group LGBTQ microaggressions. For example, in a study of college students, Garvey & Rankin (2015) found that cisgender LGBTQ women had a highly positive perception of campus climate while trans-

identified students had the most negative perceptions of the campus climate. There is competitiveness within the trans community to determine who is “trans enough” to be transgender, especially with nonbinary individuals (Galupo et al., 2014). These further fuels the unequal power dynamic of those who are binary trans as they are seen as seemingly “more trans” than gender-diverse people. Bisexual individuals feel the pressure of erasure and exclusion in many Queer spaces due to them not being “too straight” or “not gay enough” (Bostwick & Hequembourg, 2014). Bisexual individuals who are in heterosexual relationships can feel ostracized from the Queer community as they are perceived as straight while Bisexual individuals who are in homosexual relationships are sometimes seen only as gay or lesbian.

Regardless, all of these discriminatory acts can have a compounding effect and begin to severely impact LGBTQ individuals' mental well-being. Previous research has shown that LGBTQ individuals have higher rates of psychological distress compared to their straight/heterosexual and cisgender counterparts (Meyer, 2003; Burgess et al., 2008; Woodford et al., 2014). It can also contribute to a hostile and unwelcoming environment for LGBTQ individuals, affecting their overall sense of belonging and social inclusion (Sue et al., 2007; Beagan et al., 2021; Wike et al., 2023). It also differs for within-group LGBTQ individuals as trans-identified people tend to be at greater risk of issues like mental illness, suicide risk, and self-harm (Gnan et al., 2019)

Campus Climate

The unique and individualized perception of campus is often referred to as ‘Campus Climate’. This term is often used to describe the multitude of subjective and objective factors that make up a university’s environment as well as the prevailing attitudes and perceptions on

said university's campus. (Cress, 2002, Peterson & Spencer, 1990, Rankin & Reason 2008, Vaccaro, 2012).

Defining Campus Climate

Campus climate is complex to conceptually define as there are a lot of factors that can make up a campus culture. Previous research by leading expert, Dr. Susan Rankin with a colleague, Dr. Robert Reason (2008) defines it as such:

“Current attitudes, behaviors, and standards held by faculty, staff, and students. concerning the access for, inclusion of, and level of respect for individual and group needs, abilities, and potential” (p. 264)

Peterson and Spencer (1990) defined campus climate as the following:

“(1) its primary emphasis on common participant views of a wide array of organizational phenomena that allow for comparison among groups or over time, (2) it focus on current patterns of beliefs and behaviors (3) it's often ephemeral or malleable character” (p. 8).

Other individuals have defined campus climate differently. Cress's (2002) definition of campus climate involves more specific items like “perceptions, attitudes, and expectations” of the organization (p. 390). Regardless of the exact wording, research seems to agree that campus climate is defined by the beliefs and actions that current resources, policies, faculty, staff, administration, and students uphold at the university.

According to Peterson & Spencer, (1990) campus climate should be broken down into three categories: (1) objective climate, (2) perceived climate, and (3) psychological or felt climate. Objective climate refers to actions or comments that can be objectively measured. Peterson and Spencer (1990) explained this as, “Certain practices and procedures, characteristics” (p. 12). A common objective climate measure is the institution's explicit policy

on diversity, equity, and inclusion. The perceived climate is how the individuals of that institution perceive the functionality of the organization and how it should function (whether it actually does or not.) This category is only subjective, meaning every individual is going to perceive the institution differently which can make it hard to measure campus climate only using this category. The psychological or felt climate is similar to the perceived climate category but is more focused on the motivation behind their commitment to the organization. Peterson and Spencer (1990) described this category as the “motivational, rather than perceptual, dimension that focuses on how participants feel about their organization and their work” (p. 13). This category seeks to understand their level of connection to the organization, satisfaction with the organization, and their level of involvement within.

LGBTQ Campus Climate

LGBTQ college students' perceptions of campus climate are dependent on many factors from within themselves (e.g., outness, identity), within the classroom (e.g., faculty, peers, curricula), and the broader campus (e.g., campus resources and institutional policies).

Within the Classroom

Other students are one of the strongest influences on LGBTQ support on college campuses both positively and negatively. Yost & Gimore's (2011) study on LGBTQ campus climate found that there was a mixed review of students who supported LGBTQ individuals. Many respondents reported a “tolerance” to LGBTQ, citing that their sexuality is not important as long as “they don't force it on me” (pg. 1340). For LGBTQ individuals, having friends and peers who understand, validate, and support their identities can positively impact mental health and well-being (Detrie & Lease, 2007). Peers who openly identify as allies can create a visible network of support (Cooper et al, 2014). This allyship is crucial in challenging discrimination

and creating an environment where LGBTQ individuals feel accepted and valued. Many studies have looked at overt discrimination from within the classroom but there are little to no studies looking at how micro-aggressive acts influence the LGBTQ campus climate.

Faculty play a role in the LGBTQ campus climate as they not only impact the individual, but they are also responsible for the student's professional development. Ultimately, students are there for college education. When discrimination/harassment occurs from a faculty member, it impacts both areas as the students now feel less comfortable in the classroom (Garvey et al., 2018). It may lead to feelings of isolation, anxiety, and stress, hindering their ability to perform academically and engage in extracurricular activities.

Previous research has shown that college curriculum is overwhelmingly heteronormative. Heteronormative is the assumption that (1) everyone is straight until proven otherwise and (2) heterosexuality is the "standard" of sexuality and anything else is wrong. Heteronormative curricula may present an extremely narrow view of human relationships and societal norms, which may reinforce stereotypes and limit the exploration of diverse perspectives. LGBTQ students may feel reluctant to share their perspectives or disclose their identities, fearing judgment or lack of understanding from peers and faculty. This can lead students to feel invisible, unrepresented, and invalidated in the academic setting (Garvey et al 2015).

Within Themselves

Being openly out as LGBTQ can have a mixed impact on one's perception of college. Degree of outness refers to the level of "out of the closet" a person is. Individuals may be out to some people (e.g., close friends) but not disclose their identity to others (e.g., professors, parents, and/or extended family) (Kosciw et al., 2015). This may be due to their own personal comfort level, safety, fear of rejection, or just simply not feeling the need to share that part of themselves

with others (Caba et al., 2022). Being out about one's LGBTQ+ identity can positively impact mental health by reducing the stress and anxiety associated with hiding or suppressing a core aspect of one's identity (Legate et al., 2012, 2017). However, being more open about one's identity might also expose students to potential discrimination, rejection, or isolation, which can negatively affect mental health (Feldman & Wright, 2013; Kosciw et al., 2015).

Vaccaro (2012) argued that graduate students have very limited interactions with the campus. They go to class and leave. This severely limits their knowledge and interaction with the campus. For distance education students, it is the same situation: they may have little interaction with the physical campus climate and the positive benefits. There is a significant gap in the previous literature researching DE students' campus climate. One study by Rovai et al. (2005) compared the campus climate of in-person programs to fully online programs and found that “online students score lower on both classroom social community and school social community than their on-campus peers” (p. 369)

Broader Campus

One critique of previous researchers is the sole focus on the overall organizational climate and forgo discussing about smaller area of campus climate called microclimates. The term “Microclimates” was first used by Acklesberg et al. (2009) to describe smaller environments which faculty work in and interact with. They argued that without the existence of microclimates when challenged with a hostile work environment, faculty are more likely to withdraw from the institution or to leave it completely (Acklesberg et al., 2009). Recent research has expanded microclimates to include other subgroups of campus (undergraduates, graduates, and staff). Vaccaro (2012) discusses the importance of separating the organizational climate and

microclimates. They reviewed how the different subgroups of campus may have different perceptions of campus based on their role at the institution.

Campus Resources

Within the institution, many different campus resources are or could be available to students that could influence the campus climate. For example, the existence of LGBTQ resource offices, gender-neutral bathrooms, visible allyship signage, and the ability to change your name within the system and add pronouns. LGBTQ resource offices are one of the biggest indicators of a positive campus climate. They are essential for providing a safe space for students to be in (Gilbert et al, 2021). Gender-neutral bathrooms provide a safe restroom where students do not feel as if they have to decide which bathroom to use. A study done by Huff et al (2023) found that students who reported a lack of gender-neutral bathrooms on campus also had higher rates of psychological stress due to the fear of harassment. Not only do these benefit LGBTQ students, but they also benefit the larger community who may need a private bathroom (Bovens & Marcoci, 2023). Visible LGBTQ signage like the Safe Zone stickers provide a visible reminder that this person might be an ally and this campus has also provided a space for allies to improve their knowledge of allyship (Hardy et al., 2022). Many universities also have a policy that allows students who have not legally changed their name to change their name within the university system. Goldberg et al., (2018) found this to be one of the highest indicators of a supportive campus.

Policies

The same study by Goldberg et al., (2018) also revealed that the policies at the universities also contribute to a more positive campus climate. The most common policy change is the inclusion of gender identity, gender expression, and sexual identity in their

nondiscrimination statement. Other policies include allowing transgender/nonbinary students to play sports with their gender and allowing students of different sexes to live together. These inclusive policies allow students to feel as comfortable as themselves without the fear of harassment with no support from the higher administration.

In 2007, a national nonprofit dedicated to improving the LGBTQ campus environment, called Campus Pride created a Campus Pride Index to set a 5-star ranking system to evaluate campus environment, policies, programs, and practices (Garvey et al, 2017). This index was created with 5 goals in mind: (1) to set a national benchmark for LGBTQ policies and more, (2) to a measurement tool as a resource to improve campus climate, (3) to a ranking system for perspective students can find inclusive campuses, (4) resources for recruitment and retention of LGBTQ students, faculty, and staff, and (5) showcasing the positive effects of what campuses are currently doing (Garvey et al, 2017). This essential rating system has allowed many colleges to critically examine their college and make tremendous improvements toward the campus climate for LGBTQ students, faculty, and staff.

Theory

Minority Stress Theory

The Minority Stress theory (MST) as shown in Figure 1 was famously popularized by Meyer (2003) for his work with sexual minority individuals. MST first arose from the research on lesbians by Dr. Virginia Brooks (later known as Dr. Winn Kelly Brooks) in 1981. It describes the process by which excess psychological distress (which is caused by prejudice and discrimination) affects members of stigmatized and oppressed groups. Minority stress theory is guided by two processes, proximal and distal, that come together to have a holistic impact on the stressors in an individual with a minority identity. This model also includes aspects that would

play a significant impact on their stress process which influences mental health outcomes such as circumstances in their environment, their own perception of their identity, coping and social support, and other identities.

Distal stresses are everyday events or experiences that are central to the individual like policies, discrimination, microaggressions, etc. Proximal stressors are more internal processes after an event happens. Meyer (2003) described 3 main forms of proximal stressors: expectations of rejection, internalized homophobia, and concealment of one's LGB identity. The daily stigma and discrimination against their identity could lead to this fear of constant rejection. These feelings can turn inward, and individuals can develop negative thoughts about their own identity. These repetitive, negative thoughts lead individuals to hide parts of themselves to mitigate some of these stressors.

Temporal Intersectional Minority Stress Model

As with many studies on marginalized communities, the MST does not account for broader systemic stressors and their effect on the individual. Another major flaw of MST was that the original model was not developed with transgender/nonbinary individuals in mind. Further research has extended to apply Meyer's original work to other stigmatized and oppressed identities even as the original model did not call for it. A new model, the Temporal Intersectional Minority Stress Model by Rivas-Koehl et al. (2023) added more components to the model to address these critiques: hegemonies, time, and intersectionality. Using work from critical feminist scholars, intersectionality was added to highlight the unique stressors that multiple marginalized identities face. It would be naive to research stressors without addressing intersectionality. Time was added in three parts: developmental, generational, and historical time. Developmental time is acknowledging the development changes within the individual.

Generational and historical both describe the unique past events that not only shape generations but also historical events. Hegemonies is arguably the most important piece as it addresses the fact that minority individuals are labeled as a minority and are stuck within a society that was founded on the premise that some individuals hold more power and privilege than others (Rivas-Koehl et al., 2023).

Students with Minority Identities in Campus Contexts

A new theory developed from Bronfenbrenner's ecological theory is the Students with Minority Identities in Campus Contexts Model (Vaccaro et al., 2015) to understand the effect that post-secondary institutions have on LGBTQ individuals. The model focuses on many ideas that may be central to the individual like homeplace contexts, self-identity, and campus contexts within time and sociopolitical contexts to understand their engagement and meaning making. This model suggests that these experiences on campus influence their personal identity.

LGBTQ students pose a unique identity crisis as they position themselves within their LGBTQ identity as well as their identity with academia. Both of these theories suggest that their lived experiences as both a minority individual and an academic combined may be at a higher risk for mental health challenges such as anxiety and depression. College campuses with supportive environments can positively impact mental health outcomes.

Conclusion

In previous research, campus climate influence has been studied primarily with overt discrimination and harassment. While microaggressions have been researched in a variety of settings, LGBTQ microaggressions in the college climate are lacking in the literature. This study attempts to combine these two ideas to understand how microaggressions on college campuses

influence the perception of the college climate among LGBTQ students. With that, we also attempt to understand how both the perception of campus climate and microaggressions affect the levels of depression, anxiety, and stress experienced by LGBTQ students.

CHAPTER 3: METHODOLOGY

To understand exactly how microaggressions impact college students and their perception of campus, we proposed 3 main research questions:

Research Question 1: Do microaggressions on college campuses predict higher levels of depression, anxiety, and stress among LGBTQ students?

Hypothesis 1: A greater number of experiences of microaggressions on college campuses will predict higher levels of depression, anxiety, and stress levels among LGBTQ students.

Research Question 2: Do microaggressions on college campuses predict the perception of the college climate among LGBTQ students?

Hypothesis 2: A greater number of experiences of microaggressions on college campuses will predict worse perceptions of the college climate among LGBTQ students.

Research Question 3: Is there a relationship between the perception of campus climate and the levels of depression, anxiety, and stress experienced by LGBTQ students?

Hypothesis 3: There is a correlation between the perception of campus climate and depression, anxiety, and stress among LGBTQ students.

Procedures

Full IRB approval was sought for all methods and strategies. The intended sample size of 119 participants was determined by using G*Power 3.1.9.6 for Mac OS software. With a 10% over-collection buffer, the goal sample size was 131. We disseminated our flyer on the author's campus in pre-approved locations, on social media, and via a Listserv from the author's

university LGBTQ resource center. Social media locations included the author's personal social media on Instagram and Twitter, LGBTQ Facebook groups, LGBTQ Reddit pages. Participants were eligible for this study if they were at least 18 years old and enrolled in college. Participants could scan a QR code or click the link to begin the survey. The first page of the Qualtrics survey was an informed consent document along with exclusion criteria. Participants were made aware that they could opt out of taking this survey at any point without any consequences. Participants were informed about the study's objectives, potential benefits or risks associated with their survey participation, as well as the steps taken to maintain confidentiality.

At the conclusion of the survey, participants had the option to provide their university email address if they wished to receive compensation. After survey completion, all participants who shared a university email address received a virtual \$5 Amazon gift card. Participant email addresses were stored on a secure and encrypted server, accessible only to authorized personnel directly involved in the distribution of the compensation. The list of identifying information was only seen by the primary investigators. The data will be kept for 6 years after the completion of the study and after that, it will be securely deleted from the author's computer and drive.

Measures

Demographic Data

Information was collected to understand better the demographic makeup of the study sample, such as race, age, and student classification. Participants were given the same race and ethnicity question two times. In both cases, the given options were White (non-Hispanic or Latino/a/e), Black (non-Hispanic or Latino/a/e), Hispanic or Latino/a/e, American Indian or Alaskan Native, Asian or Pacific Islander, Biracial or multi-racial (two or more races), "Some other race: _____," or if they prefer not to say. The first time, the question design forced

participants to select one identity. The second time, participants were allowed to select multiple boxes to capture their identity more wholly. Ultimately, the analysis used the participant's response to the first question. Participants' ages were collected using an open-ended question. Students self-reported their student classification status with options ranging from 1 (freshman) to 6 (graduate student).

Sexual Orientation and Gender Identity

Sexuality and Gender are distinct concepts, though interrelated. The factors influencing gender identity and experiences, such as societal norms, cultural contexts, and individual psychological processes, can differ significantly from those affecting sexual orientation and behaviors. Gender and sexuality intersect but also have unique impacts on mental health, physical health, social experiences, and personal identity.

Participants were asked to disclose how they personally identify using the most frequently heard sexual orientation identities (Lesbian, Gay, or homosexual, Straight or heterosexual, Bisexual, Pansexual, Asexual or Queer) and gender identities (Cisgender Man, Cisgender Woman, Intersex, Female-to-Male (FTM)/Transgender Male/Trans Man, Male-to-Female (MTF)/Transgender Female/Trans Woman, Nonbinary/Genderqueer, neither exclusively male nor female).

Participants were asked to report their sexual orientation and gender identity twice. They were again asked to check their sexual orientation and gender identity that's most applicable to them currently, then they were asked to "check all that apply" for their sexual orientation and gender identity. They also have the option to select "I don't know", or if they prefer not to disclose. There is an "Other" category where they can write in their own sexual orientation and gender identity if they feel the list of options does not personally fit their identity. During the

final analysis, data was dummy coded “0” if participants chose an identity that was part of the LGBTQ community. A “1” was scored if the participants chose “Straight” or “Cisgender” on their respective scales.

Mental Health

The participant's mental health was evaluated using the Depression Anxiety Stress Scale-21. The Depression Anxiety Stress Scale 21 (DASS-21) is a short form of Lovibond and Lovibond's (1995) 42-item self-report measure of depression, anxiety, and stress (DASS). The DASS-21 is separated into 3 sections (Depression, Anxiety, Stress) with 7 questions in each section. This scale is assessed using a 4-point Likert scale with a higher overall score indicating greater amounts of depression, anxiety, and stress.

Microaggressions

Participants' experiences with microaggressions were assessed with Nadal's (2018) Sexual Orientation Microaggressions Scale (SOMS) and the Gender Identity Microaggressions Scale (GIMS). These scales have been empirically tested and validated by Nadal and his team (2019) with the SOMS resulting in a Cronbach's alpha of .93 and the GIMS resulting in a Cronbach's alpha of .764. The scale instructions have been amended for the purposes of this study to specify that participants report experiences that happened on college campuses.

The Sexual Orientation Microaggressions Scale (SOMS) has 24 items and 5 subscales: 1) Microinvalidations, (2) Assumption of Pathology, (3) Heterosexist Language, (4) Enforcement of Binary Gender Roles, and (5) Environmental Microaggressions. Gender Identity Microaggressions Scale (GIMS) has 14 items and 5 subscales (1) Denial of Gender Identity, (2) Misuse of Pronouns, (3) Invasion of Bodily Privacy, (4) Behavioral Discomfort, and (5) Denial

of Societal Transphobia. Higher scores on a subscale indicate greater experiences of that form of microaggression.

Campus Climate

Individuals' perceptions of the current climate were evaluated by the Assessment of Campus Climate for Gay, Lesbian, Bisexual, and Transgender persons (Rankin, 2003). The entire survey is 32 questions broken up into four parts with eight questions in each part. The first three sections were collected in this study and only the middle two sections were used in the final analysis for this project. For the final analysis, sections of Rankin's (2003) Assessment of Campus Climate for Gay, Lesbian, Bisexual, and Transgender Persons scale were broken up to help examine campus climate more clearly. Campus climate perception can hold a wide range of experiences and viewpoints. Therefore, we decided it would be beneficial to distinguish between an individual's personal perception and the actions taken by the campus. By breaking these elements apart, we can gain a clearer and more comprehensive understanding of the overall campus climate. This approach allows us to address personal experiences separately from institutional behaviors and initiatives. A combined score was created from the Campus Climate Response sections and the Campus Climate Beliefs sections to test if this was a better way to evaluate the overall campus climate. This combined score was then tested for reliability and resulted in a Cronbach's alpha score of 0.641, indicating a lower level of internal consistency for the combined scales than the individual sections of campus climate alpha scores alone as shown in Table 1. Therefore, we continued to use separate scales to evaluate the overall campus climate as the reliability scores were higher.

The first section of Rankin's (2003) survey was titled "Feelings about Campus Climate" which the authors labeled "Campus Climate Beliefs" herein referred to as CC Beliefs is items 9-

16 of Rankin's (2003) scale. This section asks participants about their own experiences and their perception of campus climate overall. These questions are answered using a standard 5-point Likert scale with 1 (very likely) to 5 (very likely) with a maximum possible score of 35. Higher scores indicating that they believe there are higher rates of harassment and are more likely to take actions to avoid harassment. This included questions like "Gay men are harassed on campus due to their sexual orientation/gender identity" and "I fear for my physical safety because of my sexual orientation/gender identity".

The last section of Rankin's survey are items 18-24 and is titled "Campus Climate Response" herein referred to as CC Response. This section asks participants to rate the campus response in general using a standard 5-point Likert scale reverse coded with 1 (strongly agree) to 5 (strongly disagree) with a max score of 45. Higher scores are indicating of an unsupportive campus response to LGBTQ issues. Examples of items include statements like, "The College/University thoroughly addresses campus issues related to sexual orientation/gender identity," or "The College/University provides visible resources on LGBT issues."

The last question of the campus climate response (Item #25) was labeled by the authors as "Campus Climate Feelings" herein referred to as CC-Feelings. This section asked participants to rate the campus climate in general with different terms such as "Friendly - Hostile", or "Non-homophobic - Homophobic" using a Likert scale with 1 being the more supportive climate (e.g., non-homophobic), and 5 being the negative climate (e.g., homophobic). Higher scores on the scale corresponded to increased feelings of negative emotions associated with their rating of campus.

Analytic Design

All analyses were conducted using Jamovi and SPSS statistical analysis software.

Research question 1 was assessed using linear regressions, looking to see whether experiences of microaggressions (measured by SOMS and GIMS) predict depression, anxiety, and stress (measured by DASS). We hypothesized that greater experiences of microaggressions on college campuses will result in higher depression, anxiety, and stress. In both the SOMS & GIMS models, we controlled for sexuality/gender identity, where appropriate as an attempt to accurately capture the impact of these microaggressions on individuals' experiences and well-being. This helps in understanding whether the observed effects are due to microaggressions specifically or if they are influenced by the inherent differences in gender and sexual identity. Sexuality and gender identity are significant factors that can profoundly impact mental health, as individuals within these groups often face unique stressors and challenges. By controlling for these variables, we aim to understand whether the observed effects are specifically due to microaggressions or if they are also influenced by the broader mental health impacts associated with diverse gender and sexual identities.

Research question 2 was analyzed using regression models to understand the role of microaggressions (measured by SOMS and GIMS) on aspects of perceptions of campus climate while again controlling for gender identity and sexual orientation. We hypothesized that greater experiences of microaggression on college campuses will predict a poorer perception of campus climate.

To test the final research question, we conducted a correlational analysis between campus climate variables and stress, anxiety, and depression. We hypothesized that there is a bidirectional relationship between the perception of campus climate and depression, anxiety, and stress. The original analysis plan planned to use Pearson's correlation coefficients but several

variables (Anxiety, Stress, GIMS, SOMS, CC-Beliefs CC-Response, and CC-Feelings) were found to be non-normally distributed with significant Shapiro-Wilk tests. As such, Spearman's correlation coefficients were used instead.

CHAPTER 4: RESULTS

Necessary assumptions (linearity, homoscedasticity, normality, multicollinearity) for all regression analyses were checked using Jamovi software and no violations were found. The normality of the data distribution for each scale was assessed using the Shapiro-Wilk test, a widely used statistical test for assessing normality. For each scale (Depression, Anxiety, Stress, GIMS, SOMS, CC-Beliefs, CC-Response, and CC-Feelings), the Shapiro-Wilk test statistic, and significance level were computed. The Shapiro-Wilk test results indicated that the data distribution for Depression ($W = 0.984, p = 0.372$), Stress ($W = 0.979, p = 0.179$), and CC-Feelings ($W = 0.991, p = 0.831$) were approximately normally distributed as the p-value was greater than 0.05. However, the data distributions for GIMS, SOMS, CC-Beliefs, and CC-Response deviated significantly from normality as the p-values were less than 0.05 as indicated in Table 1. The range, mean, standard deviation, Cronbach's alpha, and normality information for all qualitative scales used in the analysis are available in Table.

Table 1

Descriptive analysis of data

	Mean	Std dev	Range	Cronbach's alpha	Skewness	Kurtosis	Shapiro-Wilk	Shapiro-Wilk p-value
GIMS	1.94	1.50	0-4.29	0.963	-0.113	-1.66	0.857	<0.001
SOMS	2.36	1.03	0.46 - 4.17	0.928	-0.115	-1.47	0.905	<0.001
DASS Scale								
Depression	20.7	9.76	0-42	0.867	-0.03	-0.609	0.984	0.372
Anxiety	20.7	9.39	0-40	0.842	-0.244	-0.813	0.970	0.045
Stress	23.6	8.05	0-40	0.786	-0.457	0.009	0.979	0.179
Campus Climate								
Beliefs	31	5.09	15-38	0.764	-0.912	0.215	0.903	<0.001
Responses	31	6.57	5-33	0.896	0.944	0.026	0.862	<0.001
Feelings	39.3	39.3	20-61	0.657	0.137	-0.257	0.991	0.831

Participants

A total of 258 responses were initially collected. With further data review, patterns of rapid and repetitive responses, as well as inconsistencies in participant demographics and response content, raised suspicions of bot activity. Further investigation revealed that a bot had accessed the survey multiple times within a short time frame with the same repeated answers generating a significant portion of the collected data (n=161). Upon discovering the bot's access, immediate steps were taken to mitigate its impact on the study. Additional measures were implemented to enhance data security and prevent similar incidents in the future, including the implementation of CAPTCHA verification for survey access and regular monitoring of survey responses for suspicious activity. The affected data points were flagged and excluded from the analysis. The affected data points all incorrectly answered the question about what state they went to college in; instead of putting a state's name like North Carolina, they put specific colleges like University of California; San Francisco. In addition, 12 responses were removed due to not answering the majority of the survey questions. Three responses were also removed as they did not identify as part of the LGBTQ community. This resulted in a total of 85 survey responses included in the analysis. Data analysis is ongoing with the hopes of improving the sample size for peer-reviewed publications.

Demographics

The average age of the participants in the sample was 22.4 years old, with the youngest individual in the sample being 19 years old and the oldest being 30 years old. The standard deviation was 2.35. In terms of racial and ethnic composition, the majority of participants identified as White (n=64, 75.3%), followed by Black (n=21, 14.1%). There are also smaller proportions of individuals identifying as Asian or Pacific Islander, Biracial or Multi-Racial, and Hispanic or Latino/a/e, as indicated in Table 3. One participant declined to answer questions

about their racial and ethnic identity. The majority of participants in the sample were seniors ($n=42$, 49.4%), followed by juniors ($n=15$, 17.6%) and graduate students ($n=13$, 15.3%) as indicated in Table 3. Many participants reported to attend college in the southern part of the United States with majority being from North Carolina ($n=31$, 39.8%). Table 2 indicates the full breakdown of college location.

Table 2

University Location

State	Counts	% of Total
North Carolina	31	39.8 %
Georgia	9	10.8 %
Illinois	4	4.8 %
US	4	4.8 %
California	3	3.6 %
Florida	3	3.6 %
New York	3	3.6 %
South Carolina	3	3.6 %
Texas	3	3.6 %
Colorado	2	2.4 %
Michigan	2	2.4 %
Ohio	2	2.4 %
Virginia	2	2.4 %
Arizona	1	1.2 %
Connecticut	1	1.2 %

Delaware	1	1.2 %
Mississippi	1	1.2 %
Kentucky	1	1.2 %
Massachusetts	1	1.2 %
Minnesota	1	1.2 %
Nebraska	1	1.2 %
New Jersey	1	1.2 %
New Mexico	1	1.2 %
Rhode Island	1	1.2 %
Tennessee	1	1.2 %
Utah	1	1.2 %

Table 3

Demographics

	<i>n (%)</i>
Decline to answer	1 (1.2%)
Asian or Pacific Islander	2 (2.4%)
Hispanic or Latino/a/e	3 (3.5%)
Biracial or Multi-Racial (Two or More Races)	3 (3.5%)
Black (Non-Hispanic or Latino/a/e)	12 (14.1%)
White (Non-Hispanic or Latino/a/e)	64 (75.3%)

Table 4*Student Classification*

	<i>n (%)</i>
5th year	4 (4.7%)
Freshman	3 (3.5%)
Sophomore	8 (9.4%)
Graduate Student	13 (15.3%)
Junior	15 (17.6%)
Senior	42 (49.4%)

Table 5*Sexual Orientation and Gender Identity*

Sexual Orientation	n (%)
Additional sexual orientation category, please specify: _____	1 (1.2%)
Asexual	3 (3.5%)
Straight or heterosexual	3 (3.5%)
Queer	4 (4.7%)
Gay, or homosexual	7 (8.2%)
Pansexual	7 (8.2%)
Lesbian	16 (18.8%)
Bisexual	44 (51.8)
LGBTQ Total	82 (96.6)
Straight Total	3 (3.5)
Gender Identity	
Additional gender category, please specify:	2 (2.5%%)
Male-to-Female (MTF)/Transgender Female/Trans Woman	11 (12.9%)
Female-to-Male (FTM)/Transgender Male/Trans Man	13 (15.3%)
Cisgender Man	17 (20.0%)
Nonbinary/Genderqueer, neither exclusively male nor female	19 (22.4%)
Cisgender Woman	22 (15.3%)
I don't know	1 (1.2%)
Cis Total	48 (54.5%)
LGBTQ Total	40 (45.5%)

Table 5 provides a breakdown of the distribution of sexual orientations within the sample, with a majority ($n=82$, 96.6%) identifying as not straight and a much smaller proportion ($n=3$, 3.4%) identifying as straight. The majority of individuals in the sample identified as bisexual ($n=44$, 51.8%), followed by lesbian ($n=16$, 18.8%). It also provides a breakdown of the distribution of gender identities within the sample, with a majority ($n=48$, 54.5%) identifying as cisgender and the remaining individuals ($n=40$, 45.5%) identifying as non-cisgender. Most individuals in the sample identified as either cisgender women ($n=22$, 25.9%) or cisgender men ($n=20$, 20%), while nonbinary/genderqueer was close behind ($n=19$, 2.4%).

The following data was collected as part of the Campus Climate scale and provides important context for interpreting the results of our sample. A little over 55% ($n=47$) of students reported that they have been victims of harassment due to their sexual orientation/gender identity. Students also reported the form of harassment that occurred with a tie for the most common being, “derogatory remarks,” and, “pressure to be silent about your sexual orientation/gender identity,” (24.7%, $n=21$) with a close margin being, “direct or indirect verbal harassment or threats,” (23.5%, $n=20$). Students reported the location of harassment as well with the most frequently cited experience being “in a class” (36.5%, $n=31$) second to “in a residence hall” (17.6%, $n=15$). Lastly, students reported who was the source of this harassment with the overwhelming majority being other students (52.9%, $n=15$). A full breakdown of the harassment type, location, and source can be found in Table 6.

Table 6*Harassment Type, Location, and Source reported by participants.*

<u><i>What Form</i></u>	n (%)
Derogatory remarks	21 (24.75%)
Pressure to be silent about your sexual orientation/gender identity	21(24.75%)
Direct or indirect verbal harassment or threats	20 (23.5%)
Denial of services	19 (22.4%)
Written comments (e.g., anti-LGBT flyers, publications, etc.)	19 (22.4%)
Threats to expose your sexual orientation/gender identity	17 (20%)
Threats of physical violence	16 (18.8%)
Anti-lesbian, gay, bisexual, or transgender graffiti	12 (14.1%)
Actual physical assault or injury	10 (11.8%)
Other	1 (1.2%)
<u><i>Where?</i></u>	
In a class	31 (36.5%)
In a residence hall	15 (17.6%)
While walking on campus	14 (16.5%)
In a public space on campus (e.g., student union)	12 (14.1%)
While working at a College/ University job	9 (10.6%)
Campus event	7 (8.2%)
In a campus office	6 (7.1%)
<u><i>Who?</i></u>	
Student	45 (52.9%)
Administrator	8 (9.4%)
Campus police	4 (4.7%)
Faculty	3 (3.5%)
Teaching Assistant	3 (3.5%)
Don't know	1 (1.2%)

Research Question 1

To answer our first research question, we conducted linear regressions looking at the role of microaggressions (measured by SOMS and GIMS) in depression, anxiety, and stress (measured with DASS). The predictor of sexual orientation or gender identity alone did not show a statistically significant relationship with stress, depression, or anxiety indicating that an individual's sexual orientation or gender identity itself, holding experiences of microaggressions constant, does not significantly predict DASS in these models. Sexuality and gender were both dummy coded with 1 being LGBTQ and 0 being straight or cisgender respectively. Each of the six models explored in looking at the relationships between DASS, GIMS, and SOMS demonstrated significant explanatory power, as indicated by their respective R^2 values and F statistics.

Depression

Regression analysis revealed significant predictors of depression. SOMS demonstrated a statistically significant positive relationship with depression ($b = 4.21$, $SE = 0.936$, $t = 4.49$) with an R^2 value of 0.326. It also had a F statistic of 19.7 with a significance level of $p < 0.001$ suggesting that the overall regression model is statistically significant. For every one-unit increase in the SOMS score, there is, on average, a corresponding increase of 4.21 units in depression scores, holding sexuality constant. As SOMS scores increase, more experiences of sexuality microaggressions, depression scores also tend to increase.

The regression model for depression and GIMS, with an R^2 of 0.325 and an F statistic of 19.7 ($p < 0.001$), indicates that experiencing gender-based microaggressions suggests significantly higher depression levels ($b = 2.91$, $SE = 0.650$, $t = 4.48$, $p < 0.001$). 20.9% of the variability in depression is explained by SOMS and sexuality as opposed to 32.5% being explained by gender and GIMS.

Table 7*Linear regression models for SOMS and GIMS predicting Depression*

	b	SE(B)	p	Overall Model		
				R2	F	p
Model 1						
Constant	10.95	2.49	<0.001	0.209	10.8	<0.001
SOMS	4.21	0.936	<0.001			
Sexuality	-4.05	5.18	0.437			
Model 2						
Constant	17.01	2.022	<0.001	0.325	19.7	<0.001
GIMS	2.91	0.65	<0.001			
Gender	-4.22	1.938	0.03			

Anxiety

While running the regression model, we found that experiences of SOMS demonstrated a statistically significant positive relationship with anxiety ($b = 5.35$, $SE = 0.80$, $t = 6.64$). The model also had an R^2 value of 0.459 and an F statistic of 34.8 with a significance level of $p < 0.001$ suggesting that the overall regression model is statistically significant. The second regression model for predicting anxiety, characterized by an R^2 of 0.459 and an F statistic of 34.8 ($p < 0.001$), reveals that experiencing gender-based microaggressions is also suggests higher anxiety levels ($b = 3.73$, $SE = 0.56$, $t = 6.66$).

Table 8*Linear regression models for SOMS and GIMS predicting Anxiety*

	b	SE(B)	p	Overall Model	F	p
				R2		
Model 1						
Constant	8.23	2.092	<0.001	0.367	23.8	<0.001
SOMS	5.35	0.806	<0.001			
Sexuality	-5.44	4.467	-1.22			
Model 2						
Constant	14.83	1.742	<0.001	0.459	34.8	<0.001
GIMS	3.73	0.56	<0.001			
Gender	-3.08	1.67	0.069			

Stress

In the regression model for stress, SOMS demonstrated a statistically significant positive relationship with stress ($b = 3.28$, $SE = 0.781$, $t = 4.200$). With an R^2 value of 0.192 and an F statistic of 9.74 with a significance level of $p < 0.001$ the overall regression model is statistically significant, suggesting SOMS are a significant predictor of Stress. When running it against GIMS, this regression model is characterized by an R^2 of 0.372 and an F statistic of 24.2 ($p < 0.001$), which reveals that experiencing gender-based microaggressions is significantly associated with higher stress levels ($b = 2.09$, $SE = 0.518$, $t = 4.05$). For every one-unit increase in the GIMS score (measuring experiences of gender-based microaggressions), there is, on average, a corresponding

increase of 2.09 units in stress levels, holding gender constant. Individuals who report experiencing more gender-based microaggressions tend to experience higher levels of stress.

Table 9

Linear regression models for SOMS and GIMS predicting Stress

	b	SE(B)	p	Overall Model		
				R2	F	p
Model 1						
Constant	16.05	2.026	<0.001	0.192	9.74	<0.001
SOMS	3.28	0.781	<0.001			
Sexuality	-4.11	4.32	0.345			
Model 2						
Constant	22.05	1.61	<0.001	0.372	24.2	<0.001
GIMS	2.09	0.518	<0.001			
Gender	-5.40	1.544	<0.001			

Research Question 2

To answer our second research question, we again ran multiple linear regression models while controlling for sexual orientation or gender identity. Campus Climate was split up into three different subscales as one section does not fully explore all of the factors that make up campus climate and each section was run with either the GIMS or SIMS.

Campus Climate Beliefs

In the regression model predicting CC-Beliefs using SOMS while controlling for sexuality, shown by an R² of 0.582 and an F statistic of 57.1 (p < 0.001), SOMS significantly contributed to

explaining CC-Beliefs. Specifically, SOMS shows a statistically significant positive relationship with CC-Beliefs ($b = 3.30$, $SE = 0.355$, $t = 9.29$, $p < 0.001$), indicating that higher levels of sexuality-based microaggressions are associated with more negative perceptions of campus climate. For every one-point increase on the SOMS scale, we can predict a person might have a 3.3-point increase on the CC-Beliefs scale, holding sexuality constant. As individuals experience more sexuality-based microaggressions, their beliefs about campus climate suggests that they become more negative or cooler.

When looking at GIMS in the regression model predicting CC-Beliefs characterized by an R^2 of 0.459 and an F statistic of 34.8 ($p < 0.001$), GIMS significantly contributed to explaining CC-Beliefs. Specifically, GIMS shows a statistically significant positive relationship with CC-Beliefs ($b = 2.07$, $SE = 0.304$, $t = 6.81$, $p < 0.001$). For every one-unit increase in the GIMS score (measuring experiences of gender-based microaggressions), there is, on average, a corresponding increase of 2.07 units in CC-Beliefs, holding gender constant. Individuals who reported experiencing more gender-based microaggressions suggests that they hold more negative beliefs about campus climate. 58% of the variability in campus climate beliefs is explained by SOMS and sexuality as opposed to 45% being explained by gender and GIMS. Interestingly, the variability is explained more by gender and gender microaggressions in all models except campus climate beliefs.

Table 10*Linear regression models for SOMS and GIMS predicting Campus Climate Beliefs*

	b	SE(B)	p	Overall Model		
				R2	F	p
Model 1						
Constant	23.49	0.92	<0.001	0.58	57.1	<0.001
SOMS	3.30	0.36	<0.001			
Sexuality	-8.59	1.96	<0.001			
Model 2						
Constant	15.41	1.34	<0.001	0.45	34.8	<0.001
GIMS	-1.98	0.43	<0.001			
Gender	3.05	1.28	0.02			

Campus Climate Responses

In the regression model examining the impact of SOMS on CC-Responses, characterized by an R² of 0.223 and an F statistic of 11.8 ($p < 0.001$), SOMS significantly contributed to explaining CC-Responses. SOMS shows a statistically significant negative relationship with CC-Responses ($b = -3.012$, $SE = 0.624$, $t = -4.8241$, $p < .001$), indicating that higher levels of sexuality-based microaggressions are associated with more negative perceptions of campus responses. For every one-unit increase in the experiences of sexuality-related microaggressions, there is, on average, a corresponding decrease of 3.012 units in CC-Responses, holding sexuality constant. Individuals

who report experiencing more sexuality-related microaggressions tend to perceive fewer positive or supportive responses within the campus climate.

In the regression model examining the influence of GIMS on CC-Responses, the overall model is statistically significant ($R^2 = .345$, $F = 21.6$, $p < 0.001$), while GIMS negatively predicts them ($b = -1.98$, $SE = 0.431$, $t = -4.61$, $p < 0.001$) indicating that higher levels of gender-based microaggressions are associated with more negative perceptions of campus responses.

Table 11

Linear regression models for SOMS and GIMS predicting Campus Climate Responses

	b	SE(B)	p	Overall Model		
				R2	F	p
Model 1						
Constant	20.05	1.62	<0.001	0.223	11.8	<0.001
SOMS	-3.01	0.624	<0.001			
Sexuality	0.17	3.45	0.960			
Model 2						
Constant	15.41	1.34	<0.001	0.345	21.6	<0.001
GIMS	-1.98	0.43	<0.001			
Gender	3.05	1.28	0.02			

With GIMS having a higher R^2 , this indicates that gender based microaggressions impacts campus climate responses more.

Campus Climate Feelings

In the regression model analyzing CC-Feelings, the overall model was not significant ($R^2 = 0.053$, $F = 2.45$, $p = 0.093$) indicating that the predictors included in Model 1 for CC-Feelings do not collectively explain a significant amount of variance in feelings about campus climate.

However, both SOMS ($b = 1.87$, $SE = 0.89$, $t = 2.103$, $p = 0.039$) and GIMS with a $R^2 = 0.128$, $F = 5.99$, $p < 0.004$, ($b = 2.19$, $SE = 0.643$, $t = 3.405$, $p < 0.001$) both significantly predicted CC-feelings.

Table 12

Linear regression models for SOMS and GIMS predicting Campus Climate Feelings

	b	SE(B)	p	Overall Model R2	F	p
Model 1						
Constant	34.92	2.31	<0.001	0.0563	2.45	0.093
SOMS	1.87	0.89	<0.001			
Sexuality	-2.38	4.93	0.630			
Model 2						
Constant	15.41	1.34	<0.001	0.128	5.99	0.004
GIMS	-1.98	0.43	<0.001			
Gender	3.05	1.28	0.02			

Research Question 3

To answer our last research question, we used Spearman's correlation to establish a relationship between a participant's score on all three areas of campus climate and their depression, anxiety, and stress levels as shown in Table 13. The correlation coefficient was used given non-normality in some of the data. In the analysis of correlations with CC-Beliefs, significant positive relationships were observed between Depression ($r = 0.443, p < .001$), Anxiety ($r = 0.593, p < .001$), and Stress ($r = 0.422, p < .001$). As beliefs about campus climate become more negative or unfavorable, levels of depression, anxiety, and stress tend to increase. Similarly, in exploring correlations with CC-Response, significant negative associations were found between Depression ($r = -0.496, p < .001$), Anxiety ($r = -0.509, p < .001$), and Stress ($r = -0.538, p < .001$). This indicates that as students perceive campus to be unresponsive to LGBTQ issues, DAS levels may increase. Regarding CC-Feelings, a significant positive correlation was found only between Anxiety ($r = 0.255, p = 0.018$) and Stress ($r = 0.225, p = 0.038$). This suggests that as students hold stronger negative campus climate feelings, their levels of stress and anxiety tend to increase. Interestingly, only depression ($r = 0.136, p = 0.136$) was not significantly correlated with CC-Feelings.

Table 13: Correlations

	CC Beliefs	CC Response	CC Feelings	Stress	Anxiety	Depression
CC Beliefs	—					
CC Response	-0.48 ***	—				
CC Feelings	0.22 *	-0.03	—			
Stress	0.42 ***	-0.54 ***	0.25 *	—		
Anxiety	0.59 ***	-0.51 ***	0.26 *	0.70 ***	—	
Depression	0.44 ***	-0.50 ***	0.163	0.69 ***	0.759 ***	—

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

CHAPTER 5: DISCUSSION

These results build on existing evidence and provide a new insight into the relationship between microaggressions specifically within collegiate settings and the mental health of LGBTQ students. Previous research consistently shows that microaggressions have a significant impact on LGBTQ students. Unlike previous studies that have focused on individual aspects such as comfort level within the classroom or student engagement, our research considers a broader scope of variables such as their beliefs about the climate, actions they took, or how they perceive the campus response to LGBTQ issues. Our findings have shed light on the effects of microaggressions on LGBTQ students with a particular focus on the psychological impact that they endure in collegiate environments that they perceive as hostile or unsupportive. This is guided by two theories, the Minority Stress Theory by Dr. Meyer (2003) and the Students with Minority Identities in Campus Contexts Model (Vaccaro et al., 2015) which highlight the unique stressors marginalized individuals face in general and within educational settings. Understanding the implications of our findings highlights the importance of proactive measures from the university to foster a more inclusive campus climate, where microaggressions are less likely to occur in the first place.

Microaggressions & Mental Health

Our first hypothesis that increased experiences of microaggressions on college campuses would be positively associated with depression, anxiety, and stress levels among LGBTQ students was supported based on our regression analysis. Both Gender Identity Microaggressions (GIMS) and Sexual Orientation Microaggressions (SOMS) were statistically significant predictors of depression, anxiety, and stress. This suggests that individuals subjected to microaggressions are more likely to experience elevated levels of depression, anxiety, and stress. These findings resonate with and contribute to the existing literature on the adverse effects of microaggressions on the well-being of LGBT individuals (Seelman et al., 2017; Woodford et al., 2018). The increased risk of

mental health issues are concerning given that a large portion of our sample experienced microaggressions.

Previous research has established that microaggressions from within the classroom can not only impact mental health but also impact a student's academic performance (Beattie et al., 2021; Oswald & Wyatt, 2011). Beyond the overarching classroom environment, various factors can influence the well-being and academic performance of LGBTQ students. For instance, conflicts among roommates within dormitories can have a detrimental impact on students' daily lives and their ability to succeed academically (Nourafkan et al., 2020). This is concerning given the number of students who stated that they experienced harassment within their dorm room. According to our data, to address the depression, anxiety, and stress experienced by LGBTQ students at its core, it's crucial to examine the dynamics within student spaces. This echoes both prior research and our current findings, emphasizing the importance of cultivating inclusive and supportive environments that revolve around the student. Such environments are pivotal for enhancing the success and well-being of LGBTQ students by potentially diminishing their encounters with microaggressions.

The likelihood of adverse DAS outcomes can be partially ascribed to interactions within student-centered environments, where there is a heightened risk of microaggressions. This is evident in our results, which suggest that such microaggressions contribute to DAS. Many instances of harassment stemmed from fellow students, particularly in areas frequented by students such as their classrooms, dorm rooms, or student centers. Persistent exposure to microaggressions within student-centric spaces can have significant effects on the mental health of LGBTQ individuals (Murno, 2019; Sue, 2010; Wike et al., 2023) This could pose as a challenge for many universities as it is difficult to watch all students and control their actions, and behaviors, especially in large classes where professors may not be able to connect with each student (Mulryan-Kyne, 2010).

Microaggressions & Campus Climate

Our second hypothesis was that increased experiences of microaggressions on college campuses would predict more negative perceptions of the college climate among LGBTQ students. This was also supported in our results as SOMS and GIMS significantly contributed to explaining all 3 aspects of Campus Climate that were investigated in this study (Beliefs, Actions, Response). We found that higher levels of SOMS and GIMS were positively associated with more negative perceptions of campus climate. This suggests that individuals experiencing more microaggressions tend to have more unfavorable views of campus climate. This is similar to findings in the current literature (Szymanski et al., 2024; Tetreault et al., 2013; Witherup & Verrecchia, 2019).

Recognizing a campus as warm and welcoming significantly contributes to positive outcomes for LGBTQ students, as it fosters an environment where they feel supported, respected, and able to thrive both academically and personally (Garvey et al., 2015). Based on the literature and our results, we propose that encountering microaggressions contributes to more negative perceptions of the campus climate. Colleges must prioritize and actively work toward fixing students' perceptions of the campus climate because research shows that students who perceive the climate negatively are at a higher risk of dropping out, transferring to other institutions, or experiencing academic difficulties (Oseguera & Rhee, 2009). Improving the campus climate hinges on reducing microaggressions, as they significantly influence the overall atmosphere. By addressing and minimizing microaggressions, universities can effectively enhance the campus environment, enabling better management of student spaces and fostering a more inclusive and supportive atmosphere for all. In turn, research suggests this will improve overall outcomes for their students.

Campus Climate & Mental Health

Lastly, our third hypothesis stated that there is a correlation between the perception of campus climate and depression, anxiety, and stress among LGBTQ students; this was partially

supported in our analysis as well. Our study found a correlation between perceptions of campus climate and mental health outcomes among LGBTQ students, further highlighting the critical role of campus climate in the well-being of students. In this study, we used correlation to establish a bidirectional relationship between these variables as we propose that a negative experience can lead to an increase in DAS, but also high levels of DAS may color a person's perception of campus climate. According to the Students with Minority Identities in Campus Contexts Model (Vaccaro et al., 2015), which states that campus experiences can impact mental health, we propose that it is likely campus climate that is influencing DAS, though future studies are needed to establish this claim.

These findings align with prior research in the field, further reinforcing the understanding of the intricate relationship between campus climate and the mental health outcomes of LGBTQ students (Amodeo et al., 2020; Woodford et al., 2018). During their enrollment, college students are inevitably immersed in the campus climate, engaging with the various components of the campus environment as they navigate their academic and social experiences. When they don't feel supported, it severely hinders their academic success, sense of belonging, and much more. (Amodeo et al., 2020; Garvey et al., 2018). Because of this, there emerges an imperative need for colleges to proactively foster an environment free from such microaggressions, thereby mitigating any issues due to interpersonal tensions within student-centered settings.

Microaggressions, Mental Health, & Campus Climate

The bigger picture concerning microaggressions, campus climate, and the mental health of LGBTQ students is a multifaceted understanding of the challenges they face within collegiate settings. Microaggressions not only harm individuals' mental well-being but also affect their perception of the campus climate. In turn, negative campus climate perspectives and mental health issues have a direct relationship, suggesting that negative perspectives on campus climate and

mental health issues are interlinked in some way. This interconnected relationship forms a cyclical pattern of negative impact, creating a persistent challenge for LGBTQ students within collegiate settings.

Implications

Given this information, campus administrators, faculty, and staff should take actionable steps to mitigate the negative effects of microaggressions. Lipton (1996) highlighted the unique situation of LGBTQ students and their mental health. They stated how many universities are not equipped to fully help those students and urged that steps should be taken to first understand LGBTQ mental health before treating it. In line with our research, these steps may include training programs to recognize and mitigate microaggressive behaviors as campus officials may not even fully be aware that microaggressions are happening in the first place (Burleigh & Wilson, 2021). Another step would be expanding support services for LGBTQ students, such as counseling and mental health resources. Madireddy & Madireddy (2020) stated that students are most comfortable disclosing their LGBTQ status to their counselor but only 62% of the counselors responded correctly or appropriately to the situation. This number could potentially be higher with adequate training. One previous study by Dunbar et al., (2017) looked at the utilization of the current on-campus counseling services by LGBTQ students and found that LGBTQ students underutilized the on-campus student services despite having higher rates of mental illness. Dunbar et al., (2017) proposed this was partially due to a lack of understanding of LGBTQ issues.

There have been mixed results about accessing on campus resources and their usefulness. Previous research has suggested that a greater usage of campus resources improves the overall wellbeing of campus climate (Pascarella & Terenzini, 2005; Reason et al., 2006). However, Simpfinderfer (2020) found LGBTQ students who accessed these counseling services actually had a lower perception of campus climate. They hypothesized that this was due to several reasons:

students who are encountering hostile campus climates are more prone to utilizing these support services in the first place, indicating their preexisting negative view of the campus environment. Accessing support services can heighten students' awareness of campus heterosexist and heterogendered systems, potentially exacerbating their perception of the climate. It could also be due to the fact that these services might lack adequate resources to effectively support students concerning their sexuality and/or gender identity. While offering support services is crucial for addressing the needs of students in hostile campus climates, there is the potential for unintended consequences. These services may unintentionally heighten students' awareness of existing systemic issues (e.g., being unaware and untrained on LGBTQ issues) which possibly could lead to a decrease in their perception of campus climate. Universities must ensure that not only these services are available but designed to foster a supportive environment by being adequately trained for the accessibility of all students.

This study has the potential to inform practical interventions and advocacy efforts to create more inclusive and supportive environments for LGBTQ students. To better support LGBTQ students, educational institutions should enhance their support by making their allyship more visible and deliberate in their actions and policies. Yost & Gimore (2011) conducted a study regarding one specific university's campus climate. They found that a large number of LGBTQ students had experienced harassment on campus and LGBTQ students were more likely to perceive the campus to be negative. As an outcome of the study's findings, the researchers then presented the findings of negative campus climate to campus officials. As a result of the presentation, the university implemented multiple initiatives like adding "gender identity and expression" to their nondiscrimination statement, having a new student orientation solely dedicated to LGBTQ students and allies, and updating their training with information on violence against LGBTQ people and violence in same-sex sexual relationships and much more. Similarly, to this study, our findings

emphasize the urgent need for universities to take action by creating new initiatives on campus to actively support and uplift LGBTQ students.

Future Directions

Future studies should consider the physical attributes and location of the university to further understand the true implications of campus climate. Cress and Sax (1998) suggested studying the microclimates such as a student's major as different departments may have different perceptions of the current climate. The geographical location of the institution should be considered given the potential differences in societal attitudes and acceptance levels, particularly between universities in the southern and northern regions. Such research could shed light on the varying experiences of LGBTQ students in different campus environments.

Future studies could also consider the role of institutional policies and support services in shaping campus climate and mitigating the impact of microaggressions on LGBTQ students. For example, studies should explore the presence of LGBTQ centers on university campuses. Teman & Lahman (2010) and Self & Hudson (2015) both emphasized the multifaceted roles of these centers, including providing safety and advocacy to the students. Even when these universities have affirmative policies and spaces in place, future studies should investigate the extent to which students utilize these supportive services.

Qualitative research methods, such as interviews and focus groups with current LGBTQ students, could provide richer insights into the lived experiences of LGBTQ students and a better understanding of the microaggressions that occur within the collegiate environment. Open-ended questions could reveal detailed accounts of specific instances, their impact, and the context in which they occur. This method also allows for the capture of subtle behaviors and contextual factors that may not be apparent through the current study.

Future studies aiming to improve LGBTQ campus climate could utilize the Campus Pride Index as a valuable tool for assessment and intervention. This tool would assess the current state of LGBTQ inclusivity on college campuses, identify areas for improvement, and track progress over time. Additionally, researchers could explore the relationship between Campus Pride Index scores and various outcomes such as dropout rates, academic success, mental health, and overall campus satisfaction among LGBTQ students. By understanding how the LGBTQ campus climate perceptions relate to these outcomes, colleges and universities can prioritize initiatives that foster a more supportive and affirming environment for LGBTQ individuals.

Limitations

While many of our findings were significant, there are a few limitations to our study. Given the scope of this study, we decided not to use some of the demographic data like the location of college and race and ethnicity. These variables are important as they provide critical insights into the diversity and context of the sample. These factors influence individuals' experiences and outcomes in significant ways and were collected to enhance our understanding of the sample. While these factors will be explored further in future studies, including them in the current study was beyond its scope. Rankin (2006) focused on the implications of campus climate studies and pointed out that often many studies do not fully consider other factors when discussing the campus climate. Intersectionality is vital when looking at campus climate as there is an intricate web of identities and experiences that individuals bring with them into academic settings. Given the scope of the study, not all relevant aspects of intersectionality were able to be explored. Future studies should explore how these factors interact with each other and with other demographic variables such as race, ethnicity, and socioeconomic status to provide a more comprehensive understanding of the complex dynamics at play.

As this is a cross-sectional study, we cannot establish causality between variables. A longitudinal study tracking LGBTQ student over time could offer a deeper understanding of how experiences of microaggressions and perceptions of campus climate evolve and impact long-term outcomes. Because of the low sample size, the generalizability of the results is limited. While Rankin's (2003) campus climate scale served as a valuable tool in our study, it is typically interpreted using simple descriptive statistics so it may not fully capture the complexity of the campus climate. We also asked participants to self-report all of their answers which could lead to potential bias. Participants may provide responses that they perceive as socially desirable rather than reflecting their true thoughts or behaviors.

Conclusion

The main purpose of this study was to understand the role microaggressions had on LGBTQ college student's campus climate perception and their mental well-being. By using the framework of Minority Stress Theory (Meyer, 2003) and the Students with Minority Identities in Campus Contexts Model (Vaccaro et al., 2015), this study explored microaggressions and their impact on the mental health of LGBTQ students within collegiate environments. In addition to reinforcing the findings in previous literature on microaggressions (Crane et al., 2022; Garvey et al., 2018; Gnan et al., 2019; Kulick et al., 2017; Woodford & Kulick, 2015) our study offers a more nuanced understanding of the where, who, and how of microaggressions and their various effects on LGBTQ students. While future studies are needed to further advance our understanding of microaggressions and their impact on LGBTQ students in educational settings, our findings along with the prior literature concur that campus officials must prioritize measures aimed at reducing microaggressions to cultivate inclusive and supportive environments for all students.

REFERENCES

- Ackelsberg, M., Hart, J., Miller, N. J., Queeny, K., & Van Dyne, S. (2009). Faculty microclimates change at Smith College. In W. Brown-Glaude (Ed.), *Doing diversity in higher education: Faculty leaders share challenges and strategies* (pp.83-102). New Brunswick, NJ: Rutgers University Press.
- Amodeo, A. L., Esposito, C., & Bacchini, D. (2020). Heterosexist microaggressions, student academic experience, and perception of campus climate: Findings from an Italian higher education context. *PloS one*, 15(4), e0231580.10.3390/bs10120179
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469–480. <https://doi.org/10.1037/0003-066X.55.5.469>
- Balsam, K. F., Molina, Y., Beadnell, B., Simoni, J., & Walters, K. (2011). Measuring multiple minority stress: The LGBT People of Color Microaggressions Scale. *Cultural Diversity and Ethnic Minority Psychology*, 17(2), 163–174. <https://doi.org/10.1037/a0023244>
- Beagan, B. L., Mohamed, T., Brooks, K., Waterfield, B., & Weinberg, M. (2021). Microaggressions experienced by LGBTQ academics in Canada: “Just not fitting in... it does take a toll.” *International Journal of Qualitative Studies in Education*, 34(3), 197–212. <https://doi.org/10.1080/09518398.2020.1735556>
- Beattie, I. R., Van Dyke, N., & Hagaman, N. (2021). What do we know about LGBTQ+ college student academic experiences and outcomes? *Sociology Compass*, 15(3), <https://doi.org/10.1111/soc4.12862>
- Birkett, M., Newcomb, M. E., & Mustanski, B. (2015). Does it get better? A longitudinal analysis of psychological distress and victimization in lesbian, gay, bisexual, transgender, and

- questioning youth. *The Journal of adolescent health: official publication of the Society for Adolescent Medicine*, 56(3), 280–285. <https://doi.org/10.1016/j.jadohealth.2014.10.275>
- Bostwick, W., & Hequembourg, A. (2014). ‘Just a little hint’: Bisexual-specific microaggressions and their connection to epistemic injustices. *Culture, Health & Sexuality*, 16(5), 488–503. <https://doi.org/10.1080/13691058.2014.889754>
- Bovens, L., & Marcoci, A. (2023). The gender-neutral bathroom: a new frame and some nudges. *Behavioural Public Policy*, 7(1), 1-24. doi:10.1017/bpp.2020.23
- BrckaLorenz, A., Duran, A., Fassett, K., & Palmer, D. (2021). The within-group differences in LGBQ+ college students’ belongingness, institutional commitment, and outness. *Journal of Diversity in Higher Education*, 14(1), 135–146. <https://doi.org/10.1037/dhe0000135>
- Burgess, D., Lee, R., Tran, A., & Van Ryn, M. (2007). Effects of Perceived Discrimination on Mental Health and Mental Health Services Utilization Among Gay, Lesbian, Bisexual and Transgender Persons. *Journal of LGBT Health Research*, 3(4), 1–14. <https://doi.org/10.1080/15574090802226626>
- Burleigh, C. L., & Wilson, A. M. (2021). Teachers’ awareness in identifying microaggressive behaviors within the K-12 classroom. *Social Psychology of Education*, 24(1), 143-167. <https://doi.org/10.1007/s11218-020-09604-9>
- Caba, A. E., Mallory, A. B., Simon, K. A., Rathus, T., & Watson, R. J. (2022). Complex Outness Patterns Among Sexual Minority Youth: A Latent Class Analysis. *Journal of Youth and Adolescence*, 51(4), 746–765. <https://doi.org/10.1007/s10964-022-01580-x>
- Casey, L. S., Reisner, S. L., Findling, M. G., Blendon, R. J., Benson, J. M., Sayde, J. M., & Miller, C. (2019). Discrimination in the United States: Experiences of lesbian, gay, bisexual, transgender, and queer Americans. *Health Services Research*, 54(S2), 1454–1466. <https://doi.org/10.1111/1475-6773.13229>

- Cooper, J. M., Dollarhide, C. T., Radliff, K. M., & Gibbs, T. A. (2014). No lone wolf: A multidisciplinary approach to creating safe schools for LGBTQ youth through the development of allies. *Journal of LGBT Issues in Counseling*, 8(4), 344-360. <https://doi.org/10.1080/15538605.2014.960128>
- Crane, P. R., Swaringen, K. S., Rivas-Koehl, M. M., Foster, A. M., Le, T. H., Weiser, D. A., & Talley, A. E. (2022). Come Out, Get Out: Relations Among Sexual Minority Identification, Microaggressions, and Retention in Higher Education. *Journal of Interpersonal Violence*, 37(9–10), NP8237–NP8248. <https://doi.org/10.1177/0886260520967126>
- Cress, C. M. (2002). Campus climate. In A. M. Martinez, & K. A. Renn (Eds.), *Women in higher education: An encyclopedia* (pp. 390–397). Santa Barbara, CA: ABC-CLIO, Inc
- Cress, C.M., & Sax, L.J. (1998). Campus Climate Issues to Consider for the Next Decade. *New Directions for Institutional Research*, 1998, 65-80.
- Detrie, P. M., & Lease, S. H. (2007). The relation of social support, connectedness, and collective self-esteem to the psychological well-being of lesbian, gay, and bisexual youth. *Journal of Homosexuality*, 53(4), 173-199. <https://doi.org/10.1080/00918360802103449>
- Dunbar, M. S., Sontag-Padilla, L., Ramchand, R., Seelam, R., & Stein, B. D. (2017). Mental health service utilization among lesbian, gay, bisexual, and questioning or queer college students. *Journal of Adolescent Health*, 61(3), 294-301
<https://doi.org/10.1016/j.jadohealth.2017.03.008>
- Erikson, E.H. (1968). *Identity: youth and crisis*. Norton & Co.
- Feldman, S. E., & Wright, A. J. (2013). Dual Impact: Outness and LGB Identity Formation on Mental Health. *Journal of Gay & Lesbian Social Services*, 25(4), 443–464.
<https://doi.org/10.1080/10538720.2013.833066>

- Galupo, M. P., Henise, S. B., & Davis, K. S. (2014). Transgender microaggressions in the context of friendship: Patterns of experience across friends' sexual orientation and gender identity. *Psychology of Sexual Orientation and Gender Diversity*, 1(4), 461–470.
<https://doi.org/10.1037/sgd0000075>
- Garvey, J. C., & Rankin, S. R. (2015). The Influence of Campus Experiences on the Level of Outness Among Trans-Spectrum and Queer-Spectrum Students. *Journal of Homosexuality*, 62(3), 374–393. <https://doi.org/10.1080/00918369.2014.977113>
- Garvey, J. C., Rankin, S., Beemyn, G., & Windmeyer, S. (2017). Improving the campus climate for LGBTQ students using the Campus Pride Index. *New Directions for Student Services*, 2017(159), 61-70.
- Garvey, J. C., Squire, D. D., Stachler, B., & Rankin, S. (2018). The impact of campus climate on queer-spectrum student academic success. *Journal of LGBT Youth*, 15(2), 89–105.
<https://doi.org/10.1080/19361653.2018.1429978>
- Garvey, J. C., Taylor, J. L., & Rankin, S. (2015). An Examination of Campus Climate for LGBTQ Community College Students. *Community College Journal of Research and Practice*, 39(6), 527–541. <https://doi.org/10.1080/10668926.2013.861374>
- Gilbert, C., Siepser, C., Fink, A. E., & Johnson, N. L. (2021). Why LGBTQ+ campus resource centers are essential. *Psychology of Sexual Orientation and Gender Diversity*, 8(2), 245.
- GLAAD (2023) Accelerating acceptance 2023.
<https://assets.glaad.org/m/23036571f611c54/original/Accelerating-Acceptance-2023.pdf2>
(accessed Sept 10, 2023).
- Gnan, G. H., Rahman, Q., Ussher, G., Baker, D., West, E., & Rimes, K. A. (2019). General and LGBTQ-specific factors associated with mental health and suicide risk among LGBTQ

- students. *Journal of Youth Studies*, 22(10), 1393–1408.
<https://doi.org/10.1080/13676261.2019.1581361>
- Goldberg, A. E. (2018). Transgender students in higher education.
- Hanson, M. (2022, July 26). College enrollment statistics [2023]: Total + by demographic. Education Data Initiative. <https://educationdata.org/college-enrollment-statistics>
- Hardy, J., Geier, C., Vargas, S., Doll, R., & Howard, A. L. (2022). LGBTQ Futures and Participatory Design: Investigating Visibility, Community, and the Future of Future Workshops. *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW2), 1-25.
<https://doi.org/10.1145/3555638>
- Hoare, C. H. (2002). Erikson on development in adulthood: new insights from the unpublished papers. Oxford University Press.
- Huff, M., Edwards, K. M., Mauer, V. A., Littleton, H., Lim, S., & Sall, K. E. (2023). Gender-neutral bathrooms on campus: a multicampus study of cisgender and transgender and gender diverse college students. *Journal of American College Health*, 1-5.
<https://doi.org/10.1080/07448481.2023.2239358>
- Human Rights Campaign. (2022). Health Equality Index Retrieved on Sept 10th, 2023.
<https://www.hrc.org/resources/state-equality-index>
- Kelleher, C. (2009). Minority stress and health: Implications for lesbian, gay, bisexual, transgender, and questioning (LGBTQ) young people. *Counselling Psychology Quarterly*, 22(4), 373–379. <https://doi.org/10.1080/09515070903334995>
- Kosciw, J. G., Palmer, N. A., & Kull, R. M. (2015). Reflecting Resiliency: Openness About Sexual Orientation and/or Gender Identity and Its Relationship to Well-Being and Educational Outcomes for LGBT Students. *American Journal of Community Psychology*, 55(1–2), 167–178. <https://doi.org/10.1007/s10464-014-9642-6>

- Kulick, A., Wernick, L. J., Woodford, M. R., & Renn, K. (2017). Heterosexism, Depression, and Campus Engagement Among LGBTQ College Students: Intersectional Differences and Opportunities for Healing. *Journal of Homosexuality*, 64(8), 1125–1141.
<https://doi.org/10.1080/00918369.2016.1242333>
- Legate, N., Ryan, R. M., & Rogge, R. D. (2017). Daily Autonomy Support and Sexual Identity Disclosure Predicts Daily Mental and Physical Health Outcomes. *Personality and Social Psychology Bulletin*, 43(6), 860–873. <https://doi.org/10.1177/0146167217700399>
- Legate, N., Ryan, R. M., & Weinstein, N. (2012). Is Coming Out Always a “Good Thing”? Exploring the Relations of Autonomy Support, Outness, and Wellness for Lesbian, Gay, and Bisexual Individuals. *Social Psychological and Personality Science*, 3(2), 145–152.
<https://doi.org/10.1177/1948550611411929>
- Lilienfeld, S. O. (2017). Microaggressions: Strong claims, inadequate evidence. *Perspectives on psychological science*, 12(1), 138-169. <https://doi.org/10.1177/1745691616659391>
- Lipton, B. (1996). Opening Doors: Responding to the Mental Health Needs of Gay and Bisexual College Students. *Journal of Gay & Lesbian Social Services*, 4(2), 7–24.
https://doi.org/10.1300/J041v04n02_02
- Lovibond, P. F., & Lovibond, S. H. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335–343.
[https://doi.org/10.1016/0005-7967\(94\)00075-U](https://doi.org/10.1016/0005-7967(94)00075-U)
- Madireddy, S., & Madireddy, S. (2020). Strategies for Schools to Prevent Psychosocial Stress, Stigma, and Suicidality Risks among LGBTQ+ Students. *American Journal of Educational Research*, 8(9), 659–667. <https://doi.org/10.12691/education-8-9-7>

Mapping Attacks on LGBTQ Rights in U.S. State Legislatures. (n.d.). American Civil Liberties Union. Retrieved Sept 10th, 2023, from <https://www.aclu.org/legislative-attacks-on-lgbtq-rights>

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. <https://doi.org/10.1037/0033-2909.129.5.674>

Meyer, I. H. (2015). Resilience in the study of minority stress and health of sexual and gender minorities. *Psychology of Sexual Orientation and Gender Diversity*, 2(3), 209–213. <https://doi.org/10.1037/sgd0000132>

Mulryan-Kyne, C. (2010). Teaching large classes at college and university level: challenges and opportunities. *Teaching in Higher Education*, 15(2), 175–185. <https://doi.org/10.1080/13562511003620001>

Munro, L., Travers, R., & Woodford, M. R. (2019). Overlooked and Invisible: Everyday Experiences of Microaggressions for LGBTQ Adolescents. *Journal of Homosexuality*, 66(10), 1439–1471. <https://doi.org/10.1080/00918369.2018.1542205>

Nadal, K. L. (2013). That’s so gay! Microaggressions and the lesbian, gay, bisexual, and transgender community. American Psychological Association. <https://doi.org/10.1037/14093-000>

Nadal, K. L. (2018). Measuring LGBTQ microaggressions: The sexual orientation microaggressions scale (SOMS) and the gender identity microaggressions scale (GIMS). *Journal of Homosexuality*. <https://doi.org/10.1080/00918369.2018.1542206>

Nadal, K. L. (2023). Dismantling everyday discrimination: Microaggressions toward LGBTQ people (Second edition). American Psychological Association.

- Nadal, K. L., Issa, M.-A., Leon, J., Meterko, V., Wideman, M., & Wong, Y. (2011). Sexual Orientation Microaggressions: “Death by a Thousand Cuts” for Lesbian, Gay, and Bisexual Youth. *Journal of LGBT Youth*, 8(3), 234–259.
<https://doi.org/10.1080/19361653.2011.584204>
- Nadal, K. L., Skolnik, A., & Wong, Y. (2012). Interpersonal and Systemic Microaggressions Toward Transgender People: Implications for Counseling. *Journal of LGBT Issues in Counseling*, 6(1), 55–82. <https://doi.org/10.1080/15538605.2012.648583>
- Nadal, K.L., Rivera, D.P., & Corpus, M.J. (2010). Sexual orientation and transgender microaggressions: Implications for mental health and counseling.
- Nourafkan, N. J., Jumah, B., Asif, R., & DEGHANMONGABADI, A. (2020). Conflicts between Students Living on-Campus Dormitories: The Case of Dormitories at Eastern Mediterranean University Campus. *SEISENSE Journal of Management*, 3(4), 31-43.
- Osanloo, A. F., Boske, C., & Newcomb, W. S. (2016). Deconstructing macroaggressions, microaggressions, and structural racism in education: Developing a conceptual model for the intersection of social justice practice and intercultural education. *International Journal of Organizational Theory and Development*, 4(1), 1-18.
- Oseguera, L., & Rhee, B. S. (2009). The influence of institutional retention climates on student persistence to degree completion: A multilevel approach. *Research in higher education*, 50, 546-569. <https://doi.org/10.1007/s11162-009-9134-y>
- Oswalt, S. B., & Wyatt, T. J. (2011). Sexual orientation and differences in mental health, stress, and academic performance in a national sample of US college students. *Journal of homosexuality*, 58(9), 1255-1280. <https://doi.org/10.1080/00918369.2011.605738>
- Pascarella, E. T., & Terenzini, P. T. (2005). *How College Affects Students: A Third Decade of Research*. Volume 2. Jossey–Bass

- Peterson, M. W., & Spencer, M. G. (1990). Understanding academic culture and climate. *New directions for institutional research*, 17(4), 3-18.
- Rankin, S. (2003). *Campus climate for gay, lesbian, bisexual, and transgender people: A national perspective*. New York: The National Gay and Lesbian Task Force Policy Institute.
- Rankin, S. R. (2006). LGBTQA Students on Campus: Is Higher Education Making the Grade? *Journal of Gay & Lesbian Issues in Education*, 3(2-3), 111-117.
https://doi.org/10.1300/J367v03n02_11
- Rankin, S., & Reason, R. (2008). Transformational Tapestry Model: A comprehensive approach to transforming campus climate. *Journal of Diversity in Higher Education*, 1(4), 262.
- Reason, R., Terenzini, P., & Domingo, R. (2006). First things first: Developing competence in the first year of college. *Research in Higher Education*, 47(2), 149-176.
<https://doiorg.ezproxy.uvm.edu/10.1007/s11162-005-8884-4>
- Rivas-Koehl, M., Rivas-Koehl, D., & McNeil Smith, S. (2023). The temporal intersectional minority stress model: Reimagining minority stress theory. *Journal of Family Theory & Review*, 15(4), 706-726. <https://doi.org/10.1111/jftr.12529>
- Rovai, A. P., Wighting, M. J., & Liu, J. (2005). School climate. *Quarterly Review of Distance Education*, 6(4).
- Sadika, B., Wiebe, E., Morrison, M. A., & Morrison, T. G. (2020). Intersectional Microaggressions and Social Support for LGBTQ Persons of Color: A Systematic Review of the Canadian-Based Empirical Literature. *Journal of GLBT Family Studies*, 16(2), 111-147.
<https://doi.org/10.1080/1550428X.2020.1724125>
- Seelman, K. L., Woodford, M. R., & Nicolazzo, Z. (2017). Victimization and Microaggressions Targeting LGBTQ College Students: Gender Identity as a Moderator of Psychological

- Distress. *Journal of Ethnic & Cultural Diversity in Social Work*, 26(1–2), 112–125.
<https://doi.org/10.1080/15313204.2016.1263816>
- Self, J. M., & Hudson, K. D. (2015). Dangerous waters and brave space: A critical feminist inquiry of campus LGBTQ centers. *Journal of Gay & Lesbian Social Services*, 27(2), 216-245.
<https://doi.org/10.1080/10538720.2015.1021985>
- Simpfenderfer, A.D., Robles, J., Drummond, J., Garvey, J.C., Haslam, R.E., Dews, S.D., ... Weaver, C.A. (2020). Campus Climate Perceptions and Residential Living Among Queer and Trans Students: An Exploration Using Structural Equation Modeling. *The Review of Higher Education* 44(1), 31-56. <https://doi.org/10.1353/rhe.2020.0034>.
- Sokol, J. T. (2009). Identity development throughout the lifetime: An examination of Eriksonian theory. *Graduate journal of counseling psychology*, 1(2), 14.
- Solorzano, D., Ceja, M., & Yosso, T. (2000). Critical Race Theory, Racial Microaggressions, and Campus Racial Climate: The Experiences of African American College Students. *The Journal of Negro Education*, 69(1/2), 60–73.
- Sue, D. W. (2010). *Microaggressions in everyday life: Race, gender, and sexual orientation*. John Wiley & Sons Inc.
- Sue, D. W., & Spanierman, L. B. (2020). *Microaggressions in everyday life* (2nd ed.). John Wiley & Sons, Inc.
- Sue, D. W., Calle, C. Z., Mendez, N., Alsaidi, S., & Glaeser, E. (2020). *Microintervention strategies: What you can do to disarm and dismantle individual and systemic racism and bias*. John Wiley & Sons.
- Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M. B., Nadal, K. L., & Esquilin, M. (2007). *Racial microaggressions in everyday life: Implications for clinical*

- practice. *American Psychologist*, 62(4), 271–286. <https://doi.org/10.1037/0003-066X.62.4.271>
- Szymanski, D. M., Goates, J. D., & Dua, V. (2024). Moderators of the LGBTQ Campus Climate and College-Related Outcomes Links. *The Counseling Psychologist*, 52(3), 477–508. <https://doi.org/10.1177/00110000231222957>
- Teman, E. D., & Lahman, M. K. (2010). Supporting Students of Diverse Sexual Orientation in Higher Education: An Ethnography of an LGBTAQ Center. *Online Submission*.
- Tetreault, P. A., Fette, R., Meidlinger, P. C., & Hope, D. (2013). Perceptions of Campus Climate by Sexual Minorities. *Journal of Homosexuality*, 60(7), 947–964. <https://doi.org/10.1080/00918369.2013.774874>
- Thomas, C., & Skowronski, J. J. (2020). The study of microaggressive behavior: Reflections on the construct, construct-relevant research, and possible future research. *Stereotypes: The incidence and impacts of bias*, 45-69.
- Tran, D., Sullivan, C. T., & Nicholas, L. (2023). Lateral Violence and Microaggressions in the LGBTQ+ Community: A Scoping Review. *Journal of Homosexuality*, 70(7), 1310–1324. <https://doi.org/10.1080/00918369.2021.2020543>
- Vaccaro, A. (2012). Campus microclimates for LGBT faculty, staff, and students: An exploration of the intersections of social identity and campus roles. *Journal of Student Affairs Research and Practice*, 49(4), 429-446. <https://doi.org/10.1515/jsarp-2012-6473>
- Vaccaro, A., Russell, E. A., & Koob, R. M. (2015). Students with minoritized identities of sexuality and gender in campus contexts: An emergent model. *New directions for student services*, 2015(152), 25-39. <https://doi.org/10.1002/ss.20143>
- Weinmeyer, R. (2014). The Decriminalization of Sodomy in the United States. *AMA Journal of Ethics*, 16(11), 916–922. <https://doi.org/10.1001/virtualmentor.2014.16.11.hlaw1-1411>

- Wike, T., Tomlinson, C. A., Wagaman, A., Matijczak, A., Murphy, J., Watts, K., O'Connor, K., & McDonald, S. (2023). The role of thwarted belongingness on the relationship between microaggressions and mental health for LGBTQ+ emerging adults. *Journal of Youth Studies, 26*(2), 286–303. <https://doi.org/10.1080/13676261.2021.2010687>
- Williams, M. T. (2020). Microaggressions: Clarification, evidence, and impact. *Perspectives on Psychological Science, 15*(1), 3-26. <https://doi.org/10.1177/1745691619827499>
- Witherup, K. L., & Verrecchia, P. J. (2019). Microaggressions on campus: An examination of student perceptions. *International Journal of Criminology and Sociology, 8*(1), 92-99.
- Woodford, M. R., & Kulick, A. (2015). Academic and Social Integration on Campus Among Sexual Minority Students: The Impacts of Psychological and Experiential Campus Climate. *American Journal of Community Psychology, 55*(1–2), 13–24. <https://doi.org/10.1007/s10464-014-9683-x>
- Woodford, M. R., Kulick, A., Sinco, B. R., & Hong, J. S. (2014). Contemporary heterosexism on campus and psychological distress among LGBTQ students: The mediating role of self-acceptance. *American Journal of Orthopsychiatry, 84*(5), 519–529. <https://doi.org/10.1037/ort0000015>
- Woodford, M. R., Weber, G., Nicolazzo, Z., Hunt, R., Kulick, A., Coleman, T., Coulombe, S., & Renn, K. A. (2018). Depression and Attempted Suicide among LGBTQ College Students: Fostering Resilience to the Effects of Heterosexism and Cisgenderism on Campus. *Journal of College Student Development, 59*(4), 421–438. <https://doi.org/10.1353/csd.2018.0040>
- Yost, M. R., & Gilmore, S. (2011). Assessing LGBTQ Campus Climate and Creating Change. *Journal of Homosexuality, 58*(9), 1330–1354. <https://doi.org/10.1080/00918369.2011.605744>

APPENDIX A: IRB APPROVAL FORM



EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board
Willis Building · Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office 252-744-2914 · Fax 252-744-
2284 · rede.ecu.edu/umcirb/

Notification of Exempt Certification

From: Social/Behavioral IRB
To: [Mary Cate Komoski](#)
CC:
Date: 11/22/2023
Re: [UMCIRB 23-001871](#)
LGBTQ College Students' Perspectives and Responses

I am pleased to inform you that your research submission has been certified as exempt on 11/22/2023. This study is eligible for Exempt Certification under category # 2 AB.

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

Document	Description
_IRB - Thesis Proposal Final Draft .docx (0.01)	Study Protocol or Grant Application
Campus Climate (0.01)	Surveys and Questionnaires
Demographic Questions (1).docx (0.01)	Surveys and Questionnaires
Depression Anxiety, Stress Short Form.pdf (0.01)	Surveys and Questionnaires
Email Script (1).docx (0.01)	Recruitment Documents/Scripts
Final Info Sheet (Updated).docx (0.01)	Consent Forms
GIMS Packet (0.01)	Surveys and Questionnaires
Research Study Participants (Updated).pdf (0.01)	Recruitment Documents/Scripts
SOMS Packet (0.01)	Surveys and Questionnaires

For research studies where a waiver or alteration of HIPAA Authorization has been approved, the IRB states that each of the waiver criteria in 45 CFR 164.512(i)(1)(i)(A) and (2)(i) through (v) have been met. Additionally, the elements of PHI to be collected as described in items 1 and 2 of the Application for Waiver of Authorization have been determined to be the minimal necessary for the specified research.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

IRB00000705 East Carolina U IRB #1 (Biomedical) IORG0000418
IRB00003781 East Carolina U IRB #2 (Behavioral/SS) IORG0000418

APPENDIX B: SEXUAL ORIENTATION MICROAGGRESSIONS SCALE

**Sexual Orientation Microaggressions Scale
(SOMS)**

Kevin L. Nadal, Ph.D.

**Before the SOMS is copied, distributed, or used, permission
must be obtained from its author**

Kevin L. Nadal, Ph.D.
Professor of
Psychology
John Jay College of Criminal Justice
City University of New York
524 W. 59th Street
New York, NY
10019
(212) 237-8795
knadal@jjay.cuny.edu

I would like to send a very special thank you to my research assistants Kristin Davidoff, Katie Griffin, and Yinglee Wong who assisted in data collection and analysis.

**Sexual Orientation Microaggressions Scale (SOMS) Kevin L.
Nadal, Ph.D.**

John Jay College of Criminal Justice- City University of New York

Instructions: Think about your experiences with sexual orientation. Please read each item and think of how many times this event has happened to you in the **PAST SIX MONTHS**.

0 = I did not experience this event.

1 = I experienced this event 1 time in the past six months.

2= I experienced this event 2 times in the past six months.

3= I experienced this event 3 times in the past six months.

4= I experienced this event 4 times in the past six months.

5= I experienced this event 5 or more times.

1. I have been told I was overreacting when I confronted someone about their heterosexist behaviors/slights.
2. I have been criticized about not wearing clothes that are normal for my gender.
3. Someone has tried to keep their children from coming into physical contact with me because of my sexual orientation.
4. People have made negative comments or jokes about LGBTQ people in my presence without realizing my sexual orientation.
5. I have been told that I should stop complaining about heterosexism.
6. I have been criticized about the way I dress because I choose clothes that are different than people of my gender.
7. I have heard the term "That's so gay" when someone was talking about something negative.
8. Someone has assumed I have HIV or AIDS because of my sexual orientation.
9. I have seen LGBTQ people portrayed positively in magazines.
10. Someone assumed that I would be a child molester or sexual predator because of my sexual orientation.
11. People have used terms like "fag/dyke/queer/homo" in front of me.
12. When I thought something was heterosexist or homophobic, a heterosexual person provided alternative rationales.
13. I have heard a person call someone else "gay" because she/he was "weird" or "different."
14. When I thought something was heterosexist or homophobic, a heterosexual person disagreed with me.
15. Someone told me that I was oversensitive when it came to LGBTQ issues.
16. Someone has avoided sitting next to me because of my sexuality.
17. A friend has stopped talking to me after finding out about my sexuality.
18. I have seen LGBTQ people portrayed positively in movies.
19. I have seen LGBTQ people portrayed positively on television.
20. People have made insensitive gay or lesbian jokes in front of me.
21. Someone has responded defensively when I pointed out their homophobic language.
22. I have been told to act more "masculine" or "feminine."
23. I have seen advertisements/commercials that include same sex couples.
24. I have been told I was being paranoid when I thought someone was being heterosexist.

Sexual Orientation Microaggressions Scale (SOMS)

Kevin L. Nadal, Ph.D.

John Jay College of Criminal Justice- City University of New York

1. To calculate the SOMS Total score:
 - a. Convert items 9, 18, 19, 23 into inverse scores. (e.g., if “5” is marked, convert to “1.” If “4” is marked, convert to “2,” etc.).
 - b. Including the converted scores, add ALL scores for all 24 items for the total score.
 - c. Divide the total score by 24 to obtain the scale score.

2. To calculate the SOMS Subscale scores:
 - a. Microinvalidations Subscale:
Add items #s 1, 5, 12, 14, 15, 21, 24.

Divide the total by 7 to obtain the subscale score.

 - b. Assumption of Deviance Subscale: Add items #s 3, 8, 10, 16, 17.

Divide the total by 5 to obtain the subscale score.

 - c. Heterosexist Language Subscale: Add items #s 4, 7, 11, 13, 20.

Divide the total by 5 to obtain the subscale score.

 - d. Endorsement of Gender Conformity Subscale: Add items #s 2, 6, 22.

Divide the total by 3 to obtain the scale score.

 - e. Environmental Microaggressions Subscale:

Convert items 9, 18, 19, 23 into inverse scores. (e.g., if “5” is marked, convert to “1.” If “4” is marked, convert to “2,” etc.). Add items and divide the total by 4 to obtain the scale score.

SOMS Psychometric Properties

Pilot study consisted of participants (n= 260) from the following sexual orientation groups: Gay (N=123), Lesbian (N=55), Bisexual (N=44), Queer/pansexual (N=19), or other (N=14).

SOMS Total Scale ($\alpha=.93$)

Subscale 1: Microinvalidations ($\alpha=.93$)

Subscale 2: Assumption of Deviance ($\alpha=.90$)

Subscale 3: Heterosexist Language ($\alpha=.87$)

Subscale 4: Endorsement of Gender Conformity ($\alpha= .90$)

Subscale 5: Environmental Microaggressions Scale ($\alpha=.73$)

Suggested Citation:

Nadal, K. L. (2019). Measuring LGBTQ Microaggressions: The Sexual Orientation Microaggressions Scale (SOMS) and the Gender Identity Microaggressions Scale (GIMS). *Journal of Homosexuality*, 66, 1404-1414.

APPENDIX C: GENDER IDENTITY MICROAGGRESSIONS SCALE

Gender Identity Microaggressions Scale

Kevin L. Nadal, Ph.D.

**Before the GIMS is copied, distributed, or used,
permission must be obtained from its author.**

Kevin L. Nadal, Ph.D.
Professor of Psychology
John Jay College of Criminal Justice
City University of New York
524 W. 59th Street
New York, NY
10019
(212) 237-8795
knadal@jjay.cuny.edu

I would like to send a very special thank you to my research assistants Kristin Davidoff, Alexis Forbes, Katie Griffin, and Yinglee Wong who assisted in data collection and analysis.

Kevin L. Nadal, Ph.D.
John Jay College of Criminal Justice- City University of New York

Instructions: Think about your experiences with sexual orientation. Please read each item and think of how many times this event has happened to you in the **PAST SIX MONTHS**.

0 = I did not experience this event.

1 = I experienced this event 1 time in the past six months.

2= I experienced this event 2 times in the past six months.

3= I experienced this event 3 times in the past six months.

4= I experienced this event 4 times in the past six months.

5= I experienced this event 5 or more times.

1. A loved one (e.g., family or friend) has told me that my gender nonconformity is just a phase.
2. Someone avoided sitting next to me in a public or government setting (e.g., DMV, courthouses, libraries).
3. Strangers and acquaintances have called me by the wrong personal pronoun.

4. I was told that I complain too much about societal discrimination against gender nonconforming people.
5. Someone told me that my transgender identity or my gender nonconformity was just a phase.
6. Someone wanted to engage in a sexual act with me only because they view transgender people as exotic.
7. Someone avoided sitting next to me at a bar or restaurant because I am gender nonconforming.
8. A loved one (e.g., friend or family) has called me by the wrong personal pronoun.
9. Someone (e.g., family, friend, co-worker) has asked me personal questions about gender reassignment...
10. I was told that I complain too much about how people react to my gender nonconformity.
11. I was told that I made a family member uncomfortable because of my gender nonconformity or transgender identity.
12. Someone (e.g., family, friend, coworker) has asked me if I feel like I'm trapped in the body of another sex.
13. LGB people have told me that my gender nonconformity is just a phase.
14. Someone (e.g., family, friend, coworker) has asked me if I feel like I'm trapped in the body of another sex.

Kevin L. Nadal, Ph.D.

John Jay College of Criminal Justice- City University of New York

1. To calculate the GIMS Total score:

- . Add ALL scores from all 14 items for the total score.
- . Divide the total score by 14 to obtain the scale score.

0. To calculate the GIMS Subscale scores:

. Denial of Gender Identity Subscale:
Add items #s 1, 5, 11, 13.
Divide the total by 4 to obtain the subscale score.

b. Misuse of Pronouns Subscale:
Add items #s 3, 8.
Divide the total by 2 to obtain the subscale score.

c. Invasion of Bodily Privacy Subscale:
Add items #s 6, 9, 14.
Divide the total by 3 to obtain the subscale score.

- d. Behavioral Discomfort Subscale:
Add items #s 2, 7, 12.
Divide the total by 3 to obtain the scale score.

- e. Denial of Societal Transphobia Subscale:
Add items #s 4, 10.
Divide the total by 2 to obtain the scale score.

Gender Identity Microaggressions Scale (GIMS) Psychometric Properties

Pilot study consisted of participants ($N = 160$) from the following Gender Identity Groups: FTM Transgender Men ($N = 52$), MTF Transgender Women ($N = 53$), Genderqueer/Non-Binary ($N = 52$).

GIMS Total Scale ($\alpha=.76$) Subscale 1:
Denial of Gender Identity ($\alpha=.67$) Subscale 2:
Misuse of Pronouns ($\alpha=.70$) Subscale 3:
Invasion of Bodily Privacy ($\alpha=.65$) Subscale 4:
Behavioral Discomfort ($\alpha=.60$)
Subscale 5: Denial of Societal Transphobia ($\alpha=.71$)

Suggested Citation:

Nadal, K. L. (in press). Measuring LGBTQ Microaggressions: The Sexual Orientation Microaggressions Scale (SOMS) and the Gender Identity Microaggression Scale (GIMS). *Journal of Homosexuality*.

1-7 Where did this harassment occur? (Mark all that apply)

- in a class
- in a residence hall
- in a campus office
- in a public space on campus (e.g. student union)
- while working at a College/University job
- while walking on campus
- campus event

1-8 Who was the source of this harassment? (Mark all that apply)

- student
- faculty
- teaching assistant
- resident assistant
- administrator
- staff member
- campus police
- don't know

Part 2. Feelings about campus climate

For the following items, choose the response that most closely describes your feelings.

2-1 Gay men are harassed on campus due to their sexual orientation/gender identity.

- very unlikely 1
- unlikely 2
- uncertain 3
- likely 4
- very likely 5

2-2 Lesbians are harassed on campus due to their sexual orientation/gender identity.

- very unlikely 1
- unlikely 2
- uncertain 3
- likely 4
- very likely 5

2-3 Bisexual persons are harassed on campus due to their sexual orientation/gender identity.

- very unlikely 1
- unlikely 2
- uncertain 3
- likely 4
- very likely 5

2-4 Transgender persons are harassed on campus due to their sexual orientation/gender identity.

- very unlikely 1
- unlikely 2
- uncertain 3
- likely 4
- very likely 5

2-5 I fear for my physical safety because of my sexual orientation/gender identity.

- very unlikely 1
- unlikely 2
- uncertain 3
- likely 4
- very likely 5

2-6 I conceal my sexual orientation/gender identity to avoid harassment.

- very unlikely 1
- unlikely 2
- uncertain 3
- likely 4
- very likely 5

PAGE 2

2-7 I conceal my sexual orientation/gender identity to avoid discrimination.

- very unlikely 1
- unlikely 2
- uncertain 3
- likely 4
- very likely 5

2-8 I stay away from areas of campus where gay, lesbian, bisexual, transgender persons congregate for fear of being labeled.

- very unlikely 1
- unlikely 2
- uncertain 3
- likely 4
- very likely 5

Part 3. Campus response

Please indicate your agreement or disagreement with the following statements. Mark one for each line using the following scale:

3-1 The College/University thoroughly addresses campus issues related to sexual orientation/gender identity.

- Strongly agree 1
- Agree 2
- Uncertain 3
- Disagree 4
- Strongly disagree 5

3-2 The College/University has visible leadership from the administration regarding sexual orientation/gender identity issues on campus.

- Strongly agree 1
- Agree 2
- Uncertain 3
- Disagree 4
- Strongly disagree 5

3-3 The curriculum adequately represents the contributions of LGBT persons.

- Strongly agree 1
- Agree 2
- Uncertain 3
- Disagree 4
- Strongly disagree 5

3-4 The climate of the classes I have taken or the job site where I work are accepting of LGBT persons.

- Strongly agree 1
- Agree 2
- Uncertain 3
- Disagree 4
- Strongly disagree 5

3-5 The College/University provides visible resources on LGBT issues and concerns.

- Strongly agree 1
- Agree 2
- Uncertain 3
- Disagree 4
- Strongly disagree 5

3-6 The College/University has a rapid response system for incidents of LGBT harassment.

- Strongly agree 1
- Agree 2
- Uncertain 3
- Disagree 4
- Strongly disagree 5

3-7 The College/University has a rapid response system for incidents of LGBT discrimination.

Strongly agree	Agree	Uncertain	Disagree	Strongly disagree
Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ

3-8 Please rate the campus climate in general using the following scale:

Friendly	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Hostile
Communicative	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Reserved
Concerned	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Indifferent
Respectful	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Disrespectful
Cooperative	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Uncooperative
Competitive	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Noncompetitive
Improving	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Worsening
Accessible to Persons with Disabilities	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Inaccessible to Persons with Disabilities
Non-racist	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Racist
Non-sexist	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Sexist
Non-homophobic	Ⓐ	Ⓑ	Ⓒ	Ⓓ	Ⓔ	Homophobic

Part 4. Background information

4-1 What is your gender?

- female
- male
- transgender

4-2 What is your sexual identity?

- bisexual
- gay
- lesbian
- heterosexual
- uncertain

4-3 What is your age?

- 22 and under
- 23-32
- 33-42
- 43-52
- 53 and over

4-4 What is your position?

- undergraduate student
- professional student (e.g. law, medicine)
- graduate student
- staff
- administrator
- faculty

4-5 Are you full-time or part-time?

- full-time
- part-time

4-6 Do you have a disability that substantially limits a major life activity (such as seeing, hearing, learning, walking)?

- Yes
- No

4-7 With what racial/ethnic group do you identify? (If you are of a multi-racial/multi-ethnic background, mark all that apply.)

- African American/Black
- Asian/Pacific Islander
- Middle Eastern
- American Indian/Alaskan Native
- Chicano/Latino/Hispanic
- White/Caucasian

4-8 What is your citizenship status?

- US citizen - born in the United States
- US citizen - naturalized
- permanent resident (immigrant)
- international (F-1 or J-1 visa)

4-9 Place yourself on the following continuum with 5 being out to everyone personally and professionally, 4 being out to family and friends, 3 being out to a few friends/family members, 2 being out to a few close friends, and 1 being totally closeted.

Ⓐ ——— Ⓑ ——— Ⓒ ——— Ⓓ ——— Ⓔ

4-10 To whom are you most attracted?

- women
- men
- both men and women

4-11 If you are a student, where do you live?

- residence hall
- other campus housing (e.g. co-op)
- off campus
- family student housing
- fraternity or sorority house

APPENDIX E: DEPRESSION, ANXIETY, STRESS SCALE-21

DASS₂₁

Name:

Date:

Please read each statement and circle a number 0, 1, 2 or 3 that indicates how much the statement applied to you *over the past week*. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

- 0 Did not apply to me at all
- 1 Applied to me to some degree, or some of the time
- 2 Applied to me to a considerable degree, or a good part of time
- 3 Applied to me very much, or most of the time

1	I found it hard to wind down	0	1	2	3
2	I was aware of dryness of my mouth	0	1	2	3
3	I couldn't seem to experience any positive feeling at all	0	1	2	3
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5	I found it difficult to work up the initiative to do things	0	1	2	3
6	I tended to over-react to situations	0	1	2	3
7	I experienced trembling (eg, in the hands)	0	1	2	3
8	I felt that I was using a lot of nervous energy	0	1	2	3
9	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10	I felt that I had nothing to look forward to	0	1	2	3
11	I found myself getting agitated	0	1	2	3
12	I found it difficult to relax	0	1	2	3
13	I felt down-hearted and blue	0	1	2	3
14	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15	I felt I was close to panic	0	1	2	3
16	I was unable to become enthusiastic about anything	0	1	2	3
17	I felt I wasn't worth much as a person	0	1	2	3
18	I felt that I was rather touchy	0	1	2	3
19	I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	0	1	2	3
20	I felt scared without any good reason	0	1	2	3
21	I felt that life was meaningless	0	1	2	3

