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BIPOC Counseling and Health Service Psychology Graduate Students' Experience of Racism and Sense of Belonging: a Conditional Mediation Analysis of Coping and Social Support

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BIPOC COUNSELING AND HEALTH SERVICE PSYCHOLOGY GRADUATE STUDENTS' EXPERIENCE OF RACISM AND SENSE OF BELONGING: A CONDITIONAL MEDIATION ANALYSIS OF COPING AND SOCIAL SUPPORT

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ABSTRACT

This study sought to understand the relationship between experiences of racism within academic settings and sense of belonging to the field of Counseling/Health Service Psychology (C/HSP) for BIPOC graduate students. Further, this study sought to understand the potential mediating role of engagement coping in this relationship, as well as the conditional effect of high, neutral, or low perception of race-related social support from faculty/peers. Two-hundred forty-nine BIPOC C/HSP students responded to survey questions measuring frequency of racial/ethnic microaggressions, sense of belonging to C/HSP, engagement styles of coping with racism (Education/Advocacy and Resistance), and perception of availability of racism-related social support from peers/faculty. Using Hayes (2018) PROCESS model 4, for simple mediation, a direct relationship was found between all study variables and sense of belonging except for engagement coping. However, engagement coping was shown to be a significant mediator in its own right. Using Hayes' (2018) PROCESS model 14, for moderated mediation, we failed to reject the null hypothesis as social support was not found to be a significant moderator at any level. Implications and future directions are highlighted.

CHAPTER ONE

INTRODUCTION

Significant gains in population representation of Black, Indigenous, and people of color (BIPOC) psychologists have occurred over the last twenty years (American Psychological Association [APA], 2018). Despite these gains, the number of BIPOC psychologists in the workforce and in training programs continue to fall short of population representation (Callahan et al., 2018). As of 2016, 83.6% of psychologists in the workforce were white while comprising only 61% of the U.S. population (APA, 2018). Whereas only 5% of psychologists are Latine and 4% are Black or African American compared to 18% and 12% of U.S. population respectively (APA, 2018). In somewhat more closely aligned representation, 4% of psychologists are Asian who make up 5% of the U.S. population, 0.3% American Indian/Alaska Native who make up 0.7% of U.S. population, and 1.5% of psychologists are multiracial compared to 2.4% of the U.S. population (APA, 2018). To put these statistics into a different perspective, in 2016 there were approximately 5,000 Latine psychologists active in the workforce (APA, 2018) representing a population of 56.6 million Latine people living in the U.S. (U.S. Census Bureau, 2021). Taken together, this suggests a stunning overrepresentation of white psychologists, with a serious underrepresentation of BIPOC psychologists. Unfortunately, no equivalent representation statistics of the counseling workforce are available (Shin et al., 2011). Given this historic and persistent underrepresentation in the psychology and counseling workforce, we must turn our attention to the experiences of BIPOC health service psychology and counseling graduate

students to understand their sense of belonging to the field – which may in turn impact their retention in the workforce.

For many years, there have been calls within the fields of counseling and health service psychology for increased recruitment and retention of a diverse graduate student body which reflect the diversity of our communities (APA, 1997; Council for Accreditation of Counseling and Related Educational Programs [CACREP], 2016). One mixed method study looked at the perception of psychology courses among white and BIPOC students in the undergraduate population. In this national sample of 1,867 psychology undergraduate majors, Lott and Rogers (2011) found that BIPOC students were less likely to perceive encouragement from faculty and have less frequent interactions with faculty. In a follow-up semi-structured interview with a smaller sample of these participants (N=94), 75% of BIPOC respondents reported a perceived a lack of respect for diversity and felt their studies could be enhanced by attention to diversity in their psychology curriculum, textbooks, research, and faculty (Lott & Rogers, 2011). While both BIPOC and white students reported satisfaction with their psychology studies with generally small effect sizes, BIPOC students were less satisfied than their white counterparts (Lott & Rogers, 2011). These perceptions at the undergraduate level may be having a negative impact on the pathway for students who have completed undergraduate psychology degrees to become graduate level clinicians (Lott & Rogers, 2011).

Indeed, recruitment of BIPOC students at the graduate level is below representative levels for Black or African American and Latine populations in APA accredited doctoral psychology programs (Callahan et al., 2018). As for CACREP-accredited counseling programs, Shin and colleagues (2011) concluded that Black or African American, Latine, Asian American, American Indian/Alaskan Native, and multiracial/ethnic students were underrepresented in these

programs. Others maintain that master's level CACREP-accredited counseling programs have adequate BIPOC representation, however, there may exist a "leaky pipeline" in the transition from master's to doctoral level Counselor Education and Supervision trainees. (Holcomb-McCoy & Bradley, 2003). This attrition results in a lack of BIPOC counselor education faculty in CACREP programs (Holcomb-McCoy & Bradley, 2003).

There is evidence of above average attrition rates among Black or African American, Latine, and Native Hawaiian or Pacific Islander students in APA accredited doctoral psychology programs (Callahan et al., 2018). Previous literature exploring graduate student attrition in the fields of counseling and health service psychology (hereafter referred to as C/HSP) is extremely limited. However, a qualitative study with eight African American school psychology students found that positive, supportive relationships with faculty and access to diversity within university support systems (i.e., campus organizations, peers) facilitated their retention (Proctor et al., 2018). Students described emotional support from peers as being vital to their ability to persist their graduate school (Proctor et al., 2018).

In a review of research from 2004 to 2019 regarding the experience of BIPOC and other marginalized identities (LGBTQ and women) in counselor education, Thacker and Barrio Minton (2021) found that these trainees experienced numerous microaggressions. Specifically, across studies, students reported experiences of tokenization, stereotyping, and identity erasure. These experiences resulted in feelings of isolation, disconnection, difficulties with mentorship, and discouragement (Thacker & Barrio Minton, 2021). Qualitative research looking specifically at the experience of BIPOC students in counselor education (Henfield et al, 2011; Henfield et al., 2013), multicultural counseling (Seward, 2014), and doctoral health service psychology (Winley, 2020) all reveal experiences of racism and microaggressions that occur at the individual and

institutional level. Ragland Wood et al. (2021) found qualitative evidence for BIPOC counseling and clinical psychology student's experience of racial battle fatigue resulting from their numerous attempts to disrupt microaggressions occurring within their classrooms.

While previous research has shown the positive impact that racial and ethnic diversity in the classroom for students (i.e., Atkins et al., 2017; Pike & Kuh, 2005), this research often implicitly or explicitly frames this in terms of benefits for white students. This paper seeks to turn the focus from the experience of white students to those of BIPOC graduate C/HSP students in an effort to understand potential factors to explain the lack of BIPOC representation in the counseling and psychology workforce. Specifically, this study seeks to explore the experiences of racism that BIPOC students encounter in their interpersonal interactions with students and faculty and within the graduate program environment. This research seeks to understand how students cope with these experiences and, importantly, how these experiences impact student's sense of belonging to the field of counseling or psychology. Further, this study seeks to understand how support received from faculty and peers following racist incidents influences students' sense of belonging.

The Importance of Sense of Belonging in Graduate Education

Because racism is likely to be occurring in BIPOC student's academic program, understanding how racism impacts sense of belonging could help the field of C/HSP understand the underrepresentation and attrition from the field. Belonging is considered a universal human need that motivates human behavior (Baumeister & Leary, 1995). Sense of belonging involves one's own feeling of acceptance and membership in a community, as well as the perception that members of that community value and respect one's contributions (Good et al., Strayhorn, 2018). In this way, it is reciprocal as one must want to be a part of the community and the community

must value an individual as a member – and take actions that indicate this value (Baumeister & Leary, 1995). Sense of belonging researchers have distinguished between one's sense of belonging and one's need to belong (Leary et al., 2013). The latter is thought to be an innate or learned personality trait. While one's need to belonging may influence one's sense of belonging (Leary et al., 2013), they are conceptually distinct. This difference is important in that this study assumes that sense of belonging is not the sole responsibility of BIPOC students but instead the result of perceiving a potentially hostile or welcoming environment or interpersonal interactions that result in a sense of being an accepted member of a field (or not).

Initial research on sense of belonging focused on intimate and familial relationships (Baumeister & Leary, 1995), but has since expanded to include one's sense of belonging to academic spaces (Goodenow, 1993; Strayhorn, 2018) and specific academic disciplines (Good et al., 2012). Initial research on sense of belonging in educational spaces focused on BIPOC adolescents' sense of belonging to middle and high school (Goodenow, 1993). Research then expanded into higher education with a particular focus on undergraduate students and their sense of belonging to the university. Graduate training is a relatively unexplored educational space.

In a nationally representative longitudinal study, BIPOC undergraduate students were more likely to report very low sense of belonging compared to their white peers ($\chi 2 = 15.47$, $p < 0.001$; Gopalan & Brady, 2020). After controlling for several institutional and student factors, belonging was uniquely related to persistence in undergraduate school and mental health (*ps* < *.05;* Gopalan & Brady, 2020). Researchers have found that formal relationships with teachers and fellow students along with positive interactions with diverse peers contribute to positive sense of belonging in BIPOC undergraduate populations (Meeuwisse et al., 2010; Strayhorn, 2018). It is possible that the pathway for BIPOC students into graduate education, and eventually

professional fields that require a graduate degree (i.e., C/HSP), may be impacted by the perceived sense that they may not belong to these environments which have in the past, and presently, excluded BIPOC students.

This study extends the previous research on sense of belonging by applying it to a graduate school population. This distinction is important because graduate school serves a different function from undergraduate studies and graduate students have different needs (Strayhorn, 2018). Graduate academic training differs from undergraduate training, as it centers on socialization to a specific profession rather than exploration of a wide range of knowledge and skills (Stayhorn, 2018; Twale et al., 2016). Specific profession knowledge acquisition, peer interactions, and faculty climate serve as primary mechanisms for graduate socialization to a profession (Strayhorn, 2018; Twale et al., 2016). Graduate students also, typically, have less contact with the overall campus climate; instead, graduate students have more direct interactions with program peers/cohort members and faculty (Stayhorn, 2018; Twale et al., 2016). Positive experiences with peers and faculty have been found to be particularly important for the successful graduate socialization of BIPOC students (Twale et al., 2016), which may influence one's sense of belonging to an academic discipline or profession (Strayhorn, 2018). Graduate students' sense of belonging to their academic program has consistently been shown to have a positive relationship with GPA (Strayhorn, 2018). Sense of belonging may also be connected to graduate students' intent to persist in graduate school though this area of research is underdeveloped (Strayhorn, 2018).

Given the emphasis of more direct, sustained interpersonal contact with faculty and peers, ruptures to these relationships could have a great impact on graduate student’s sense of belonging to their field. This study focuses on the experience of racism as an interpersonal

rupture and explores the impact that racism may have on student's sense of belonging to the field.

Racism in Academia and Graduate Education

Since the U.S. civil rights movements of the 1960s, BIPOC students have increasingly accessed higher education. Along with that access, BIPOC students and faculty have encountered experiences of interpersonal and institutional racism (de la Luz Reyes & Halcon, 1988; Solorzano et al., 2000; Yosso et al., 2009). Frequently, racism in academic spaces is expressed through racial microaggressions (Solorzano et al., 2000; Yosso et al., 2009) which has been related to lowered sense of belonging to the academic institution (Lewis et al., 2021).

Chester Pierce and colleagues (1978) coined the term microaggression which they described as cumulative and unending "subtle, stunning, often automatic, and nonverbal exchanges which are "put downs" of blacks by offenders" (p. 66). Derald Wing Sue and colleagues (2007) built upon this definition to describe microaggressions as "brief and commonplace daily verbal, behavioral, or environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults toward people of color" (p.271). Microaggression are described as "micro" because they occur at the "micro" or interpersonal level as opposed to the experiences of discrimination that occur at the "macro" or institutional level (Sue et al., 2019).

Sue et al. (2007) identified three types of microaggressions: microassaults, microinsults, and microinvalidations. Microassaults are the only type of microaggression that are most often explicit and conscious. These are the most like overt racism or traditional racism. However, these are more likely to occur in situations where the perpetrator anticipates anonymity – thus making it a "micro" aggression. Microinsults are often unconscious, subtle snubs that can be verbal or

nonverbal. They convey rudeness or insensitivity and are experienced as demeaning. Nonverbal examples of microinsults include avoiding eye contact or not paying attention to BIPOC students in classroom settings. A verbal example might include statements that convey a belief that a person might be in a graduate program because of affirmative action rather than ability. Lastly, a microinvalidation is communication that negates the thoughts, feelings, or experiences of BIPOC folks. Examples of this include comments such as "You speak good English" or "Where are you from?" As well as color-blind statements such as "I don't see color" or a BIPOC individual being called overly sensitive for bringing up issues of race.

Over the last 20 years, research on microaggressions has flourished. The use of the word "micro" in no way indicates that the sequelae of microaggressions are small or insignificant (Sue et al., 2019). Indeed, previous research has highlighted the numerous negative consequences of experiencing racial/ethnic microaggressions and subsequent race-related stress (Utsey et al., 2012) and racial trauma (Carter & Pieterse, 2020). Microaggressions, and subsequent stress or trauma, have been correlated with a variety of physical and mental health problems (for an overview, see Alvarez et al., 2016). Additionally, racial/ethnic microaggressions may lead to adverse racial climates in schools (Yosso et al., 2009). These oppressive climates have been related to reduced opportunities for mentoring and peer support for BIPOC students (Johnson-Bailey et al., 2008), and BIPOC students questioning of their career aspirations (Gomez et al., 2011). This study is unique in that it seeks to extend the previous, limited literature regarding microaggressions' impact on sense of belonging – particularly sense of belonging to a given profession.

Research on microaggressions has found several categories or taxonomies of microaggressions that occur generally or in specific environments (Sue et al., 2007; Williams et

al., 2021). Within academic settings, researchers have found several prevalent microaggressions including assumptions of criminality, ascriptions of intelligence, tokenism, and environmental exclusion (Salorzano et al., 2000; Yosso et al., 2009). By focusing this study on a particular environment, this research will extend our understanding of the microaggressions that are likely to occur in C/HSP academic settings which could assist in future intervention or prevention efforts in addressing microaggressions in this environment. This project also seeks to understand the mediating effects of racism-related engagement coping and the moderating effect of social support from faculty and peers between microaggressions and sense of belonging (as described more thoroughly below and depicted in Figures 1 and 2).

Racism in Academia and Sense of Belonging to Professional Fields

Relatively little is known about racism's relationship to sense of belonging, and even less is known about how racism impacts C/HSP graduate students' sense of belonging to the field. One research study found that BIPOC students (N= 87) in school psychology programs encountered more negative race-related experiences compared to their white peers (N = 313) with a standardized mean difference of self-reported microaggressions of 0.82 which is considered a large magnitude difference. Additionally, white students reported higher levels of sense of belonging compared to BIPOC students, specifically white students reports of sense of belonging was 0.25 SD above BIPOC students (Clark et al., 2012). Belongingness in turn made up 37% of the variance in academic engagement.

Using a gender diverse sample of graduate students from low socioeconomic backgrounds, Ostrove et al. (2011) tested a model linking family social class to lowered sense of belonging to lower academic self-concept. These students were subsequently less likely to endorse career goals pertaining to achieving professorial positions at research universities.

Ostrove et al. (2011) found their model had exceptional fit. Unfortunately, both of these studies (Clark et al., 2012; Ostrove et al., 2011) utilized measures that confounded sense of belonging with other constructs (i.e., campus environment, perceived teacher academic support). Nevertheless, microaggressions and identity based contextual factors have been connected with lower sense of belonging which has led to differences in academic achievement and goals (Clark et al., 2012; Ostrove et al., 2011).

Due to the methodological concerns (i.e., construct confounding at the measurement level) in the graduate population research, we must turn to undergraduate research that is not impacted by this limitation. Much of the undergraduate literature on sense of belonging has focused on women and BIPOC students in STEM programs. A particularly relevant longitudinal research study, part of a project to develop a psychometrically sound measure of sense of belonging to an academic field, showed women's sense of belonging to math is susceptible to perceived sexism in their classroom environments (Good et al., 2012). In a mostly white sample of 1,005 undergraduate students enrolled in a Calculus course, sense of belonging to math decreased over time with a significant difference between genders - with males having significantly higher sense of belonging to math than women ($F(1, 332) = 4.44$, $p < .04$). Sense of belonging for females was negatively impacted by perceptions of environmental stereotyping (PEST; i.e., that men are inherently better at math than women) and perceptions of environmental entity theory (PEET; i.e., that people are both with math ability, math cannot be learned) with this interaction accounting for 67% of the variance in sense of belonging. Good et al. (2012) went on to conduct a path analysis finding that sense of belonging to math mediated the relationship between perceived gender stereotyping and intent to purse math in the future. Sense of belonging to math significantly predicted intent to pursue math in the future, even after

controlling for prior and current math performance. While microaggressions were not directly assessed, it could be that microaggressions conveyed to students that they did not belong in the classroom and, by extension, a particular career or field. If this is true than racial microaggressions will have a similar impact on BIPOC graduate student's sense of belonging.

Just as in this study, the Good et al. (2012) study uses sense of belonging to understand the impact of identity-based discrimination that occurs within specific settings. Using sense of belonging in this way does not suggest that the women are at fault for their decreased sense of belonging but instead focuses on how the environment specifically and broadly impact a student. Again, this is an important distinction as students in the Good et al. (2012) and this dissertation study should not be held solely responsible for increasing their own sense of belonging, or for making the changes to the environment or to individuals in it to decrease discrimination. This is instead the responsibility of faculty, program administrators, university, and society at large.

Racism-related Coping as a Mediator of the Racism and Sense of Belonging Relationship

Individuals cope with stressors using a variety of strategies including ignoring the situation and seeking social support (Carver, 1989). Some general coping strategies, such as these, may overlap with how individuals cope with racial discrimination (Wei et al., 2010). However, racial discrimination is a unique stressor due to its pervasiveness and chronic nature (Wei et al., 2010). Racial discrimination impacts an individual's perceptions of self and perceptions of their place within the community (Wei et al., 2010). Because of this, BIPOC may utilize unique coping strategies to racial discrimination such as attempting to educate the perpetrator or engaging with advocacy efforts for one's racial/ethnic community (Wei et al., 2010).

In their coping with discrimination scale development study, Wei et al (2010) suggested five coping strategies unique to coping with racial discrimination. These include education/advocacy, internalization, drug and alcohol use, resistance, and detachment. Education/advocacy refers to efforts to educate or advocate at the individual or systemic level. Internalization occurs when BIPOC wonder if they contributed or are responsible for the discrimination. Resistance refers to individual confrontation of the racist behavior. Detachment occurs when folks may not know how to respond to the incident and may distance themselves from support. Education/Advocacy and Resistance have been found to be positively associated to each other (Wei et al. 2010) and have been referred to as engagement coping strategies (Syzmanski & Lewis, 2016). As well, Alcohol and Drug Use, Detachment and Internalization have been positively associated to one another. These styles have been referred to as disengagement coping strategies (Syzmanski & Lewis, 2016). Disengagement and engagement coping strategies were negatively associated (Wei et al., 2010).

Most of the research regarding coping with discrimination has focused on mental health outcomes. Utilization of disengagement strategies has been associated with higher levels depression, lower life satisfaction and lower self-esteem (Wei et al., 2010). Syzmanski and Lewis (2016) found that racism-related disengagement coping (i.e., detachment and internalization) mediated the link between gendered racism and psychological distress in a sample of African American college women. However, they did not find a mediating role for engagement strategies (Szymanksi & Lewis, 2016). They speculated that this could be due to the costs and benefits of using this type of racism-related coping, which may cancel each other out (Szymanski & Lewis, 2016). One potential explanation for this inconsistent, or unexpected finding, may be the impact of a moderating variable. As I describe in the following section, this

study will extend previous research by exploring the potential moderating effect that racism-related social support has on racism-related coping in mediating the path between racism and sense of belonging.

Only one study has looked at role of racism-related coping as a mediator in the relationship between racism and school sense of belonging. In a sample of 1,686 high school grade students, Montoro et al. (2021) found that when BIPOC students were faced with discrimination by peers, those who engaged in proactive coping (defined in this study as being proud of who you are, working hard to disprove stereotypes, and clarifying the misconception) was related to higher sense of school belonging compared to students who used anger in direct confrontation or used a passive approach (i.e. ignoring the situation). While this conceptualization of racism-related coping differs from Wei et al.'s (2010) model, this study suggests that strategies similar to those defined as engagement styles may have a unique role in understanding sense of belonging that are contrary to psychological distress outcomes – meaning that racism-related engagement coping may have a more significant indirect effect when looking at sense of belonging rather than focusing on the absence of psychological distress.

The proposed study will seek to understand how the use of engagement styles of coping mediates the relationship between racism and sense of belonging to the field of C/HSP. In an unpublished study regarding racial microaggressions in clinical supervision, Gonzales et al. (2023) found that trainee's use of resistance coping was positively related to supervisory working alliance. Extending this finding to sense of belonging to the field of C/HSP, I hypothesize that, after experiencing racism in C/HSP academic settings, individuals who use racism-related engagement coping will have higher sense of belonging to the field of C/HSP. For example, if a student uses racism-related engagement strategies, they may be able to shift the

relationship with the transgressor, bring awareness to the program, or focus on longer-term goals for change that allow them to see themselves as part of the field. These shifts may result in a greater sense of belonging to the field.

Mediating Role of Racism-related Engagement Coping Conditional upon Social Support from Faculty and Peers

The mediating role of coping may be dependent upon the support that one receives from other peers/faculty in their program. As Szymanski and Lewis (2016) suggested, utilizing racism-related engagement coping strategies may require a greater degree of personal resources. While this approach may result in changes to the environment or perpetrator that have positive effects over time, they may also increase interpersonal conflict (Szymanski & Lewis, 2016). For example, perceived social support in one's immediate environment may be especially important to the mediating role of racism-related engagement coping in the relationship between racism and sense of belonging.

Social support through formal and informal networks has been established as an important and crucial aspect of BIPOC graduate education which may be especially true in the face of racism. Henfield et al. (2013) noted that, because BIPOC counseling students had to manage racism from peers, supportive faculty advising relationships were especially important. Jones et al. (2018) found that Black psychology graduate students particularly benefited from having multiple formal and informal advising relationships in order create a sense of safety and inclusivity in academic departments. Research related to the protective role of peer support in the link between discrimination and negative outcomes is lacking (Golden et al., 2018). However, positive peer relationships have been correlated with other positive outcomes such as increased

counseling self-efficacy (Chui et al., 2021) and social justice career commitment (Keum & Miller, 2020).

Taking the findings of the importance of supportive faculty and peers in BIPOC graduate students' academic lives, along with the inconsistent findings related to coping with racism, this study will build on previous research by looking at the potential protective role of social support through a conditional mediation analysis. Adding to the example given in the previous section, it could be that students who experience racism and cope using racism-related engagement coping may have greater sense of belonging to the field if they perceive support from faculty and/or peers in their program related to racism. If students, however, do not perceive that their actions to confront the microaggression, educate about race/racism, or advocate for their race/ethnicity are met with support, they may conclude that they do not belong and are not accepted by the field.

Proposed Study

Based in the literature reviewed, this study seeks to expand on previous research related to racism and sense of belonging by exploring a mediation effect of racism-related coping. Further, this study intends to explore the conditional nature of this mediation effect by exploring the potential moderating factor of perceived social support from peers and faculty. Not only does this study seek to understand these factors but seeks to understand these mechanisms in the context of belongingness to the field of counseling and health service psychology.

Therefore, this study has several aims. First is to understand the frequency of racial/ethnic microaggressions in counseling and psychology graduate programs and their associations with the level of one's sense of belonging to their academic program and to the profession. Next, this project seeks to understand the indirect effect of racism-related

engagement coping on the relationship between racism and sense of belonging to the field. Not only does this study seek to understand this mediating effect, but this study also aims to explore the conditional nature of this mediation given different levels of perceived racism-related social support received from peers and faculty.

I will use a cross-sectional quantitative design to test the proposed moderated mediation model depicted in Figure 1. Moderated mediation, as described by Hayes and Rockwood (2020), can be used to test the mediating role of racism-related coping in the relationship between racism experienced in C/HSP programs and sense of belonging to C/HSP field and how this mediation is conditional upon level of social support (this study will testing a moderator - Peer/Faculty Support that is on one side of the indirect effect (Hayes & Rockwood, 2020).

Figure 1. Conceptual Model of Moderated Mediation

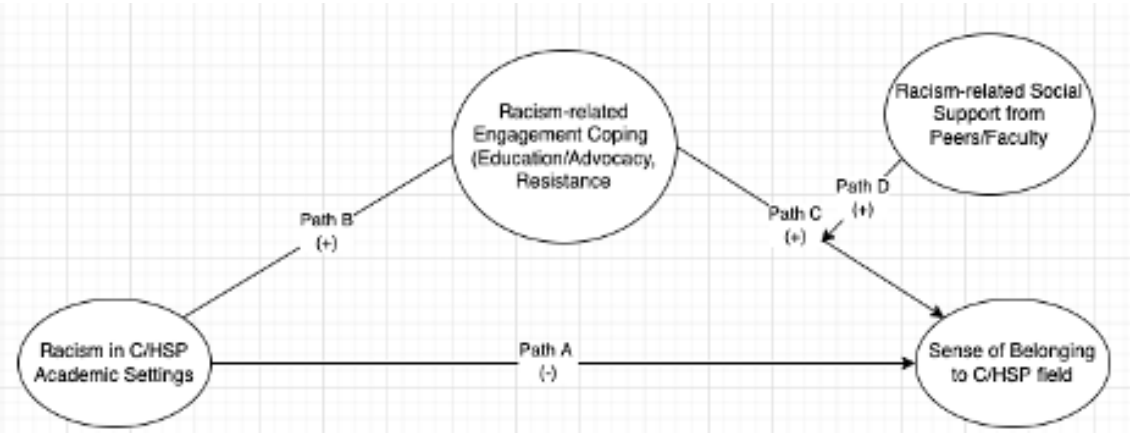
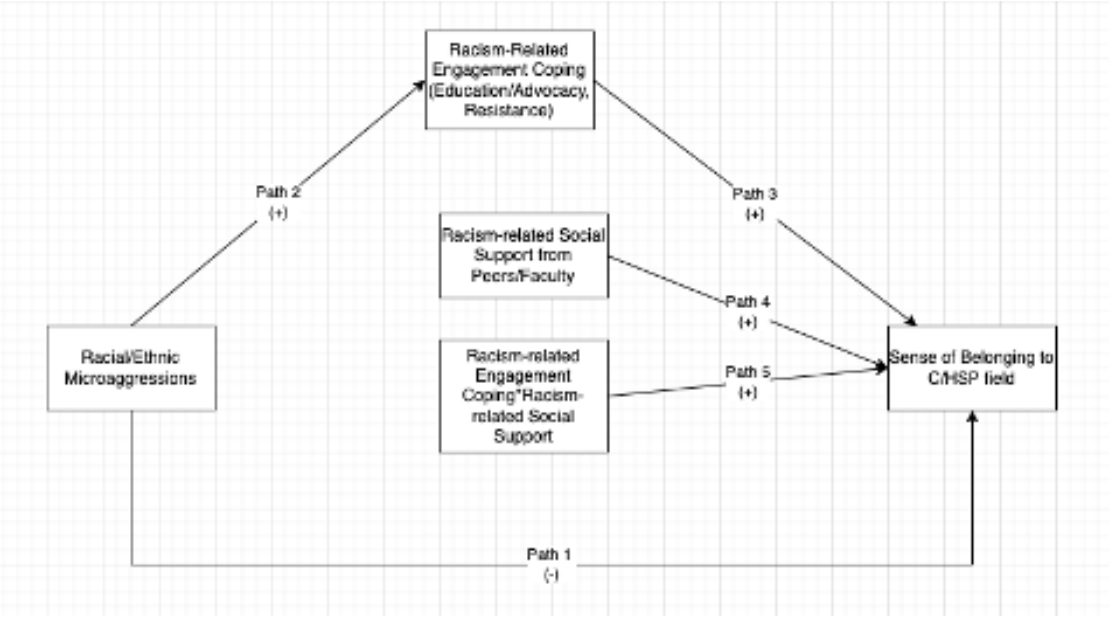


Figure 2. Statistical Model of Moderated Mediation



Note. Figure 1 depicts the theoretical model hypothesized in this study and is the typically seen depiction of a conditional mediation model. Figure 2 depicts the paths necessary for statistical analysis.

Hypotheses

As depicted in the statistical model shown in Figure 2, the proposed study will test several hypotheses.

1. Based on Good et al.'s (2012) findings that perceived gender-based discrimination regarding women's math ability, perceived in math classrooms, negatively impacts women's sense of belonging to the field, it is hypothesized that racism experienced in C/HSP academic settings has a direct negative effect on BIPOC graduate trainees' sense of belonging to the field of C/HSP (Figure 2, Path 1).
2. As experiences of racism increase, so will the need to engage in racism-related coping (Wei et al., 2010). Therefore, racism will be positively related to engagement racism-related coping (Figure 2, Path 2). Based on Montoro et al.'s (2021) finding that

engagement styles of coping were positively related to school sense of belonging, engagement-related coping will be positively related to sense of belonging to the field (Figure 2, path 3). Strayhorn (2018) and Twale et al. (2016) have found that positive peer and faculty relationships are related to positive outcomes, including sense of belonging to academic programs. Therefore, I hypothesize that racism-related support from peers/faculty will also be positively related to sense of belonging to the field (Figure 2, Path 4).

3. Taking Montoro et al.'s (2021), Strayhorn (2018), and Twale et al.'s (2016) findings together, I hypothesize that when students experience a high level of racism-related social support from peers/faculty and cope with racism using engagement styles of coping, they will have a greater sense of belonging (Figure 2, Path 5).
4. Given the variety of general (Carver, 1989) and racism-related coping styles (Wei et al., 2010) not accounted for in this model, engagement style of racism related coping will partially mediate the relationship between racism and sense of belonging (Figure 2, Path 2 * 3). More specifically, after experiences of racism, students who use higher levels of engagement coping will have a higher sense of belonging.
5. Previous studies have found non-significant mediating effects of engagement coping with racism on outcomes such as life satisfaction and well-being. Syzmanski and Lewis (2016) have argued that using engagement coping which requires some level of confrontation of racism at the systemic or interpersonal level carries inherent risk and takes personal resources. Thus, support received around one's advocacy or resistance of racism may be particularly important. Therefore, I hypothesize that the mediating effect of engagement

coping on the relationship between racism and sense of belonging is conditional on the level of racism-related social support received from faculty and peers.

a. Average Social Support (mean): The positive mediating effect of coping on the relationship between racism and sense of belonging, as hypothesized above, will remain significant and positive when students perceive average levels of racism-related social support from peers and faculty.
b. High Social Support (+1 SD): The positive mediating effect of coping on the relationship between racism and sense of belonging will be strengthened, and achieve greater significance, when students perceive high levels of racism-related social support from peers and faculty.
c. Low Social Support (-1 SD): The mediating effect of coping on the relationship between racism and sense of belonging will be weakened and become non-significant when students perceive low levels of racism-related social support from peers and faculty.

CHAPTER 2

EXTENDED LITERATURE REVIEW

As explored in Chapter 1, the recruitment and retention of Black, Indigenous, and People of Color (BIPOC) students in counseling and psychology programs has been a goal of the American Psychological Association (APA) and other professional counseling and psychology organizations for the last several decades (APA, 2018). Despite these goals and impressive gains over the previous decades, BIPOC representation in the workforce falls short of population representation (Callahan, 2018; Shin et al., 2011). Qualitative studies have shown that BIPOC graduate counseling and health service psychology (C/HSP) students experience racism within classrooms. Through quantitative analysis, this study seeks to understand the extent to which students' experiences of racism within their academic C/HSP programs impact their sense of belonging to the field of C/HSP. This dissertation seeks to understand the role of two potential factors (racism-related coping and perceived support) in the relationship between racism and sense of belonging.

Therefore, the following extended literature review will focus on the development of sense of belonging as a construct to understand how it has shifted and is now applied to understand belonging to a field of study. Also, this literature review will explore the development of the microaggression construct and recent critiques and responses to it. It is these reactions and responses to microaggressions, alongside the gaps in understanding field belonging and racism, that influenced the decision to include racism-related coping and perceived support in this study – exploration of these constructs are integrated throughout the appropriate sections.

Sense of Belonging

Psychoanalysts like Freud and famous behaviorists like Skinner suggested that interpersonal relationships, love, and belonging were derivative of "primary drives" like sex or hunger (Baumeister & Leary, 1995; Kenrick et al., 2010). However, many other early psychologists interested in human motivation suggested that the need to belong was the central tenet of human life. Influenced by the work of Emile Durkheim, Alfred Adler suggested that the need to belong was *the* fundamental motivation of human life (Dreikurs Ferguson, 2020). Abraham Maslow situated belongingness in the middle of his hierarchy of needs – first to follow the satisfaction of basic physiological and safety needs (Maslow, 1943). Maslow used Harlow's famous experiments with rhesus monkeys to demonstrate that after physiological needs were met, a new motivation emerged - the motivation toward comfort and love (Kenrick et al., 2010). Maslow's hierarchy suggested that the need to belong was a precursor to other human drives, including the drive to acquire knowledge or power (Kenrick et al., 2010). Indeed, multiple regression analysis suggested that satisfaction of higher-level needs was predicted by the satisfaction of lower order needs in the same order theorized by Maslow (Toarmina & Gao, 2013).

Unfortunately, many early theorists and clinical psychologists failed to provide much critical empirical evaluation of the research undergirding their theory (Baumeister & Leary, 1995). It was not until Baumeister & Leary's (1995) seminal article that the need to belong became a cohesive construct grounded in empirical literature. Baumeister and Leary (1995) helped to center belonging as a basic human motivation meta-theory. They provided an alternative to other human drive hypotheses, such as Terror Management Theory, that were popular at the time (Allen et al., 2021).

According to Baumeister and Leary (1995), belongingness is a human "drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships" (p.497). Evidence for belonging as a meta-theory of motivation, according to Baumeister and Leary (1995), includes the idea that humans form bonds easily, as suggested by the Robbers Cave study (Sherif, 1988) and evidence that people in every society form groups. They also cited research on human reluctance to break social and interpersonal bonds, even when they may harm the individual, such as domestic violence (Baumeister & Leary, 1995).

Baumeister and Leary (1995) demonstrated that the need to belong is a significant focus of cognitive activity; humans think a lot about their relationships or desire to create and maintain them. Baumeister and Leary (1995) suggested that basic cognitive activities, such as filtering individuals into in-groups and out-groups, provide evolutionary evidence of the need to belong. Also, they suggest that our affective system is designed in many ways to respond to our need to belong. Forming new relationships creates positive affect. Furthermore, threats (real or imagined) to bonds result in significant negative affect such as depression, anxiety, and suicidal ideation (Baumeister and Leary,1995).

Additionally important is the idea of satiation and substitution. According to Baumeister and Leary (1995), satiation occurs when belongingness needs are well met, which causes a diminished motivation to seek out new relationships. Satiation is evidenced by studies cited in Baumeister and Leary (1995) wherein college students preferred fewer, more meaningful relationships over "lots of friends." Substitution suggests that relationships can be replaced, though they are not necessarily interchangeable. An example provided by Baumeister and Leary (1995) is that divorced or widowed individuals may seek out new relationships or deepen familial or friendship bonds to satiate the need to belong.

Baumeister and Leary (1995) showed that while belongingness needs can be satiated and substituted, two criteria must be met: stable interaction and mutual caring. Partial deprivations, lacking either component, do not satisfy belongingness needs. For example, research cited by Baumeister and Leary (1995) suggested that long-distance marriages are less satisfactory, and individuals desire more contact with their partner. On the other hand, when contact is maintained, but partners do not perceive that the other cares for them (i.e., highly conflictual marriages), individuals are more vulnerable to adverse health and psychological consequences, according to research cited by Baumeister and Leary (1995). Further, they suggested that this caring must be mutual and reciprocal. One-way relationships, in which one partner feels they are investing more into the relationship than the other, are more likely to end. This finding contradicts social exchange theory, which suggests that people might prefer one-way relationships in which they benefit from another's care at no cost to themselves (Baumeister & Leary, 1995). From this, Baumeister and Leary (1995) suggested that mutuality forms the basis for trust, a critical feature in satisfying relationships.

School Belonging

Baumeister and Leary (1995) drew their evidence primarily from intimate, family, and friendship bond research. In a recent interview, Baumeister and Leary acknowledged that belonging to groups more broadly was missing from their initial work despite their use of the term “belong” meant to imply groups (Allen et al., 2022b). Their seminal work also suggested that their theory of belongingness could have significant implications in other areas, such as employment or education systems. Many educational psychologists have extended belonging research to understand how belonging influences educational outcomes.

School belonging has become important in understanding academic motivation, outcomes, and behaviors. Goodenow and Grady's (1993) conceptualized school belonging as "the extent to which [students] feel personally accepted, respected, included, and supported by others – especially teachers and other adults in the social environment" (Goodenow & Grady, 1993, pp. 60-61). This definition has become the predominant definition of the construct (Allen, 2018). In a study with 301 participants drawn from predominately Latine and Black schools, Goodenow and Grady (1993) found that 41% of students did not experience belonging or feeling supported by others in the school. Goodenow and Grady (1993) found significant correlations between school belonging and school motivation (r^2 =.21, p <.001), expectations for success (r^2 =.19, p <.001), intrinsic value of schoolwork (r^2 =.30, p <.001), and effort/persistence (r^2=.01, p <.05). Goodenow and Grady (1993) concluded that school environments that are welcoming and encouraging, where students feel that they have the resources available for success, and who feel connected to those with resources for success are environments that students find "enjoyable, worthwhile, and interesting" (p. 68).

Why do some students in a school feel that they belong while others do not? Goodenow (1993) found no ethnic or gender differences in school belonging. However, they found that Latino students in a 75% Latino school had a greater sense of belonging than non-Latino students (t[99]=2.01, p <.05). Goodenow (1993) did not find differences in sense of belonging based on racial or ethnic identities when there was no clear racial or ethnic majority in the school. Similarly, they found that newcomers to suburban schools, regardless of ethnicity, reported lower school belonging (F = 7.17, p <.01). However, this was not true for newcomers to urban schools due to the potential that urban schools may have more student turnover (Goodenow, 1993). Goodenow (1993) concluded that a subjective sense of belonging to the

perceived majority group of the setting may have more influence on belonging than simply having membership in a particular identity-based subgroup outside of the setting. Goodenow (1993) provides evidence that the setting and an inclusive, representative environment matter.

Utilizing Bronfenbrenner's (1979) socio-ecological model to frame their recent meta-analysis (51 studies, N=67,378), Allen et al. (2018) found several student-level and school-level predictors for adolescents' school belonging and tested for several macro-and chronosystem moderators. In general, teacher support had the most potent effect on school belonging (r = .46, [.37, .54]), followed by personal characteristics (r = 0.44, [0.36, 0.52]), emotional stability (r = 0.35 [0.26, 0.43]), parent support (r = 0.33 [0.29, 0.36]), peer support (*r* = 0.32 [0.2, 0.42]), environmental (*r* = 0.32 [0.06, 0.55]), and academic motivation (*r* = 0.31, [0.24, 0.38]. Gender, while significant, had weak effects (*r* = 0.18, [0.05, 0.31]). Race/Ethnicity and extracurricular activities were not significant.

Using data from 52 countries collected between 2003 and 2015 (N=309,785), Allen et al. (2022a) tested predictors of school belonging using a socio-ecological framework. Student and micro-system level factors accounted for the greatest variance in school belonging (92.8%; Allen et al., 2022a). Specifically, student collaboration and teamwork dispositions were the strongest positive predictors of sense of belonging (Allen et al., 2022a). Testing anxiety was the strongest negative predictor (Allen et al., 2022a). Consistent with Allen et al. (2018), Allen et al. (2022a) found that teacher unfairness and parental support were significantly related to school belonging. Regarding mesosystem level factors, Allen et al. (2022a) found that socioeconomic status had a significant relationship to school belonging.

These findings suggest that sense of belonging can be affected by several factors, which may be layered or embedded within different levels. While academic motivation is often studied

in relation to school belonging (Allen et al., 2018), other factors are important for student's sense of belonging. Because students' ability to collaborate and work within a team is important, developing social and emotional skills may be beneficial in developing school belonging, impacting students' academic motivations and outcomes. It may also be essential to understand how students cope with interpersonal situations that arise in the classroom.

To this end, Allen et al. (2018; 2020) found that teacher support as well as parent and peer support impacts adolescents' school belonging. Within teacher support, Allen et al. (2018) identified autonomy, support and involvement, caring relationships, and fairness/friendliness as having the strongest effects. Allen et al.'s (2018) findings could suggest that positive, supportive teacher-student relationships are imperative for student success. Teacher and student factors may also interact such that students, parents, or peers may offer support for emotional regulation and coping strategies key to developing collaboration and teamwork (Allen et al., 2018).

Aligned with Erikson's theory of psychosocial development, Goodenow and Grady (1993) and others (e.g., Allen et al., 2018; 2020) have speculated that adolescents' developmental tasks make middle and high school belonging particularly relevant. However, according to Baumeister and Leary (1995), the need to belong does not necessarily diminish over time – though satiation may have occurred. Thus, other educational psychologists have begun to focus on college belongingness, graduate student belonging, and field-specific belonging.

University Belonging

Since Tinto's (1988) work on student's departure from higher education, university belongingness has been theorized to be essential to retention. However, compared to primary and secondary school belonging, university belonging research could be more robust (Slaten et al., 2016a). Qualitative research has highlighted key differences between university and school

belonging. In one study of a group of majority white undergraduates (N=11), Slaten et al. (2014) found that valued group involvement, personal relationships, environmental factors, and intrapersonal factors influenced students' sense of university belonging. In a follow-up study with Asian international students (N=11), Slaten et al. (2016b) found further evidence of the importance of meaningful interpersonal interactions and relationships with peers or faculty on sense of belonging, as well as the influence of environments and intrapersonal factors, similar to the majority white sample. However, they also found that experiences of acculturative stress and discrimination created feelings of not belonging (Slaten et al., 2016b).

Although college students have different development needs than middle or high-school students, qualitative researchers often utilize revised primary and secondary school belonging scales (Slaten et al., 2018), which may miss significant differences in the two settings. Research by Guiffrida et al. (2013) showed that constructs related to university belonging (e.g., feelings of relatedness to peers or faculty) were positively related to indicators of performance (GPA) but had no relationship to persistence. These findings differ somewhat from school belonging literature and suggest the need for further research.

Given these findings, Slaten et al. (2018) created the University Belonging Questionnaire (UBQ). Through exploratory and confirmatory factor analysis, they estimated a three-factor model of university belonging that included university affiliation (sense of membership through participation in university events, wearing school colors, etc.), university support and acceptance (perception of unconditional support through campus resources, acknowledgment of success, etc.), and meaningful faculty/staff relationships. Although items were created to measure the role of peer relationships, these items did not load onto any meaningful factor.

These findings indicate that school and university belonging overlap in their shared emphasis on meaningful relationships with faculty and teachers and intrapersonal factors. Similar to school belonging, there needs to be more understanding of how exactly peers influence students' sense of belonging, though qualitative research continues to point towards their influence. Additionally, university belonging differs from school belonging in that a sense of pride or affiliation with the school serves a more significant role.

One major critique of school or university belonging literature is the lack of understanding of the role of context and identity (Slaten et al., 2014). However, more recent university belonging research has focused more on the experiences of BIPOC students and other groups that may experience marginalization (e.g., LGBTQ, disability communities) in predominately white institutions (Slaten et al., 2016). Much research suggests that these students perceive less sense of belonging to their white counterparts. For example, Gopalan and Brady (2020) found that BIPOC students at four-year universities were less likely than white students or BIPOC students at two-year colleges to endorse a sense of belonging to campus ($\chi 2 = 15.47$, $p < 0.001$).

Graduate Belonging

If undergraduate belonging is relatively under-researched, our understanding and research around graduate school belonging is even further reduced (Strayhorn, 2018). Much research on graduate school training and belonging has focused on professional socialization (Strayhorn, 2018). Students often attend graduate school to either gain specialization or technical skills in a specific profession or to contribute research to advance knowledge in the chosen field (Strayhorn, 2018). Compared to undergraduate education, this shifts the function of graduate school from gaining a breadth of knowledge to gaining depth of knowledge (Strayhorn, 2018).

Though still influential, this shift deprioritizes the larger campus environment and centers on the academic department faculty and peers (Weidman et al., 2001). For BIPOC students, this could mean narrowing down the representation encountered in one's program.

The graduate school socialization process occurs in interactions with peers or cohort members as well as individual formal and informal knowledge acquisition (Weidman et al., 2001). According to the Weidman-Twale-Stein (Weidman et al., 2001) framework for graduate student socialization, students go through several stages of socialization. Interactions with members of a profession through personal contact or mass media lead to decisions about one's potential fitness and application to graduate programs. Graduate programs provide socialization through formal and informal processes of knowledge acquisition and interactions with faculty, mentors/advisors, cohorts, field professionals, and others that influence one's understanding of what it means to be a part of the profession – the work requirements but also the culture of the professional field. Students witness discrepancies between what they initially believed the profession would be, their beliefs about themselves, and their experience with the socializing agents to make decisions regarding their potential role in the profession. In the final socialization stage, students form their own professional identity and separate their sense of professional self from their academic department. Throughout each stage, the interaction between students and faculty and students and cohorts/peers is central to the process (Weidman et al., 2001)

Socialization differs from sense of belonging in that socialization is the process that leads to acquiring knowledge, skills, and values of the profession through formal and informal interaction and training (Weidman et al., 2001). In contrast, sense of belonging refers to the subjective sense of membership and acceptance in a graduate program (Strayhorn, 2018). Strayhorn (2018) argues that it is through formal and informal socialization practices that

students identify whether they or their group, belong in a profession. Put another way, it is not just the events that occur, the knowledge gained, but the people, supportive or non-supportive, that influence sense of belonging, which aligns with research on school and university belonging.

Because the people (faculty, peers, and students) matter regarding graduate school belonging, understanding how a student's identity or background influences their sense of belonging is also essential. Studying a broad group of graduate students (N = 859) enrolled in a large research university, Ostrove and colleagues (2011) sought to understand social class's role on students' sense of belonging, academic self-concept, and career aspirations. Using structural equation modeling, controlling for race, Ostrove et al. (2011) found a model that indicated that social class background negatively influenced current financial struggles, which negatively influenced sense of belonging, which in turn negatively impacted academic self-concept. Academic self-concept was positively related to students' intent to pursue a career as a professor at a research university ($\chi 2$=51.12, df=30, p <.01; CFI = 0.98; RMSEA = 0.03[90% CI of 0.01-0.04]; relative $\chi 2$ = 1.70).

Unfortunately, Ostrove and colleagues (2011) utilized a measure of belonging that does not follow the conceptualization of belongingness that the literature emphasizes (feeling like an accepted and valued group member). Instead, they utilized three items from a measure of school climate to indicate whether a student experiences their department as welcoming or alienating, respectful or disrespectful, and down-to-earth or snobbish. While I disagree that this constitutes sense of belonging, Ostrove et al. (2011) did find evidence that one's social identity can influence the perception of a departmental climate, a potential situational cue of belonging or threat. It is important, nevertheless, how these experiences of welcome and respect influence how graduate students perceive their current learning environment and future career goals.

BIPOC graduate students' sense of belonging and successful professional socialization can, thus, be impacted when there are unconscious or conscious biases present in the formal and informal learning environments. Research has shown that Black students and those from lower SES backgrounds often have difficulty finding mentorship (Felder et al., 2014; Warnock & Appel, 2012), difficulty getting support for their research interests (Felder et al., 2014), are less likely to seek support or advice from their peers (Daniel, 2007; Warnock & Appel, 2012), are less likely to feel prepared for graduate school (Warnock & Appel, 2012), and feel less productive during graduate school (Warnock & Appel, 2012). In one qualitative study of 15 Black and Latine graduate social work students, participants expressed how feelings of marginalization and difficulty finding mentorship resulted in a decreased passion and motivation toward completing the degree or going into the field (Daniel, 2007). This study supports the connection between interpersonal experiences within the academic setting and a sense that one may or may not belong to a professional field.

As described above, graduate school focuses on socializing students toward a profession (Strayhorn, 2018) and interference in successful socialization may have consequences for sense of belonging to graduate school or an academic department (Daniel, 2007; Felder et al., 2014; Strayhorn, 2018; Warnock & Appel, 2012; Weidman et al., 2001) and to a specific career path within a profession (Ostrove et al., 2011). Because of the higher rate of BIPOC attrition during graduate school (described above and in Chapter 1), this lack of sense of belonging could help us understand the attrition. However, because graduate school, especially in counseling and psychology, is just one of many sources of socialization and potential belonging, how do the experiences within the classroom ultimately impact a sense of belonging to this larger field?

Field Specific Belonging

Field-specific belonging refers to the feeling that an individual is accepted as a member by other members of a professional field (such as psychology) and that their contributions are valued and respected in that field (Good et al., 2012). As opposed to campus or general university belonging, field-specific belonging may be more relevant to graduate students as they are in the process of professional socialization. As Ostrove et al. (2011) noted, graduate school experiences significantly affect career decisions.

Stereotype Threat. Steele (1997) suggested that pervasive negative stereotypes permeate US culture about certain groups' academic abilities across either educational contexts or within specific contexts. Steele (1997) suggested that these stereotypes profoundly influence students' performance and academic identity. Stereotype threat, then, refers to the idea that when a student is aware of a stereotype about their group, they will, consciously or unconsciously, perceive their performance as having the potential to confirm the stereotype. The threat and anxiety that arise can interfere with performance, and students will often perform worse than expected. Over time, Steele (1997) theorizes that repeated underperformance and feelings of threat will cause individuals to disidentify and disengage with an academic domain (or academics in general).

Given that stereotypes are likely to influence many aspects of daily life, Steele and colleagues (2002) have expanded the theory to include a broader social identity threat hypothesis. This broader hypothesis, somewhat oversimplified here, suggests that individuals aware of stereotypes in any given context may perform or behave differently when situational cues are present. Many situational and individual factors moderate social identity threats. For example, Murphy et al. (2007) found that students who more strongly identify with a particular academic domain, such as a woman who chose math as a major, are more likely to have changes

in performance when situational cues are introduced in math settings as opposed to those in science settings.

Situational cues of stereotypes occur across many settings for BIPOC. These cues could include but are not limited to, a lack of numerical representation (Purdie-Vaughns et al., 2008; Steele, 1997), the types of roles BIPOC have in an organization (Steele, 1997), espousal of a color-blind ideology (Purdie-Vaughns et al., 2008) and a lack of clarity around evaluative processes (Purdie-Vaughns et al., 2008; Steele, 1997). Because of the previously cited lack of numerical representation for BIPOC psychology and counseling graduate students and research related to the lack of BIPOC faculty in C/HSP programs (Callahan, 2018; Shin et al., 2011), Steele's theory of stereotype threat may be particularly relevant as students may be more aware of their group status.

Stereotype Threat and Belonging. Because of a pervasive representation gap of women in science, technology, engineering, and math (STEM) careers, much research has gone into understanding the causes of this gap. Research regarding stereotype or social identity threat suggests that the pervasive stereotype that men have greater natural math ability has been proposed as a potential cause for women's disidentification with STEM academic domains or careers.

Testing the impact of stereotype threat, Murphy et al. (2007) ran an experimental design with 150 male and female advanced STEM undergraduate students – meaning students who were seemingly committed to a STEM degree. Each student was individually shown a video advertising a gender-balanced STEM conference (1:1 ratio of women to men) or an unbalanced conference (1:3 ratio of women to men). Because of the stereotype described above, it was believed that representation would cue the stereotype for women even though it was not directly

expressed. Indeed, women shown the gender-unbalanced video had greater evidence of physiological vigilance evidenced through increased heart rates and skin conductance. The unbalanced video also increased vigilance and recall of the video and the testing room. Notably, women were less likely to feel they would belong at the conference and reported being less likely to attend it.

These findings are significant as they provide evidence that even one cue, even in highly driven, seemingly committed students, impacted their sense of belonging and may cause students to opt out of certain socializing activities. However, as an experimental design, we must question how much this speaks to real-life situations. There may be many situational cues of threat, but there could also be buffering influences. Also, choosing not to attend one conference may or may not have long-lasting impacts on career decisions or the sense that one belongs to the field. Additionally, the sense of belonging measure was only three items asking a variation of whether a student perceived that "they belonged at the conference." Measures of belonging need to account for the depth and complexity of the construct.

Good and colleagues (2012) sought to test the impact that implicit theories of intelligence (fixed trait or malleable) and negative gendered stereotypes of math ability had on students belonging to math and on their academic motivations. Good et al. (2012) conducted a series of studies that also provided scale development data for a Math Belonging scale utilizing samples of students from a highly selective undergraduate program in the Northeast United States. First, they developed a 28-item measure for sense of belonging to math that included five factors: acceptance, membership, affect, desire to fade, and trust (Scale reliability and validity information is provided in more detail in Chapter 3).

Next, Good et al. (2012) utilized the Math Belonging scale and found that students who experienced a higher math belonging were more likely to have a greater intent to pursue math in the future (stats here). Further, regardless of gender, they found that math belonging had a negative correlation with math anxiety (-.70, p <.001) and a positive relationship with both perceived usefulness of math (0.59, p <.001) and math confidence (.77, p <.001). These results indicate that math belonging predicts intent to pursue along with other critical math-related variables. Math belonging also served as this predictor over and above other hypothesized variables such as school belonging and the degree someone identified themself with math (i.e., "I am a math person").

Finally, using a longitudinal design, Good et al. (2012) tested factors that may influence math belonging. Good et al. (2012) utilized data collected at three points throughout a calculus class. At each time, 534 females and 471 males with higher-than-average quantitative SAT scores completed the Sense of Belonging to Math scale. Scales were also administered at different time points to test the perceptions of lay theories of intelligence in the environment and perceptions of environmental stereotyping. Data on intention to pursue math, interest in math, and final course grades were also obtained.

Results showed that while both men and women's sense of belonging to math decreased over the semester, women's decrease was greater over time ($F(1, 332) = 4.44$, p <.04). Incorporating perceptions of lay theories of intelligence and negative gendered stereotypes, Good et al. (2012) found a significant three-way Sex X Intelligence Theories X Stereotype interaction ((β = .10), $t(10004) = 2.01$, p = .05) that accounted for 67% of the variance in math belonging by the end of the course. These findings mean that the more women perceived that their math environment (peers and professors in the course) held a theory that intelligence was a fixed trait

and that women were inherently not as good at math, the less likely they were to have a sense of belonging to math. Math belonging was, again, found to be significantly related to female students' intent to pursue math in the future (female: .35, p <.001). These findings held for women with a strong sense of belonging to math at the beginning of the semester and those with high SAT scores. Xu and Lastrapes (2022) have extended these findings into broader STEM fields.

Although the research highlighted below has been conducted using undergraduate women in math, we may be able to draw parallels with BIPOC graduate students. These findings are significant because they show that multiple social identity threats from social interactions within an academic environment can erode students' sense of belonging to a specific academic domain. Moreover, this sense of belonging has meaningful consequences for someone's intent to pursue a particular career. Steele (1997) discusses the idea of disengagement or disidentification that can occur after hearing repeated messages that one's group does not belong in a particular domain. Furthermore, as he suggests, why would one remain in a threatening environment when different domains offer less threat? While undergraduate students have greater freedom to switch majors and thus remove themselves from a threatening environment, graduate students may have fewer apparent choices. How, then, do BIPOC graduate students handle racism that occurs in their academic setting?

Social Support vs. Sense of Belonging. Unfortunately, many sense of belonging researchers, including Strayhorn (2018) and Clark et al. (2012), seem to conflate the idea of perceiving social support and perceived sense of belonging. Often, as in the case of Clark et al. (2012), purported measures of belonging are actually items measuring perceptions of support. For example, a few of the items used in the Clark et al. (2012) study asked respondents to rate

the degree they felt that "other students care about how much I learn" or "my graduate trainers want me to do my best." Social support is likely vital and may overlap with a sense of belonging; however, extricating these from one another is essential. Sense of belonging, again, is the feeling of acceptance and being valued and respected by group members. Social support can be viewed as "an asset for coping," contributing to feelings of belongingness, love, care, and other positive interpersonal feelings. (Gore, 1973, as cited in Pearson, 1986). The coping literature defines " social support as the presence or availability of network members who express concern, love, and care for an individual and provide coping assistance" (Sarason et al., 1983, as cited in Brondolo et al., 2009). According to Brondolo et al. (2009), social support involves communication: seeking out and talking to others within one's network.

Social support likely matters for all graduate students due to the stress of the enterprise. However, it may be doubly important for BIPOC graduate students and others from historically underrepresented backgrounds, given a proposed deficit in cultural capital. Cultural capital refers to the knowledge of the unwritten rules of interaction within different contexts often dictated by the ruling or dominant class (Bourdieu, 1983). In the context of graduate school, this means understanding the unwritten roles, rules, and expectations of higher education institutions that white, upper-class men have historically dominated. It is believed that BIPOC students, women, and those from lower socioeconomic backgrounds are at a disadvantage because they have been historically shut out of these institutions and thus intergenerationally shut out from this type of capital (Felder et al., 2014; Warnock & Appel, 2012).

In semi-structured interviews of 11 African American Black doctoral alumni, Felder et al. (2014) noted that students who were able to find supportive faculty (often faculty who identified as BIPOC) were able to share, discuss, and get support for their research interests. These students

were able to have socialization experiences that could engender feeling valued within their academic community and receive mentorship to aid their professionalization. Unfortunately, Felder et al. (2014) found that many alumni reported a lack of faculty diversity and experienced many microaggressions throughout their doctoral studies. These participants felt their research agendas were not valued and their racial experiences were not acknowledged. It is crucial, then, to understand how social support impacts sense of belonging and not conflate the two.

Belonging and Racism in Academia

Evolving separately from school or field belonging literature, though at times intersecting, research related to the impact of racism on sense of belonging has begun to emerge. The following sections will discuss how microaggressions have come to define modern racism and recent debate regarding the conceptual and construct validity of microaggressions and a review of research regarding racism in higher education environments, particularly in C/HSP environments.

Microaggressions and Modern Racism

Chester Pierce first coined the term microaggressions in the 1970s to describe the more insidious forms of racism that occur in everyday Black-white interactions (Pierce et al., 1978; Sue et al., 2007). The use of the term "micro" was intentional by Pierce to juxtapose this personal/interpersonal, more covert racism from the more macro and overt racism that occurs (Pierce et al., 1978; Spanierman et al., 2021; Sue et al., 2007; Williams, 2020). Despite this early work by Pierce, microaggressions were an often overlooked and understudied construct until the seminal work of Sue and colleagues in 2007 (Costa et al., 2022).

When Sue et al.'s article, “Racial Microaggressions in Everyday Life”, was published in 2007, overt acts of racism in the United States were less common, and racism was primarily

communicated through less obvious or ambiguous means. Sue et al. (2007) suggested that racism was less likely to be overt acts but instead occur privately or have seemingly innocuous explanations, which would cause confusion in the target and be easier to deny by the perpetrator. Drawing from the work of Pierce, Sue and colleagues (2007) categorized microaggressions as "brief, everyday exchanges that send denigrating messages to people of color because they belong to a racial minority group." (p. 273). According to Sue et al. (2007), microaggressions can be either conscious or unconscious, automatic, verbal, or nonverbal responses in cross-racial interactions. Because they are automatic and may occur without conscious thought, perpetrators may be unaware that they have caused harm. Additionally, microaggressions, as a form of racial trauma, tend to be cumulative and pervasive.

Sue et al. (2007) identified a taxonomy of three forms of microaggressions. The first type of microaggression that Sue et al. (2007) identified was microassaults. Sue et al. (2007) state that microassaults are more explicit and purposefully discriminatory. According to Sue et al. (2007), microassaults differ from overt racism in that they are often expressed in private or during interactions in which the perpetrator could deny that the aggression occurred. The second form of microaggression, defined by Sue et al. (2007), is the microinsult. These microaggressions "convey rudeness and insensitivity and demean a person's racial heritage or identity" (Sue et al., 2007, p. 274). These microaggressions can be expressed verbally through statements or questions, such as comments about someone's college acceptance resulting only from affirmative action or comments about appearance and professionalism. They can also occur nonverbally when a professor does not call on or acknowledge a BIPOC student's contributions. The third and final microaggression is microinvalidation. These microaggressions are often expressed by those who hold a color-blind racial ideology, denying or diminishing the reality of a racialized

world (Sue et al., 2007). These microaggressions effectively negate the experience of BIPOC people when white people or others express that they "do not see color," compliment someone on their language ability, or tell BIPOC that what occurred was not related to race/racism.

Sue et al. (2007) also identified nine categories of microaggressions based on previous research on modern racism, aversive racism, symbolic racism, and microaggressions. The first of these, *alien in own land*, describes when BIPOC – commonly Asian or Latine – are assumed to be foreign-born. These microaggressions convey that they do not belong in the US, are not American, or are perpetual foreigners. These can be conveyed through questions about someone's origin or comments on English-language ability. The second category, identified by Sue et al. (2007), is *ascriptions of intelligence*. These microaggressions convey messages that BIPOC are not as intelligent as whites, ascriptions of greater intelligence to some groups and less intelligence to others, and surprise when BIPOC display their intelligence. *Color-blind microaggressions* occur when individuals profess to "not see color" or otherwise downplay or not acknowledge the role of race. Another example of microaggression is *assumptions of criminality*. These types of microaggressions convey a message that BIPOC are inherently dangerous. These can include verbal expressions as well as non-verbal interactions in which a person clutches their purse, or a security guard follows BIPOC shoppers around a store.

Distinct from color-blind microaggressions, *denial of individual racism* microaggressions differs in that the perpetrator might acknowledge race as a reality but deny their own biases. This denial often comes from the perpetrator's other identities or interracial relationships. They may comment that because they are a woman or have BIPOC friends, they understand or are exempt from racism. Several common microaggressions fall into the category of the *myth of meritocracy*. These microaggressions reassert the myth, especially in the US, that people succeed

based on merit and effort rather than systemic privilege. These microaggressions send the racist message that BIPOC are lazy, incompetent, or receive unfair benefits through affirmative action or other civil rights acts. *Pathologizing cultural values/communication styles* suggests that anything that deviates from the white dominant cultural values or ways of communication should be abandoned. These can be conveyed through classroom comments about acceptable dress, hairstyles, or ways of talking – all signaling a need for BIPOC to assimilate into white culture. Finally, Sue et al. (2007) named *second-class citizen* microaggressions as those in which the needs of white individuals take precedence over BIPOC. Often, these occur through ignoring the BIPOC individual. Often, BIPOC individuals discuss having difficulty getting a taxi or having an Uber canceled once a passenger is identified as BIPOC; these are examples of second-class citizen microaggressions.

Many qualitative and quantitative research studies have emerged since Sue et al. (2007). More recently, Spanierman et al. (2021) reviewed 138 empirical articles on racial microaggressions published between 2007 – 2020 in the US and Canada. Spanierman et al. (2021) identified four superordinate categories of racial microaggressions: pathologizing differences, denigrating and pigeonholing, excluding and rendering invisible, and perpetuating color-blind racial attitudes. Subthemes also emerged in each of the superordinate categories. Most subthemes apply to multiple BIPOC communities, though some are specific to one. Multiple empirical studies back most subthemes; however, some in under-researched communities may have only one or a few studies undergirding the theme.

First, pathologizing differences entails "conscious or unconscious attempts by white people to disparage a target's cultural styles, values, and practices" (Spanierman et al., 2021, p. 1039). Within this category, subthemes of tolerating assumptions of white superiority, facing

assumptions of inferior status, encountering assumptions of substandard cultural values and styles, and contending with treatment as a second-class citizen emerged. Many of these align, while also expanding on, with Sue et al.'s taxonomy and description of microinsults.

The second superordinate category, denigrating and pigeonholing, consisted of seven subthemes: encountering expectations of intellectual inferiority, encountering expectations of intelligence in stereotypical domains, encountering expectations of primitiveness, facing assumptions of criminality, facing assumptions of terrorism, enduring exoticism, and experiencing false adoration and honor. These "refer to white perpetrators who assert the power to undermine, confine, or romanticize a target's mental capacity, behavior, or appearance" (Spanierman et al., 2021, p. 1044).

Excluding and rendering invisible consisted of seven subthemes: contending with treatment as an alien in one's own land, enduring nativism, enduring perceptions as "fresh off the boat," living with day-to-day cultural and social isolation, experiencing invisibility and exclusion, encountering assumptions of homogeneity, and feeling compelled to be a cultural expert. Excluding and rendering invisible conveys messages that BIPOC individuals do not belong and reflects many of the same microinvalidations Sue et al. (2007) described (Spanierman et al., 2021).

Finally, perpetuating color-blind racial attitudes most closely aligns with the color-blind racial ideology that Neville et al. (2013) described. These are microinvalidations that deny, distort, or minimize race and racism between the perpetrator and the target. This superordinate category includes the subthemes enduring denials of one's racial reality, tolerating denials of racism, tolerating denial of historical trauma, withstanding allegations of hypersensitivity, and withstanding jealous accusations (i.e., "reverse-racism").

As the Spanierman et al. (2021) superordinate and subthemes indicate, many of the microaggressions that Sue et al. (2007) identified continue to be confirmed in the empirical literature. However, many different expressions of microaggressions have continued to be identified as researchers explore microaggressions in different populations and contexts. Spanierman et al. (2021) specifically focused on racial and ethnic microaggressions as the context of white supremacy informs the messages conveyed through microaggressions. It is beyond the scope of this literature review to discuss how microaggression research has expanded concerning LGBTQ+ populations, religious minorities, women, and beyond.

Instead of a categorical taxonomy proposed by Sue et al. (2007) and Spanierman et al. (2021), Mekawi and Todd (2021) have suggested the use of a dimensional taxonomy to shift identifying the multitudinous array of microaggressions to understanding what factors result in a perception of a microaggression and the potential for harm. They suggest four broad categories: target dimensions, perpetrator dimensions, characteristics dimensions, and sociopolitical functions. Based on recent critiques of microaggression research discussed below, target and perpetrator dimensions focus on individual differences, while characteristics focus on descriptive elements of the event. Sociopolitical functions emphasize the role that microaggressions have in perpetuating systems of oppression.

In each of the four categories, Mekawi and Todd (2021) identified key elements that could be relevant. For target dimensions, they suggest, as much research has already indicated, that the stress and impact of microaggression be studied. They focus on understanding how individual differences in reaction to stress, such as coping strategies, may impact outcomes, including sense of belonging. Mekawi and Todd (2021) also suggest a need for greater focus on the target's perception of intentionality. According to Mekawi and Todd (2021), previous

research has shown this may impact feelings of hurt and reactions to microaggressions. Finally, Mekawi and Todd (2021) suggest that more be known about the role that ambiguity has in the target's experience.

Regarding the perpetrator's characteristics, Mekawi and Todd (2021) suggest that understanding the acceptability of committing microaggressions, the likelihood of perpetrating microaggressions, and motive are three key factors in understanding why microaggressions remain prevalent. Although each sound similar, they differ in crucial aspects. Acceptability refers to the perpetrator's attitude toward a particular microaggression being acceptable for someone to say or do (i.e., suggesting that exotification is a compliment). According to Mekawi and Todd (2021), research has suggested that individuals may endorse a likelihood of making a microaggression due to underlying beliefs like color blindness or negative stereotypes. Mekawi and Todd (2021) argue that understanding this factor could prove beneficial when conducting anti-racism training or other prevention work. Lastly, motive refers to the reasons that someone may give as to why they committed a microaggression.

Dimensions within Mekawi and Todd's (2021) characteristics include mode of delivery, situational context, and valence. Within the mode of delivery, Mekawi and Todd (2021) suggested that how the microaggression is expressed may have different meaning or impact – such that verbal or nonverbal, written, or oral, eye rolls, "scoffing," tone of voice may all have different meaning and impact. They suggest these cues work together in that a surprised tone of voice alongside the verbal statement may impact the perception of something as a microaggression rather than the statement alone. Situational context refers to the understanding that microaggressions or innocuous statements within a specific setting or context may impact the perception of a microaggression and its impact. For example, those that occur in situations

with greater or lower power of either the target or the perpetrator may impact how one responds – a BIPOC professor has more power to respond than a BIPOC student. Finally, Mekawi and Todd's (2021) valence refers to their supposition that the literal, combined content of all these elements matters in the perception and impact – such that some microaggressions can be considered compliments within specific situational contexts, perpetrator dimensions, or target dimensions.

Finally, categories within the sociopolitical function dimension include invalidation, othering, and dehumanizing. According to Mekawi and Todd (2021), invalidation parallels Sue et al.'s (2007) microinvalidation. These microaggressions serve the sociopolitical function of downplaying BIPOC's reality of race and racism. Othering, in contrast, suggests that BIPOC are permanently outside the "norm" of white dominant culture, which may impact BIPOC's feelings of belonging. Dehumanizing is not simply that BIPOC does not belong but that there is a sociopolitical function to deny BIPOC their full humanity within a system of white supremacy.

These taxonomical dimensions and the factors therein are intended to be used in tandem to explore further how individual differences, contexts, and sociopolitical factors impact BIPOC individuals and, to some extent, the perpetrators of microaggressions. Mekawi and Todd (2021) argue that by attempting to incorporate these dimensions into a microaggression research project, a more nuanced picture of microaggressions can emerge. This more nuanced understanding could then better inform the development of more accurate measures of microaggressions and interventions to support coping and prevent microaggressions. This project attempts to focus on this more nuanced understanding by looking at one particular setting as power dynamics may be relevant in classrooms, as well as attempting to fill the gap in understanding how coping and

social support within the same context that the microaggression occurs impacts the outcome of microaggressions.

Recent Critiques of the Conceptual Base of Microaggressions and Responses.

Although there have been other critiques of microaggressions, Lilienfeld's (2017) critique of the construct, operationalization, and state of microaggression research has spurred debate, clarification, and refinement of the microaggression construct in more recent years. It will thus be the focus of this section. The following will review Lilienfeld's (2017) critiques and the responses that shaped the direction of this study.

Lilienfeld (2017) first argued that microaggressions lack construct validity and a clear operational definition. He argued that because many verbal and nonverbal, intentional and unintentional, behavioral and environmental actions could be considered microaggressions, the boundaries have become overly flexible and porous. He cites the ever-growing body of literature, discussed to some extent above, that continues to identify examples of microaggressions as evidence of this claim. He also suggested that while microaggression research has shown high convergent validity with other measures of discrimination, microaggression researchers have not provided sufficient divergent validity to properly place microaggressions within the nomological network of implicit bias and aggression research. He argued that the foundation of microaggression research, both that of Pierce in the 1970s and Sue et al.'s (2007) work, is based on "armchair" observations and not empirically based research.

Based on this, he asserted that the definition is flawed, and, in turn, he questioned the integrity of all research that followed, including measurements used to test microaggressions. He found that a lack of sufficient operational definition led to contradictory items on measures of microaggressions. For example, someone commenting on intelligence or not commenting on

intelligence could both be considered a microaggression. He argued that measures of microaggressions do not emphasize the "when, where, and how the communication is delivered" (pg. 150). He argued that this leads to researchers making interpretations that may not be accurate and may overemphasize the role that microaggressions have on outcomes of physical and mental health. Further, Lilienfeld (2017) argued that because microaggression researchers interpret comments or actions in hindsight through a particular political lens, this turns any ambiguous statement into a microaggression without concern for the "deliverer's" intention.

Further, Lilienfeld took umbrage in the name "microaggression." He argued that because microaggressions can be unintentional, and the target may not recognize something as a microaggression, the use of "aggression" is inappropriate. Lilienfeld (2017) stated that social psychology researchers agree that aggression implies intent and harm. He also argued that labeling these acts as aggressive could increase aggression towards the perpetrator and activate a hostility attribution bias in the target. He additionally suggested that, instead of using terms like "perpetrator," "victim," or "target," researchers use the terms "deliverer" and "recipient." He argued that the former may increase hostility and a "victim mindset" whereas the latter is neutral and could allow the "recipient" to not interpret an action as a microaggression when the deliverer did not intend it so.

He also argued that the term "micro" is not well-suited because of interpretations that people may make around the meaning of the prefix "micro." In particular, he focused on microassaults, which are more overt and often intentional. He argued that these acts are not small or difficult to detect, so calling them micro may have the effect of underestimating the impact of overt acts of racism. While counterarguments to his points will be explored in greater detail below, this argument is simple to refute and highlights an almost willful misreading of the

original texts. Chester Pierce's various works in the 1970s, Sue et al. (2007), and many others (e.g., Spanierman et al., 2021; Williams, 2020) have been particular in explaining that micro prefix is used in juxtaposition to discrimination that occurs at the macro level. Therefore, microaggressions are rightly called micro as this is the racism that occurs interpersonally or between the environment and an individual rather than through policy or other structural levels to perpetuate systems of white supremacy with entire groups of people. Micro was never intended to suggest that the aggressions were difficult to decipher, though they sometimes are, or that the harm caused is minimal (Spanierman et al., 2021).

To counter many of the other arguments made by Lilienfeld (2017), we will begin by examining his operational definition which formed the basis of his other assertions. Lilienfeld (2017) defined microaggression as "subtle snubs, slights, and insults directed toward minorities, as well as to women and other historically stigmatized groups, that implicitly communicate or engender hostility" (p. 139). This definition removes Sue et al.'s (2007) assertion that these slights occur because of the target or victim's membership in an oppressed group (Williams, 2020). According to Williams (2020), this is an important distinction as it supplies the macro, systemic context through which microaggressions can be interpreted (i.e., white supremacy, patriarchy, heterosexism, etc.). Acknowledging that larger systems are playing out within a microaggression event also centralizes the target and the perpetrator's respective power. Thus, many researchers have argued that white individuals cannot experience racial microaggressions as they hold the dominant racial position in the United States (Spanierman et al., 2021).

Contrary to Lilienfeld's (2017) assertation that microaggressions have not found their space in the nomological network, Williams (2020) and Spanierman et al. (2021) argued that microaggression research has sufficiently defined itself within everyday racism and

discrimination and trauma literature. Williams (2020) argued that microaggressions are specific acts or examples of everyday racism and discrimination – which Williams (2020) defines as "unacknowledged racism integrated into common situations through cognitive and behavioral practices that activate and perpetuate underlying power relations via familiar schemas in common situations" (p. 7). Microaggressions reinforce the stereotypes that justify disparity (Williams, 2020).

Through situating microaggressions as an example of everyday racism and an expression of the dominant group asserting hierarchy, the role of intentionality shifts from focusing on the intention of the specific individual perpetrator to the broader intention of the dominating structure – through which the individual may be intentionally or unintentionally acting to benefit (Williams, 2020). Williams (2020) and Mekawi and Todd (2021) have suggested that the intentionality of the perpetrator is of little importance or use to microaggression researchers as most people believe their actions were well-intentioned. In addition, Williams (2020) showed that whether the perpetrator intended the microaggression to be harmful or not, the target often perceives it as such and experiences adverse sequelae (discussed more in the following subsection) With this, she situates microaggressions into violence literature base rather than social psychology's aggression literature, as violence can occur without intention by the perpetrator (e.g., a car accident can be violent despite it being an accident) and thus, reconnects microaggressions to the racial trauma literature. Combining empirical data related to the impact of racial trauma, discrimination, and microaggressions, then refutes the claim that Lilienfeld (2017) makes in suggesting insufficient evidence of harm.

Lilienfeld (2017) also suggested that microaggressions were insufficiently defined because there can be a lack of consensus around what was a microaggression, either between or

within groups or individuals. Lilienfeld (2017) focused on the lack of individual difference factors explored in the microaggression research base, particularly on the role of an individual's neuroticism. Williams (2020) found this particular focus to be a microaggression itself – a microinvalidation that someone reporting a perceived microaggression is simply neurotic. That being said, Mekawi and Todd (2021) suggested that individual differences do serve a function in understanding who may be more apt to perceive a microaggression and to understand the extent of harm made by microaggressions. Mekawi and Todd (2021), however, are particular to note that though an individual may not perceive something as a microaggression, it does not mean that the action was not a microaggression. Mekawi and Todd (2021) suggest that by asking for a particular response or perception among targets, there is an expectation of homogeneity that is unlikely, given the complicated history of racism and racial identity in the US.

Similarly, Lilienfeld (2017) commented that microaggression research does not sufficiently account for situational context while claiming that by doing so, microaggressions are at risk of "concept creep." Lilienfeld also argued that by relying on the target or victim's interpretation and not that of the perpetrator, events may be unduly defined as microaggressions. Mekawi and Todd (2021) refuted this by stating that if one accounts for the larger situational context (i.e., white supremacy), the action can be interpreted more narrowly as a racial microaggression. Mekawi and Todd (2021) further asserted that many psychological and social phenomena, including traumatic events, are often interpreted by the target or victim of the action. Taking this perspective further situates microaggressions in the violence and trauma nomological network. Finally, Mekawi and Todd (2021) argued against Lilliendfeld's assertation that the measures of racial microaggression lack construct validity because they have been developed by BIPOC researchers and those who inherently believe that microaggressions and racism should be

an eliminated social issue. Mekawi and Todd (2021) suggested that this centering of the BIPOC voice increases construct validity by centering the voice of those impacted by racial microaggressions. Further, they argued that this type of measurement development is consistent with many psychological measures, especially those of trauma.

Recent Reviews of Racial/Ethnic Microaggression Literature

In many recent years, several synthesized narrative reviews of literature and meta-analyses have been published in peer-reviewed journals to identify the state of microaggression research and the strength of associations with mental and physical health outcomes – two aspects Lilienfeld (2017) also found lacking.

A meta-analysis of 72 studies (N = 18,718) conducted by Lui and Quezada (2019) found that a composite of all microaggressions studied (race, gender, LGBTQ+) was significantly related to adjustment outcomes (r = .20 (95% CI [.16, .23]), z = 12.23, p <.001). However, there were significant between-study differences. Race significantly moderates the relationship between microaggressions and adjustment outcomes (F = 7.33, p = .003). Studies focused on Asian Americans showed greater effects than white populations, followed by Black and Latine populations. These findings suggest that there may be greater consequences for experiencing microaggressions in Asian American populations compared with Black and Latine populations. Because it is unlikely that simply being Asian American is the reason for this, individual differences such as coping or preparation for bias may account for these differences.

Regarding outcomes, Lui and Quezada (2019) found that higher levels of microaggressions were most strongly associated with depression and anxiety (r = .240, p < .05). Microaggressions were also positively related to externalizing outcomes such as drinking, smoking, and gambling (r = .187, p < .05), and stress and negative affect (r = .187, p <.05).

Further, microaggressions are negatively related to positive adjustment (r = -.171, p <.05). Contrary to expectations, no significance was found in the relationship between microaggressions and physical or somatic outcomes.

In the narrative review, Lui and Quezada (2019) seemingly agreed with Lilienfeld (2017) in that microaggression research has not sufficiently explored the outcome difference between microaggressions and overt racism. Indeed, their review found that only four studies attempted to account for overt discrimination in multivariate analysis of microaggression and adjustment. Because of this, Lui and Quezada (2019) could not conduct a meta-analysis to discover whether a difference exists. However, in the narrative review, they noted that at times, microaggressions account for greater anxiety or depression symptoms compared to overt discrimination, while at other times not. They also found that these differences in symptomology may differ across racial and ethnic groups. The differential impact of microaggressions and more overt discrimination remains worthy of additional research.

To this end, Lui (2020) conducted a study with 713 Asian, African American, and Latine participants testing the relationship between experiences of overt discrimination and racial microaggressions with psychological adjustment outcomes while accounting for trait neuroticism. Trait neuroticism was the potential individual difference that Lilienfeld (2018) argued was under-controlled in previous research on microaggressions. Although controversial, Lui (2020) controlled for neuroticism and found that both microaggressions and overt discrimination continued to have a significant negative relationship with psychological adjustment. Further, they found that overt discrimination and microaggressions were positively correlated but statistically distinct (non-multicollinear).

A recent meta-analysis by Costa et al. (2022) examined the relationship between microaggressions and psychological well-being, physical health outcomes, job outcomes, and positive and negative coping. Positive and negative coping was not specifically defined in this study. Examples of positive coping included reappraisal, humor, active copning, and support seeking. Examples of negative coping included suppression, rumination, avoidance, and self-blame. Authors suggested that while positive coping held long-term benefits, they could also require more resources than negative coping strategies. They also examined potential moderators, including microaggression targets (i.e., race-based, gender-based, LGBTQ-based microaggressions), publication year, publication status, sample occupation, and inclusion of nonstigmatized groups in samples. Through publication keyword search and emailed requests for unpublished microaggression research, Costa et al. (2022) located 141 articles with 154 samples, 62 published studies with 92 unpublished. Most studies focused on racial microaggressions (n = 101), followed by sexual orientation, gender, and intersectional microaggressions.

Costa et al. (2022) found that microaggressions, regardless of target identity, were negatively related to psychological well-being (r = -.29), physical health (r = -.18), and job outcomes (r = -.27). They also found that microaggressions, again regardless of target identity, were positively associated with both positive coping (r = 0.24) and negative coping (r = 0.15). Regarding psychological well-being, microaggressions were shown to have a significant negative relationship for each target group. Intersectional microaggressions had the most negative relationship (r = -.42), followed by gender, sexual orientation, and racial microaggressions. Regarding physical health, racial and intersectional microaggressions showed significant negative relationships (r = -.21; r = -.17 respectively). However, gendered microaggressions did not have a significant relationship with physical health. Due to the lack of

research regarding job outcomes and microaggressions, only racial and sexual orientation-based microaggressions were analyzed. Costa et al. (2022) found that both have a significant negative relationship to job outcomes.

Regarding coping, Costa et al. (2022) found that intersectional microaggressions were most strongly positively related to negative coping ($r = 0.38$), followed by sexual orientation ($r = 0.23$) and racial ($r = 0.18$). Gendered microaggressions did not have a significant relationship with negative outcomes. Positive coping also had a significant positive relationship with racial microaggressions ($r = 0.31$), intersectional ($r = 0.28$), and sexual orientation ($r = 0.22$). Publication year and publication status did not moderate any of the outcomes measured, except that published articles had more robust relationships with positive coping than unpublished articles. Sample occupation did matter with job outcomes in that employed samples showed stronger negative relationships with job outcomes than student samples. Finally, Costa et al. (2022) found that samples of only stigmatized group members had a stronger correlation with job outcomes. However, nonstigmatized group members did not moderate psychological, physical, or coping outcomes.

The results of both Lui and Quezada (2019) and Costa et al.'s (2022) meta-analysis show that microaggressions are generally detrimental to the target of the microaggression. These findings may be especially true for the target's psychological well-being as both meta-analyses reveal similar adverse psychological outcomes. However, Lui and Quezada (2019) and Costa et al. (2022) differ in their results regarding negative physical health outcomes. Meta-analysis methods, including criteria for inclusion, could be the cause of this difference. The issue will not be explored here because physical or somatic outcomes are not of central interest to this study.

However, the relationship between microaggressions and physical health deserves future attention.

Costa et al. (2022) additionally focused on coping, which Lui and Quezada (2019) did not. They hypothesized that microaggressions would have a negative relationship with positive coping and a positive relationship with negative coping. They suggested that the mental and emotional labor of experiencing microaggressions would result in decreased positive resources to cope and greater reliance on more negative coping strategies. They found that positive and negative coping was positively related to microaggressions for all but gender-based microaggressions only. They speculated that the resource loss was insufficient to block victims from using positive coping strategies. They also suggested using longitudinal research methods to understand the coping strategies over time. Although this study is not longitudinal, this study seeks to understand further the role of coping, specifically what Costa et al. (2022) may term positive coping, as a mediator in the relationship between microaggressions and a job-related outcome.

Costa et al. (2022) focus on two key potential moderators important to this study. First, Costa et al. (2022) were interested in the role of job outcomes. These outcomes included job satisfaction, turnover intentions, GPA, and others left unnamed in their manuscript. Of the outcomes studied, job-related outcomes had the second fewest independent effect sizes to use in the analysis – meaning that there were relatively fewer studies focusing on microaggressions and jobs. Even within those available, studies that used student populations alone did not have as strong a relationship between microaggressions and job outcomes as those that used employed samples. Given what was explored earlier regarding graduate student retention, understanding the job-related outcomes of still enrolled students is important next to an overall increase in

understanding the relationship between racism and job outcomes. Outcomes like GPA may not tell enough of the story to understand job outcomes, while asking students about job satisfaction may be too distal. It is this study's proposal, therefore, that looking at one's current sense of belonging to a profession can help to bridge the gap in our understanding of microaggression and work intentions.

Racism, Sense of Belonging and Graduate School.

Much of the early research on microaggressions, including those cited in Sue et al.'s (2007) paper, was conducted within university settings to understand the experience of BIPOC students. To some extent, there is a more extensive understanding of microaggressions and their impact on college students. However, the understanding of how racism impacts graduate students – particularly concerning their sense of belonging is less known.

Beginning in the 1970s, researchers began exploring BIPOC graduate students' experiences and found replete examples of racism and discrimination (e.g., Duncan, 1976). Early research showed that BIPOC graduate students had difficulty finding faculty mentors, felt their intellect and work demeaned (Woods, 2001), and experienced isolation and tokenism from faculty and peers (Gay, 2004). These findings mirror BIPOC's sense of belonging in graduate school discussed in previous sections (e.g., Felder et al., 2014; Warnock & Appel, 2012). It is proposed, therefore, that it is the impact of microaggressions in BIPOC professional and academic lives that results in this loss of belonging.

Seeking to understand the experience and career consequences of microaggressions on BIPOC and International Graduate Teaching Assistant/Teacher Educators (hereafter referred to as TAs), Gomez et al. (2011) utilized a critical race framework to analyze 14 such students. Gomez et al. (2011) found that many of the TAs perceived that white students would use tactics

to undermine, disrupt, and invalidate the TA. These included the use of silence, avoidance, and slighting. white instructors of record would align with the white students. According to those interviewed by Gomez et al. (2011), instructors of record would openly question BIPOC TAs in front of students. Because TAs felt they were undermined and invalidated in class, they reported difficulty gaining rapport, trust, and control of the classroom. In Gomez et al. (2011), participants discussed feeling unable to confront microaggressions committed against themselves or toward BIPOC students. TAs reported feeling that they needed to meet the demands of the dominant group to the detriment of BIPOC students. They reported feeling doubt about their abilities following these experiences.

Many of the international TAs interviewed by Gomez et al. (2011) reported that they intended to return to their home country to avoid the racism and racial climate of the US. They reported wanting to avoid the constant questioning of their intellect and authority. Other TAs reported that they would not seek teaching opportunities in social justice/multicultural-focused programs to avoid conversations about race/racism. Many continued questioning their abilities and felt they needed more support from mentors or advisors. Gomez et al. (2011) discussed these losses in the workforce as a direct and indirect result of the microaggressions experienced. Having fewer BIPOC and international educators restricts the degree to which BIPOC, or international students feel seen, heard, and validated in the educational space.

Bonafacio et al. (2018) utilized a social cognitive career theory model to explore how ethnic identity and microaggressions impacted career decision self-efficacy in Latina college students. Fifty-nine percent of the sample were enrolled in a master's or doctoral program. Bonafacio et al. (2018) found that microaggressions were negatively related to career decision self-efficacy ($\beta = -0.35$, $p < .001$). Microaggressions were also negatively related to positive

outcome expectations (β = -0.15, $p < .05$) and positively related to negative outcome expectations (β = .44, $p < .001$). Ethnic identity was also positively related to negative outcome expectations (β =.21, $p <.001$) and career decision self-efficacy (β =.17, $p <.01$). Unfortunately, their proposed indirect effect models did not show a buffering effect of ethnic identity in the relationships between microaggressions and career decision-making, or positive or negative outcome expectations. Although career decision-making self-efficacy is more related to confidence in one's ability to make career decisions, Bonafacio et al. (2018) provided additional evidence of how microaggressions negatively impact individual expectations of their professional life.

In a study by Miller and Orsillo (2020), 436 BIPOC graduate students completed measures related to microaggressions, a revised belongingness measure, acceptance, valued-living, and psychological outcome measures. They found that microaggressions were positively correlated with depression, anxiety, and stress (β =.21, .29, .28 respectively, $p <.01$). They also found that sense of belonging to their doctoral program was negatively correlated with each psychological outcome (β = -.33, -.23, -.29 respectively, $p < .01$). Miller and Orsillo (2020) further found that practicing mindful acceptance and value-based living buffered the relationship between each predictor and outcome. Unfortunately, they did not test for the impact of racist events and microaggressions on belonging.

Though less recent but more relevant, Clark et al. (2012) tested the relationship between racism, belongingness, emotional distress, and academic engagement in 87 BIPOC and 313 white school psychology graduate students. Clark et al. (2012) found that BIPOC students expressed more microaggressions than their white counterparts, with a standardized mean difference of 0.82. White students reported belonging was .25 standard deviations above the

mean. Utilizing structural equation modeling, Clark et al. (2012) found that microaggressions were significantly negatively related to belonging ($\beta = -.30$, $p < .001$). Belonging was not significantly related to emotional distress but was positively correlated with academic engagement ($\beta = .40$, $p < .001$). Indirectly, microaggressions were significantly related to academic engagement through belonging (99% CL: -.23 to -.01, $p < .001$). While this gives evidence that microaggressions and belonging are connected for graduate psychology students, the belonging measure used by Clark et al. (2012) may not be a conceptually valid indicator of belonging, especially using the accepted definition used by Goodenow and Grady (1993) and Good et al. (2012) - that belonging is the reciprocal feeling of acceptance by members of a group alongside a feeling of respect and being valued. Clark et al. (2012) adapted the Classroom Life Scale (CLS; Johnson et al., 1985). They used and adapted subscales related to personal and academic support by fellow students and teachers. Many belonging researchers and measures of belonging have conflated belonging with perceptions of social support. This study will instead choose to test belonging using a validated measure of belonging. This study will also separately measure the experience of social support from peers and faculty, particularly support around negative racial experiences.

Coping with Racism

Psychologists for decades have proposed the importance of coping as a means for psychologists to support clients and to understand human resilience (Carver et al., 1989; Skinner et al., 2003). However, little agreement exists about the definition of coping or how to measure it (Skinner et al., 2003; Stanislawski, 2019). Recently, Stanislawski (2019)– after reviewing several of the major models of coping discussed below– suggested the following definition: "both volitional and automatized, cognitive, emotional, and behavioral responses to stress" (pg. 4).

Many coping models developed in the past 40 years are derived from the model proposed by Lazarus and Folkman (1984). Lazarus and Folkman (1984) suggested that individuals had two main tasks when encountering a stressful situation: resolve the problem and regulate the emotion. From this, they suggested a coping model of problem- and emotion-focused coping. This model has been criticized as overly simplified even by Lazurus in later years (Stanislawski, 2019).

Carver et al. (1989) maintained that problem- and emotion-focused coping was central to coping but suggested that additional theoretically derived coping strategies could exist. From this assumption, Carver et al. (1989) developed 13 coping strategies in four categories (problem-focused, emotion-focused, less useful, and others). These strategies included active coping, planning, suppression of competing activities, restraint coping, seeking social support for instrumental reasons, seeking social support for emotional reasons, positive reinterpretation and growth, acceptance, denial, turning to religion, focus on and venting emotions, behavioral disengagement, mental disengagement, humor, and substance use.

Throughout the intervening years, other researchers have proposed different models of coping (e.g., Stanislawski's Circumplex Model, 2019). In 2003, Skinner et al. conducted a systematic review of coping measures and found 400 distinct ways of coping identified through bottom-up models of coping. Skinner et al. (2003) suggested that while psychologists may have a thorough understanding of how people cope, we still need to understand the high-order structure of coping.

Skinner et al. (2003) found a lack of research aimed at understanding the high-order structure. One of the most used structures is the one proposed by Lazarus and Folkman (1984). However, Skinner et al. (2003) argued that the distinction between emotion- and problem-focused is not clear and that these two constructs are not mutually exclusive. Skinner et al.

(2003) also found common use of topological categories. They found that the most used higher-order categories are approach or avoidance. These distinguish coping strategies between those that bring a person closer or farther away from the stressful event. According to Skinner et al. (2003), while helpful, this way of categorizing can also be vague and lack distinction. Finally, Skinner et al. (2003) found the use of "action" categories to identify higher-order coping structures. These action categories could include ways in which people may attempt to control (or not control), assimilate, or accommodate; they may be effortful or involuntary, and so on. The distinction between the other high-order categories is that coping serves some cognitive, emotional, or behavioral theoretical function through action. Skinner et al. (2003) argued that while each is useful in some way, none are sufficient. They encourage researchers to use exploratory factor analysis to identify the higher-order structure of coping.

As more attention has focused on the impacts of racism, attention has also increased on the insufficiency of coping models to adequately address coping with racism as a unique stressor (Brondolo et al., 2009). Brondolo et al. (2009) suggested that both general models of coping and race-based coping failed to incorporate how individuals manage both the emotional and interpersonal nature of racism. Brondolo et al. (2009) also argued that racism is unique in that racism is both an acute events and an ongoing stressor likely to reoccur over one's life. Others also distinguish racism as a unique stressor as it is embedded in institutions and cultural norms (Wei et al., 2010).

Mellor (2004), in a qualitative study of 34 Australian Aboriginal adults, developed a taxonomy of coping with racism. They identified three different groups with distinct subcategories. The first group identified was protecting the self. The first category within this group was acceptance of racism with several subcategories: withdrawal and escape, resignation

to fate, and avoidance of further contact. Other categories within the protecting the self group included reinterpretation of events, use of social support, denial of identity, attempts to achieve and excel, and attempts to make children strong.

The second group of coping responses Mellor (2004) identified were controlled responses. This group included the categories ignoring the racism, contained responses refers to wanting to respond but not, and making imagined responses. Mellor (2004) described these responses as those that had some acknowledgment of the racism alongside a deliberate choice on how to respond. However, controlled responses differ from the third and last category of confronting racism in that controlled responses are typically held within the individual rather than directed toward the perpetrator or systems of oppression. Categories within the confronting the racism group include teaching or educating the perpetrator, contesting the racism, asserting one's rights, asserting one's identity, taking control, using external supports or authorities to address racism, and seeking revenge.

As can be seen, many of these categories align with more general ways of coping, such as seeking social support and ignoring the problem. However, many other coping responses to racism are not adequately covered in general coping measures. For this reason, Wei et al. (2010) developed a scale for coping with discrimination based on the work of Mellor (2004), along with interviews of BIPOC students and an understanding of racial/cultural identity development theory. Wei et al. (2010) initially developed a 36-item scale with a proposed 6-factor structure. These factors included internalization (attributing the cause of discrimination to personal inferiority), disengagement (not knowing how to deal with the discrimination and disengaging with support), reaction/confrontation (reacting directly to perpetrators of racism), support seeking (seeking validation and advice), focusing on strengths/resilience (learning from

experiences for self-growth), and Education/Advocacy (educating within and outside of one's community to prepare for discrimination). An initial pilot study suggested that the reaction/confrontation factor be split into drug and alcohol use and resistance.

Using a sample of 656 BIPOC students, Wei et al. (2010) found that their items loaded into a five-factor solution: education/advocacy, internalization, drug and alcohol use, resistance, and detachment. This factor structure was replicated using confirmatory factor analysis with 328 BIPOC individuals (validity and reliability statistics are provided in Chapters 1 and 3). As can be seen, these factors do not include the seeking social support factor, although detachment involves aspects of not having or not seeking social support. These findings leave the question of how social support, instrumental or emotional, influences outcomes. Nevertheless, the factors identified by Wei et al. (2010) uniquely influenced mental health outcomes over and above general coping strategies, suggesting that there are unique responses to racism.

Understanding coping styles as potential mediators in the link between gendered racism and mental health, Syzmanski and Lewis (2016) suggested that disengagement coping via detachment, internalization, and use of drugs or alcohol would be related to negative mental health outcomes. Syzmanski and Lewis (2016) also suggested that engagement coping through resistance or education/advocacy would be related to less adverse outcomes. Their study found a significant relationship between experiencing gendered racism and each coping style except alcohol/drug use. However, mediation analysis found that coping via detachment and internalization were the two factors that partially mediated the link between gendered racism and psychological distress (Syzmanski & Lewis, 2016) and not engagement styles of coping.

In another similar study in 2023, Moody and colleagues proposed racism-related coping styles as a mediator between gendered racial microaggressions and traumatic stress. Moody et al.

(2023) found significant positive relationships between gendered racism and each coping style – slightly differing from Szymanski and Lewis (2016). However, like Szymanski and Lewis (2016), Moody et al. (2023) did not find a significant association between engagement styles of coping (resistance and education/advocacy) and traumatic stress.

These findings suggest that coping via resistance or education/advocacy does not sufficiently explain the possible link between discrimination and distress (Szymanski & Lewis, 2016). Szymanski and Lewis (2016) suggested that engagement coping may have risks and benefits that cancel each other out, particularly within institutions that lack support for making change. Syzmanski and Lewis (2016) also suggested that engagement coping may better explain more positive outcomes than simply the lack of psychological distress. For this reason, this study looks at the role of engagement coping within conditions of support on the relationship between racism and a positive outcome – sense of belonging.

The Present Study

Given the research described above, this study seeks to expand on previous research regarding microaggressions, belonging to a professional field, racism-related social support, and engagement coping. Deriving from the extensive research related to the negative consequences of racism on BIPOC, this study hypothesizes the direct negative relationship between racism and sense of belonging to a field. While racism has already been found to be negatively related to sense of belonging, this study seems to be one of the first to study this connection within a graduate degree program, particularly in C/HSP graduate programs. Although many of these programs have professional values connected to social justice and diversity, they are also not immune from the pervasiveness of racism and white supremacy culture of the US. This study also extends and attempts to improve upon previous studies that confounded sense of belonging

with other constructs. Finally, this study attempts to draw from racism-related coping and social support literature to help explain previous unexpected findings.

CHAPTER THREE

METHODOLOGY

As described in Chapter 1, this study will test a proposed moderation mediation model (Hayes & Rockwood, 2020) to understand the indirect effects of engagement styles of racism-related coping and racism-related support from peers/faculty) on the proposed connection between racism and sense of belonging. As a reminder, racism experiences measured as microaggressions are the predictor variable with engagement styles of racism related coping (education/advocacy and resistance) as the mediator. The outcome variable is sense of belonging to the fields of Counseling and Health Service Psychology (C/HSP) and the proposed moderator is perceived racism-related support received from peers/faculty. Moderated mediation analyses test the conditional indirect effect of a moderating variable (i.e., racism-related support received from peers/faculty) on the relationship between a predictor (i.e., racism) and an outcome (i.e., sense of belonging) via a potential mediator (i.e., engagement coping). The following chapter will outline the participant recruitment procedures and sample characteristics, summary of survey instruments psychometrics, and data analysis procedure.

Participants

Participants were those who identified as BIPOC (Black, Indigenous, People of Color) who were enrolled currently or within the previous two years in a masters or doctoral counseling, counseling psychology, counselor education and supervision, clinical psychology, or school psychology program. Participants also needed to be 18 years of age and residing in the US.

A total of 268 participants completed some parts of the online survey. Nineteen participants were excluded from the study for not completing 50% or more of the survey. Little's MCAR test was conducted and indicated that data were not missing completely at random and were either missing at random or not missing at random (χ^2 (2201), N = 249) = 2419.202, p = .001). Six cases did not complete the last 24-31 items; each of the other missing cases only had 1-3 missing items. Per Dong and Peng's (2013) recommendations, expectation-maximation imputation was used to retain data from 28 participants who had some degree of missingness (less than 29.5%). Therefore, the final sample used in data analysis was 249 participants.

The mean age of participants was 27.7 (SD = 5.17; Range: 21 to 63). One-hundred ninety-three (77.5%) participants identified as female, 37 (14.9%) as male, seven (2.8%) as non-binary, pangender, or gender fluid, four (1.6%) as gender non-conforming, two (0.8%) as trans men, and two as agender (0.8%). Regarding race/ethnicity, 91 (36.5%) identified as Asian or Asian American, 64 (25.7%) as Black or African American, 45 (18.1%) as Latine, 39 (15.7%) identified as multiracial or multiethnic (for full breakdown of their specific identification see Table 1), 7 (2.8%) as Middle Eastern, 2 (0.8%) as Indigenous or Native American, and 1 (0.4%) as North African.

Seventy (28.1%) participants were enrolled or recently enrolled in a master's in counseling program (I.e., community, clinical mental health, or school counseling), 66 (26.5%) in a Counseling Psychology PhD, 49 (19.7%) in a Clinical Psychology PhD, 33 in a Clinical Psychology PsyD, 10 (4%) in a masters in psychology, nine (3.6%) in a Counseling Psychology PsyD, six (2.4%) in a School Psychology PhD, one (0.4%) in a School Psychology PsyD and five (2%) identified "other." Seventy-four (29.7) participants had been enrolled in their program for one year or less, 66 (26.5%) as being in their second year, 42 (16.9) as third years, 30 (12%)

as fourth years, 21 (8.4%) as fifth years, nine (3.6%) as sixth years, and three (1.2%) as in their seventh year.

Table 1. Sample Demographic Characteristics.

Age	M=27.7	SD = 5.17
	Frequency	Percentage
Race		
Asian	91	36.5%
Black/African American	64	25.7%
Latinx	45	18.1%
Multiracial/multiethnic	39	15.7%
Latinx/White	5	2.0%
Black/Latinx	4	1.6%
Black/Latinx/White	4	1.6%
Black/Indigenous	3	1.2%
Latinx/Indigenous	3	1.2%
Black/White	3	1.2%
Asian/White	3	1.2%
"Mixed BIPOC"	3	1.2%
Latinx/Middle Eastern	2	0.8%
Latinx/Indigenous/White	2	0.8%
Black/White/Indigenous	1	0.4%
Black/White/Latinx/Indigenous	1	0.4%
Middle Eastern/White	1	0.4%
Asian/Latinx	1	0.4%
Black/Latinx/Indigenous	1	0.4%
Asian/Middle Eastern/White	1	0.4%
Indigenous/White	1	0.4%
Middle Eastern	7	2.8%
Indigenous/Native American	2	0.8%
North African	1	0.4%
Gender		
Woman	193	77.5%
Man	37	14.9%
Non-binary, Pangender, or Gender Fluid	7	2.8%
Gender non-conforming	4	1.6%
Genderqueer	3	1.2%
Trans Man	2	0.8%
Agender	2	0.8%

Degree Program		
Masters in counseling (community, clinical mental health, school, etc.)	70	28.1%
PhD Counseling Psychology	66	26.5%
PhD Clinical Psychology	49	19.7%
PsyD Clinical Psychology	33	13.3%
Masters in Psychology (community, clinical mental health, school, etc.)	10	4.0%
PsyD Counseling Psychology	9	3.6%
PhD School Psychology	6	2.4%
PsyD School Psychology	1	0.4%
Other	5	2.0%
Years Enrolled		
1 year or less	74	29.7%
2 years	66	26.5%
3 years	42	16.9%
4 years	30	12.0%
5 years	21	8.4%
6 years	9	3.6%
7 years	3	1.2%
Socioeconomic Status		
Middle Class	93	37.3%
Working Class	73	29.3%
Upper Middle Class	50	20.1%
Lower Class	30	12.0%
Upper Class	3	1.2%
Religious/Spiritual Identity		
Christian	55	22.1%
Agnostic	51	20.5%
No religious affiliation	38	15.3%
Atheist	19	7.6%
Catholic	18	7.2%
Hindu	16	6.4%
Muslim	16	6.4%
Spiritual	11	4.4%
Buddhist	9	3.6%
Jewish	3	1.2%
Mixed Faith	3	1.2%
Traditional Indigenous Traditions	3	1.2%
Formerly Catholic/Unsure	3	1.2%
Traditional African Traditions	2	.8%
Pagan/Wiccan	2	.8%

Sexual Orientation		
Heterosexual/Straight	149	59.8%
Bisexual	48	19.3%
Lesbian/Gay	15	6.0%
Queer	12	4.8%
Pansexual	9	3.6%
Asexual	7	2.8%
Questioning	5	2%
Demisexual	3	1.2%
Polyamorous	1	.4%
Disability Status		
Able-Bodied	206	82.7%
Disabled	43	17.3%

Data Collection Procedure

The sample for this study was recruited using online listservs from counseling and psychology associations and groups including APA's Division 45 and Division 17. In addition, possible participants were recruited through academic institutions listed on APA and CACREP's website as accredited programs. Directors of Clinical Training and/or Department Chairs were contacted via email and asked to share the recruitment email with their students. The study was made and housed with Qualtrics, a web-based survey research software. The recruitment posts and emails had an accessible link to the Qualtrics survey wherein potential participants provided their informed consent to participate. Those who provided their consent were directed to a set of screening questions to confirm they met the criteria for participation. Once confirmed, students were directed to the survey questions which began with demographics followed by the study variable questionnaires.

After completion of the survey data, potential participants were asked if they wished to provide their email for entry into a raffle for one of twenty $25 Amazon gift cards. If they chose to participate, participants were redirected to another survey unaffiliated with their survey data

and were asked to only submit an email address for contact should they win the raffle. As named in the informed consent, and as policy of the funding institution, an administrative representative from Loyola University Chicago would send the link to the Amazon gift card. After completion of data collection, I utilized a random names generator to select the 20 recipients and provided those emails to the administrator at Loyola University Chicago.

Instruments

Participant Demographics

Demographic Questionnaire. Participants will be asked to complete a demographic questionnaire including program type, year in program, race, ethnicity, gender, social class, sexual orientation, religious affiliation, and disability.

Predictor, Moderator, and Outcome Variables

Racial and Ethnic Microaggressions. The Racial and Ethnic Microaggressions Scale (REMS; Nadal et al., 2011) is a 45-item scale that measures the frequency of racial/ethnic microaggressions in the previous six months. The scale is comprised of 6 subscales: 1) assumptions of inferiority, 2) second-class citizen and assumptions of criminality, 3) microinvalidations, 4) exoticization/assumptions of similarity, 5) environmental microaggressions, and 6) workplace and school microaggressions. Confirmatory factor analysis indicated that the 6-factor structure was a good or excellent fit for both the 45-item scale and its subscales (Nadal et al., 2011).

Typically, respondents are asked to reflect on experiences in all domains of life over the previous 6 months. The instructions in this study were modified to focus on experiences within their academic training for the past six months. Items on the REMS include: "someone was surprised by my scholastic or professional success because of my race" and "someone avoided

eye contact with me because of my race." Respondents indicate the number of times that they have experienced a microaggression with 1=I did not experience this event in the past six months, 2 = I experienced this event 1-3 times in the past six months, 3 = I experienced this event 4-6 times in the past six months, 4 = I experienced this event 7-9 times in the past six months, 5 = I experienced this event 10 or more times in the past six months. For this study, items on the environmental microaggressions subscale were modified from a focus on representations of race/ethnicity in popular media, politics, etc. to representations of race/ethnicity in their academic setting (i.e., deans, advisors, faculty, etc.). Additionally, items from the Workplace and School microaggressions scale were revised to solely focus on school environments.

REMS was developed and validated using a sample of multiple racial and ethnic groups, including Black/African American, Latine, Asian American, Pacific Islander, Arab American, and multiracial (Nadal, 2011). An exploratory principal-components analyses yielded a 6-factor structure which was confirmed by confirmatory factor analysis. (Nadal, 2011). Concurrent validity was supported through significant correlation with the Daily Life Experiences-Frequency scale (r = .698, N = 253, p <.001). REMS has high internal reliabilities between racial/ethnic groups, with coefficient alphas ranging from 0.905 to 0.922. The scale itself produced a reliability coefficient alpha of 0.928. Coefficient alphas for each subscale ranged from 0.850 to 0.888. In this study, Cronbach's alpha was .958.

Racism-Related Coping. The Coping with Discrimination Scale is a 25-item, Likert-type scale assessing how BIPOC individuals cope with discrimination (CDS; Wei et al., 2010). The CDS constates of five subscales with five items each, two of which will be used in this study: Education/Advocacy and Resistance for a total of 10 items. Sample items from the scale

are “I educate others about the negative impact of discrimination” and “I directly challenge the person who offended me.” Participants are asked to respond to items on a 6-point scale using the following response options: 1) never like me, 2) a little like me, 3) sometimes like me, 4) often like me, 5) usually like me, and 6) always like me.

In a sample of BIPOC students, the CDS subscales demonstrated good internal consistency with reliability estimates ranging from .72 to .90 (Wei et al., 2010). The measure also indicates adequate to strong two-week test-retest reliability estimates for the subscales: Education/Advocacy, r = .85; and Resistance, r = .70 (Wei et al., 2010). With a sample of 220 BIPOC undergraduate and graduate students, Wei et al (2010) found that the five CDS subscales significantly predicted depression, life satisfaction, self-esteem, and ethnic identity. Importantly, these findings also showed incremental validity over and above the influence of socially desirable responding (Wei et al., 2010). In the current study, Cronbach's alpha for the two subscales used to measure engagement coping was .815.

Perceived Support from Faculty/Peers. Perceived racism-related social support from peers/faculty will be assessed using a revised version of social supports to social justice engagement scale developed by Miller et al (2009). The revised scale is intended to assess the degree to which individuals perceive racism-related support with higher scores indicating greater perceived support. In the revised scale, respondents are asked to assume that have experienced a racism experience in their academic training program. Respondents will then rate how likely they are to experience social support from faculty/peers on a 10-point Likert-type scale (0=Not Likely, 9=Extremely Likely). Items include “feel support from faculty/peers in my program” and have access to a mentor who could offer advice or encouragement.” Internal consistency

estimates for the original scale ranged from .75 to .90 (Miller et al. 2007; Miller et al., 2009). In this study, using the revised scale, Cronbach's alpha was .903.

Sense of Belonging to Counseling/Psychology Field. A revised version of the 28-item Sense of Belonging to Math scale (Good et al., 2012) was used for this study. Sense of Belonging to Math scale was created to assess one's perception of being an accepted member of an academic discipline and the extent that one believes their contributions are perceived as valued and respected by a given community or academic domain. Researchers have successfully revised this scale to assess sense of belonging to other academic domains (Ladewig et al., 2020). To revise this scale, respondents are instructed to think about their experiences in the C/HSP field. Each item is proceeded by the statement, "when I am in a counseling/psychology setting…" followed by items such as "I feel that I belong to the counseling/psychology community" and "I feel accepted." Respondents indicate their agreement with each statement on an 8-point Likert-type scale.

Good et al. (2012) conducted exploratory and confirmatory factor analysis and determined that this scale measures a first order Sense of Belonging factor composed of 5 subscales: 1) membership, 2) acceptance, 3) affect, 4) trust, and 5) desire to fade (Good et al., 2012). Therefore, a composite score is used (Good et al., 2012). Predictive validity was also assessed. Controlling for psychological sense of school membership (Goodenow, 1993), trait anxiety, and math identification – Good et al. (2012) regressed math anxiety, perceived usefulness of math, confidence in math, and intention to pursue math in the future on Sense of Belonging to Math. They found that Sense of Belonging to math was the strongest predictor of intention to pursue math in the future (.42, $p < .001$). Sense of Belonging to Math scale has

achieved Cronbach's alpha ranging from 0.78 to 0.84 (Good et al., 2012). Test-retest reliability is 0.87 (Good et al., 2012). In the current study, Cronbach's alpha was .944.

CHAPTER FOUR

RESULTS

Data Cleaning

Data analysis was completed in SPSS beginning with data cleaning. This involved the removal of participants who did not complete the informed consent or failed to pass the initial screening questions related to 1) identity as a BIPOC, 2) being 18 years or older, and 3) being recently or currently enrolled in a counseling or health service psychology doctoral or master's program. Nineteen participants were identified as having not completed more than 50% of the survey data. These participants were excluded. Twenty-eight cases remained with some degree of missing data, less than 29.5%, and their data was retained. Missing data was imputed using expectation-maximation. Little's MCAR test was conducted and indicated that data were not missing completing at random and were either missing at random or not missing at random (χ^2 (2201), N = 249) = 2419.202, p = .001). Six cases did not complete the last 24-31 items; each of the other missing cases only had 1-3 missing items.

Preliminary Analysis

Preliminary Quantitative Analysis. Categorical demographic variables were examined for frequency and percentage. Means, standard deviations, and ranges were examined for the continuous variable - age. See Table 1 in Chapter 3 for demographic data.

Survey measures were then reviewed, and scores were reversed where necessary. Mean, standard deviation, skewness and kurtosis, and Cronbach's alpha were examined for each study variable including subscales. Preliminary data analysis showed that two of the four study

variables violated tests of normality. Mean, standard deviation, and bivariate correlations for each of the scales and subscales are presented in Table 2.

Racial microaggressions had a mean score of 2.04 (SD = .62) out of a score range of 1 (I did not experience this event) to 5 (I experienced this event 10 or more times). Racial microaggressions were positively skewed with a skewness statistic of 1.78. Racial microaggression data, therefore, were transformed using reflected inverse transformation and normal skewness and kurtosis were met for the overall racial microaggressions variable (skewness statistic: .099; kurtosis:.482).

Means for each of the subscales are as follows: School-based microaggressions (M = 1.80, SD = .91), Second-Class Citizen and Assumptions of Criminality (M = 1.46, SD = .73), Exoticization and Assumptions of Similarity (M =1.64, .75), Invalidations (1.81, SD = .95), Assumptions of Inferiority (M = 1.60, SD = .86), Environmental Microaggression (M = 4.17, SD = .70). Each of the subscales were also positively skewed (skewness statistic ranging from 1.5 to 2.6 and SE = .154) except for the environmental microaggression subscale which was negatively skewed with a skewness of -1.51. Unfortunately, attempts to transform each of the subscales using square root, log 10, and reflected inverse transformation did not result in shifts to more normative data and therefore these were left untransformed.

See Table 2 for bivariate correlations between subscales and between all variables. Of note, all subscales within the REMS were significantly related to the overall racial microaggression score. Additionally, all subscales are significantly correlated with each other except for the Environmental Microaggression subscale.

Mean score for engagement coping was 3.16 (SD = .79). Engagement coping did not violate assumptions of normality with a skewness statistic of .13 (SE = .15) and kurtosis of .05

(SE = .31). Education/Advocacy subscale had a mean score of 3.63 (SD = .97). Resistance coping had a mean score of 2.69 (SD = .91). Skewness and kurtosis for each subscale were within normal limits. Resistance and education/advocacy subscales were moderately correlated *(r* =.39, *p* <.001) and significantly correlated to the overall engagement coping scale.

Perceived Social Support from Faculty/Peers had a mean score of 5.16 (SD = 1.57). Perceived Social Support violated tests of normality as it was negatively skewed with a skewness statistic of –.823 (SE = .307). Data was reflected and transformed using Log 10 to achieve a more normal distribution. The transformed data achieved normal distribution with a skewness statistic of -.1 (SE = .154). Kurtosis statistic was calculated as -.811 with a standard error of .307.

Sense of belonging to C/HSP had a mean score of 4.34 (SD = .96) from a score range of 1 (Strongly Disagree) to 7 (Strongly Agree). Sense of belonging met assumptions of normality with a skewness statistic of .1 (SE = .154) and kurtosis of -.369 (SE = .307).

Bivariate correlations for all study variables were calculated using the transformed data. Racial microaggressions were weakly but positively correlated with engagement coping (*r* = .217, *p* <.001). Racial microaggressions had a moderate, negative relationship to social support (*r* = -.397, *p* <. 001) and sense of belonging (*r* = -.371, *p* <.001). Engagement coping was weakly but positively related to social support (*r* = .142*, p* = .025) but not significantly related to sense of belonging to C/HSP. Perceived social support had a moderate, positive relationship to sense of belonging (*r* = .442, *p* < .001).

Qualitative Data Analysis. One qualitative item was asked following the sense of belonging questionnaire. This item asked respondents “Please describe the types of settings that you called to mind when responding to questions regarding the “counseling/psychology community.”” Responses were coded using a process based on thematic analysis (Braun &

Table 2. Descriptive Statistics and Correlations for Study Variables

Variable	M	SD	1	1a	1b	1c	1d	1e	1f	2	2a	2b	3	4
1.Racial Microaggression [a]	2.04	.62	-											
1a. School-based Microaggression	1.80	.91	.788**	-										
1b. Assumptions of Criminality	1.46	.73	.710**	.772**	-									
1c. Exotification	1.64	.75	.729**	.586**	.526**	-								
1d. Microinvalidations	1.81	.95	.821**	.693**	.702**	.700**	-							
1e. Assumptions of Inferiority	1.60	.86	.776**	.700**	.792**	.619**	.781**	-						
1f. Environmental Microaggressions	4.17	.70	.322**	.118	-.023	-.026	-.068	-.054	-					
2.Engagment Coping	3.16	.79	.217**	.210**	.217**	.166**	.292**	.194**	-.071	-				
2a. Education/Advocacy	3.63	.97	.169**	.158*	.152*	.157*	.228**	.157*	-.075	.846**	-			
2b. Resistance	2.69	.91	.194**	.193**	.212**	.119	.261**	.168**	-.042	.822**	.391**	-		
3. Social Support [a]	5.16	1.57	-.397**	.345**	.268**	.145*	.212**	.247**	.403**	-.142*	-.162*	-.071	-	
4. Sense of Belonging	4.34	.96	-.371**	-.440*	-.319**	-.170**	-.246**	-.267**	-.310**	.052	.093	-.010	.442**	-

[a,] Means and Standard Deviations are reported prior to transformation. Bivariate correlations are reported post-transformation.
**p < .01, *p < .05

Clarke, 2006). First, three superordinate themes were identified: Academic Settings, Clinical Settings, and Broad Professional Settings. Academic Settings was defined as responses that indicted academia in general, specific classes, specific program/department, research labs and/or interactions with actors in academia such as cohort members, professors, or administrators. Clinical settings referred to practicum, clinical work settings, internships, post-doctoral settings, or interactions with actors in clinical settings such as clinical supervisors or fellow interns. Broader professional settings referred to professional organizations, conferences, or interactions with members of the field outside of one's clinical or academic setting including online interactions through social media or listservs.

Out of the 249 respondents, 217 responded to the qualitative question. One hundred and ninety-nine respondents indicated academic settings, 95 indicated broader professional settings, and 87 indicated that they had thought of clinical settings when responding to questions about sense of belonging to the field of C/HSP. Thirty-three respondents indicated all three settings, 46 indicated both academic and broader professional settings, four indicated both clinical and broader professional settings. Seventy-four respondents only reported thinking of academic settings, 10 respondents only thought of broader professional settings, and three reported only thinking of clinical settings.

Academic Settings responses were probed further as additional subthemes emerged. Ninety-seven responses under the academic settings superordinate theme indicated that they had thought of specific classroom experiences. Sixty-nine reported thinking of interactions between themselves and their cohort, classmates, professors, or administrators including clinical training staff. Finally, 23 respondents reported thinking about their experiences in conducting research or within their research labs.

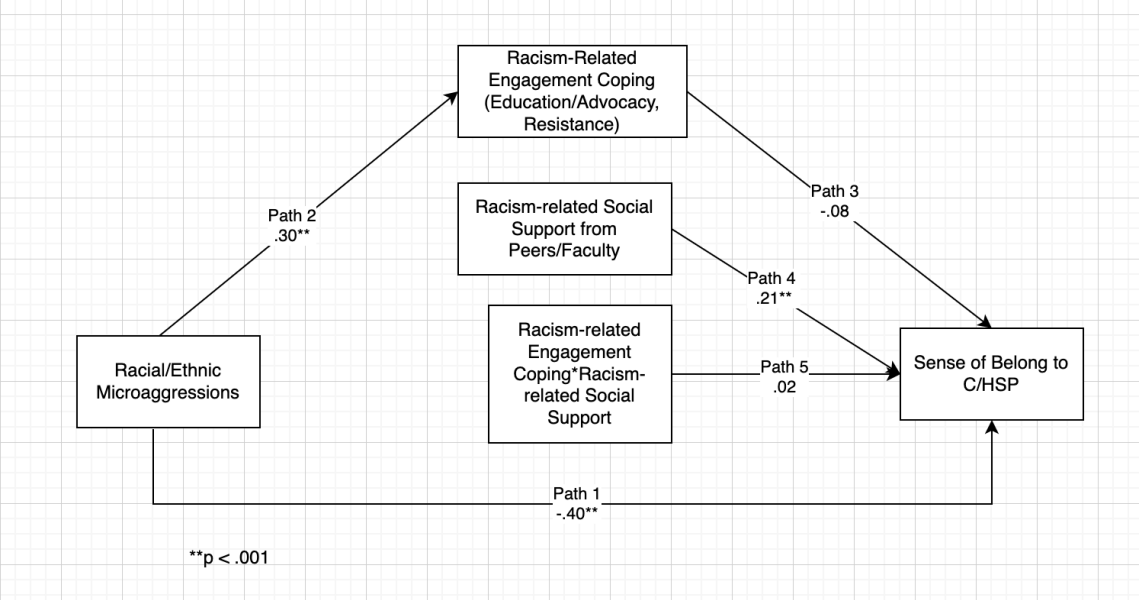
Within the Broader Professional Settings theme, several subthemes also emerged. These included participation at conferences or trainings, within professional organizations such as APA, ACA, or specific divisions, and experiences with online communities. Forty-two respondents indicated that they had thoughts about their experiences in conferences or training. Twenty-two discussed being members of various professional organizations such as APA, ACA, or specific divisions such as Division 17 or the National Latinx Psychological Association. Finally, 10 respondents discussed experiences engaging with members of the professional community online through social media, specifically "therapist twitter." Other responses in this subtheme discussed reading listserv emails or searching online for therapists in their area.

Main Analysis

This study performed a moderated mediation analyses to examine whether sense of belonging was predicted by racial microaggressions and whether engagement styles of racism-related coping partially mediated the relationship within different conditions of perceived racism-related social support. Hayes (2018) PROCESS model 14 was run to test for the proposed direct effects, hypothesized mediation, and hypothesized moderated mediation. Because Hayes PROCESS model mean centers the data, the original untransformed data was used for racial microaggressions and perceived racism-related social support. Tests were run using both models and the outcomes were equivalent. Figure 3 depicts the statistical model of the moderated mediation.

Hypothesis H1 suggested that Racial/Ethnic Microaggressions would have a significant direct, negative effect on Sense of Belonging to C/HSP. Hypotheses H1 (Figure 3, Path 1) was supported as the unstandardized regression coefficient (b = -.40) was significant (p =.0001).

Figure 3. Statistical Model showing Unstandardized Regression Coefficient.



Hypothesis H2 suggested that Racial/Ethnic Microaggressions would be positively related to Racism-related Engagement Coping (Figure 3, Path 2) and Racism-related Coping would be positively related to Sense of Belonging to C/HSP (Figure 3, Path 3). Further, H2 suggested that that Racism-related Social Support from Peers/Faculty would be positively related to Sense of Belonging to C/HSP (Figure 3, Path 4). Hypothesis H2 was only partially supported. First, Racial/Ethnic Microaggressions was found to be positively related to Racism-related Engagement Coping (b = .30, p = .0001; Figure 3, Path 2). However, Racism-related Engagement Coping was not significantly related to Sense of Belonging to C/HSP (b = -.08, p = .246; Figure 3, Path 3). Racism-related Social Support from Peers/Faculty was positively related to Sense of Belonging to C/HSP (b = .21, p <.001; Figure 3, Path 4).

Hypothesis H3 stated that the interaction between Racism-related Engagement Coping and Racism-related Social Support from Peers/Faculty would be positively related to Sense of Belonging to C/HSP. This hypothesis was not supported as the interaction term was not significantly related to sense of belonging (b = .02, p = .59; Figure 3, Path 5).

Hypothesis H4 stated that Racism-related Engagement Coping would partially mediate the relationship between racism and sense of belonging (Figure 3, Path 2 * 3). Hypothesis H4 was supported. Utilizing PROCESS model 4 which removes the influence of the moderating variable in this study, results revealed a significant indirect effect of the impact of Racism-related Engagement Coping the index of mediation statistic was .054 (t = 1.96) at 95% confidence interval (.0106/.1195). Furthermore, the direct effect of Racism on Sense of Belonging in the presence of the mediator continued to have significance (b = -.6169, p < .001). Therefore, Engagement Coping partially mediated the relationship between Racism and Engagement Coping. Mediation analysis summary is presented in Table 3.

Table 3. Mediation Analysis

Relationship	Total Effect	Direct Effect	Indirect Effect	Confidence Interval		t-statistics	Conclusion
				Lower Bound	Upper Bound		
Racism -> Engagement Coping -> Sense of Belonging	-.5629 (<.001)	-.6169 (<.001)	.054	.0100	.1178	1.96	Partial Mediation

Hypothesis H5 suggested that the indirect effect of racism on sense of belonging through engagement coping would be moderated by perceived social support at three levels (mean and +/- 1SD; H5A, H5B, H5C). Utilizing PROCESS model 14, Hypothesis H5, H5A, H5B and H5C were not supported as the index of moderated mediation (index = .006, 95% CI = [-.0126/.0271]) was not significant as the 95% CI includes zero.

Post-Hoc Analysis

Next, I sought to examine the data for significant effects between key demographic and study variables using one-way analysis of variance (ANOVA) for categorical data with more than three groups, independent-samples *t*-tests for categorical data with two groups, and bivariate

correlations for categorical data. In addition to one-way ANOVA, Welch test of ANOVA or Brown-Forsythe test of ANOVA was used to test the categorical data that did not meet assumptions of homogeneity of variances (Moder, 2010). This only occurred when examining the relationship between Race and Racial/Ethnic Microaggressions and REMS subscales. As a reminder, Racial/Ethnic Microaggressions and its subscales were not distributed normally. The overall Racial/Ethnic Microaggressions data was able to be transformed using reflected inverted transformation, however the subscales did not benefit from attempted transformation. Some researchers recommend the use of non-parametric tests such as the Kruskall-Wallis H Test, over ANOVA, to examine mean rank differences in non-parametric data. However, both the Kruskall-Wallis H Test and ANOVA require that the assumption of homogeneous variances be met. In this case, researchers suggest that Welch or Brown-Forsythe ANOVA (e.g., Frost, N.D.), therefore these tests are used. Below, Levene's tests of homogeneity of variances are reported when the assumption was violated (when $p < .05$).

Examining the relationship between Race and Racial/Ethnic Microaggressions, Levene's test of homogeneity of variances was violated (3.07, $p = .01$). A Welch ANOVA test was run, and no significant differences were found between the mean total of all racial microaggressions and race (F(1.65), $p = .178$). Race had significant effect on each of the subscales except the School-based Microaggression subscale: Second-Class Citizen and Assumptions of Criminality (Levene's statistic: 7.33, $p < .001$; Welch ANOVA: (F(5) = 3.50, $p = .043$)), Exotification/Assumptions of Similarity (F(5, 243) = 2.96, $p = .013$), Microinvalidations subscale (Levene's statistic: 3.82, $p = .002$; Brown-Forsythe ANOVA: F(5) = 2.41, $p = .028$), Assumptions of Inferiority ($F(5, 243) = 4.66$, $p < .001$), and Environmental Microaggressions (Levene's Statistic: 4.53, $p < .001$; (F(5) = 20.16, $p < .001$).

Post hoc-Tukey tests were performed to identify, if any, specific mean racial group differences within each subscale. Regarding Second-class Citizen and Assumptions of Criminality, Black respondents reported experiencing significantly more Second-class Citizen and Assumptions of Criminality type microaggressions than Asian (p <.001) and Latine respondents (p = .025). Regarding Exotification/Assumptions of Inferiority, Latine respondents reported significantly more instances of these microaggressions than Black respondents (p = .029). Regarding Microinvalidations, Black respondents reported significantly more of these types of microaggressions than Asian respondents (p = .007). Black respondents also reported experiencing significantly more of Second-class Citizen and Assumptions of Inferiority than Asian respondents (p <.001). Finally, Middle Eastern and North African students (MENA; combined due to low sample size) reported significantly greater environmental microaggressions than Black respondents (p = .016).

Racial group membership had no significant relationship on Engagement Coping. However, one-way ANOVA revealed that Race had a significant effect on use of Education/Advocacy (F (5, 243) = 2.53, p = .03). Post-hoc Tukey test, however, did not reveal significant, specific mean group differences. Looking at means alone, Indigenous students (N = 2) had the highest Education/Advocacy mean score (4.6), followed by MENA (N = 8, M = 4.07), Latine (N = 45, M = 3.9), Black or African American (N = 64, M = 3.7), Asian (N = 91, M = 3.51), and Multiracial (N = 39, M = 3.35). Race had no significant effect on perceived Racism-related Social Support or Sense of Belonging.

Respondents' socio-economic status (SES) had a significant effect on student's Sense of Belonging (F (4, 24) = 3.24, p <.013). Post-hoc Tukey test revealed that students who identified as having spent most of their life in lower-class SES reported significantly less Sense of

Belonging than upper-class students (p = .044). SES had no other significant effects on main study variables or subscales.

Using one-way ANOVA, no significant effects of Sexual Orientation were found on any of the study variables or subscales. However, after collapsing the categories into Heterosexual/Straight and LGBQ+, an independent-samples t-test found a significant difference between these two groups and Engagement Coping ($t(247)$= -2.457, p = .015). LGBQ+ students were more likely to utilize Engagement Coping (M = 3.31, SE = .08) compared to Heterosexual/Straight students (M = 3.06, SE = .06). Probing further, independent-samples t – test was conducted to determine differences in use of Resistance coping. The results indicated a significant difference between LGBQ+ students (M = 288, SD = .93) and Heterosexual/Straight students (M = 2.57, SD = .88), [t(249) = -2.638, p = .009). Independent-samples t-tests did not reveal any other significant differences between LGBQ+ and heterosexual students on any other study variables or subscales.

Similarly, using one-way ANOVA, Gender Identity was found to have a significant effect on engagement coping (F(6, 241) = 4.03, p < .001). A post-hoc Tukey's test showed that folks identified as Genderqueer were more likely to utilize Engagement Coping compared to cis-men (p = .042) and cis-women (p = .05). Gender non-conforming folks were also more likely to report using Engagement Coping than cis-men (p =.018) and cis-women (p = .02). Probing further, there were significant between group differences in the use Education/Advocacy Coping (F (6, 241) = 2.88, p = .01) and use of Resistance Coping (F(6, 241) = 3.38, p = .002). Post-hoc Tukey's test did not indicate specific mean group differences. Gender Identity had no significant effects on the three other main variables or racial microaggression subscales.

One-way ANOVA was conducted to check the effect of program type[2] (i.e., PhD Counseling Psychology, PsyD Counseling Psychology, etc.) on the main study variables. There were effects of Program Type on Sense of Belonging ($F(7, 241) = 2.73$, $p = .003$). A post-hoc Tukey's test showed that master's in counseling students were significantly more likely to report Sense of Belonging than PhD Clinical Psychology students ($p = .004$). No other Program Type differences were significant with regard to Sense of Belonging. Additionally, Program Type also had a significant effect on Perceived Racism-related Social Support ($F(7, 241) = 2.68$, $p = .011$). However, post-hoc Tukey's test did not identify significant mean differences between groups. No significant differences were found with program type on Racial Microaggressions, Engagement Coping, or subscales.

To further explore how the type of program a respondent was enrolled in impacted responses to study variables, enrollment in either a Masters, Doctoral, or "other" program regardless of specific program type was examined in comparison to the study variables. Between group effects were found on Sense of Belonging ($F(2, 246) = 5.820$, $p = .003$) with Master's Students reporting significantly greater Sense of Belonging than doctoral students ($p = .008$). Between group effects were also found on perceived racism-related support ($F (2, 246) = 3.144$,. $p = .045$). However, post-hoc Tukey's test did not identify significant mean differences between groups.

No significant differences were found between Masters, Doctoral, or Other students on total Racial Microaggression scores. However, there were significant differences when probing specific subscales: School-based microaggressions ($F(2, 246) = 3.72$, $p = .026$) and

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[1]School Psychology PhD and PsyD were combined as only one participant identified as being in a School Psychology PhD program.

Environmental Microaggressions ($F(2, 246) = 3.22$, $p = .042$). Post-hoc Tukey's test did not reveal significant mean differences. No significant differences were found between Master's and Doctoral students on Engagement Coping or coping subscales.

Years in the program was positively related to frequency of Racial Microaggressions ($r = .17$, $p < .01$). Probing further, Years in the program was positively related to the experience of School-based Microaggressions ($r = .263$, $p < .001$), Assumptions of Criminality *(*$r = .154$, $p = .016$*),* Exotification ($r = .158$, $p = .013$), and Microinvalidations ($r = .171$, $p = .001$). Years in the program was also significantly negatively related to Perceived Racism-Related Social Support from peers and faculty ($r = -.19$, $p < .01$). Years in the program had a negative relationship with the use of Engagement Coping but the data bordered on significance with $r = -.125$, $p = .051$ so should be interpreted cautiously. There were no significant relationships between Years in the program and Education/Advocacy or Resistance Coping.

Age was negatively related to the use of Engagement Coping ($r = -.17$, $p < .05$). Probing further, use of Resistance Coping was negatively related to Age *(*$r = -.166$, $p = .011$). There was no relationship between Age and Education/Advocacy. There were also no significant relationships between Age on Racial Microaggression including specific subscales, Racism-related Social Support, or Sense of Belonging.

Religious/Spiritual Identity had no effect on any of the main study variables or subscales except one microaggression subscale. Using one-way ANOVA, Religious/Spiritual Identity had a significant between group effects on reports of Environmental Microaggressions. Post-hoc Tukey's test did not reveal specific between group mean differences.

Independent samples *t*-test were conducted to determine whether there is a difference in responses to the study variables and subscales between folks who identified as having a disability

and those who did not. First, Levene's Test for Equality of Variances was violated in several cases, so significance was assessed at the equal variances not assumed level. Here, there were no significant differences between those with or without disability on the main study variables. However, there were significant differences when looking at subscales. First, there were significant differences on reports of specific types of microaggressions. Results on the Microinvalidations subscale indicated significant differences between Disabled (M = 2.17, SD = 1.23) and Able-bodied (M = 1.73, SD = .87), [t(249) = -2.207, p = .032]. Results on the Assumptions of Inferiority scale also indicate significant differences between Disabled (M = 1.92, SD = 1.13) and Able-bodied students (M = 1.54, SD = .78), [t(249) = -2.138, p = .037]. Additionally, results on the Resistance Coping scale indicated significant differences between Disabled (M = 2.98, SD = 1.01) and Able-bodied students (M = 2.63, SD = .88), [t(249) = -2.101, p = .04].

Geographical region of program (i.e., rural, urban, etc.) and disability status did not have a significant effect on any study variable.

CHAPTER FIVE

DISCUSSION

Discussion of Main Findings

This study examined the relationship between BIPOC Counseling and Health Service Psychology (C/HSP) Graduate Students experiences of racism and their sense of belonging to the field of C/HSP. Racism was found to be a significant predictor of students' sense of belonging to C/HSP. Racism was found to also be positively related to students' use of Racism-related Engagement Coping (hereafter referred to as Engagement Coping). It was further hypothesized that Engagement Coping would partially mediate this relationship which was supported in the data. Finally, a hypothesized moderated mediation was proposed in which Perceived Racism-related Social Support from Peers/Faculty (herein referred to as Social Support) would moderate the proposed mediation of Engagement Coping. Despite there being a significant relationship between Perceived Social Support and Sense of Belonging, the moderated mediation was not supported by the study data.

Hypothesis one stated that racism experienced in C/HSP academic settings would have a direct negative effect on BIPOC graduate students' sense of belonging to the field of C/HSP. The study findings supported this hypothesis through both the PROCESS model results and the correlational findings during the preliminary analysis. This study provides quantitative data to support previous qualitative findings which had suggested this negative relationship. This study also expanded on previous narrowly focused research related to only school psychologists, by looking at data across the range of graduate counseling and health service psychology programs.

Further, this finding connects the experiences of graduate students, specifically BIPOC graduate students, to the literature related to sense of belonging to a field. Also, with regard to microaggressions, they were found to be directly positively related to engagement coping. This finding is well-supported by previous studies such as Wei et al. (2010) and Szymanski and Lewis (2016). However, the correlation between these two variables is considered relatively weak (r = .217, p < .001).

This study hypothesized and found that social support from either peers or faculty would be positively related to sense of belonging to the field. This finding held the strongest correlation between the main study variables, though still considered a moderate correlation (r = .442, p < .001). This finding aligns with the literature on the role of social support, particularly that of peers and faculty, in students' sense of belonging. Strayhorn (2018), Twale et al. (2016), and others have suggested that this may be particularly true based on the role that social interactions play in professional socialization. This study is novel in that it specifically asked students to rate the amount of *racism-related* support they may receive rather than social support generally. Interestingly, the data for the social support questionnaire was not normal and negatively skewed. This suggested respondents to this study experienced a high level of racism-related social support from either peers or faculty.

This study showed that engagement coping creates a suppression effect on the negative relationship between racism and sense of belonging. Understanding the effect of engagement coping has been somewhat elusive, as it has unexpectedly not been shown significant in previous studies (e.g., Moody et al., 2023; Szymanski & Lewis, 2016). This study confirms Szymanski and Lewis's (2016) speculation that engagement coping as a mediator may create more expected results when considering more "positive" outcomes, such as sense of belonging, rather than

exploring engagement coping's role in the absence of negative outcomes such as depression. In this model, as frequency of microaggressions increased and student's use of engagement coping increased, students ultimately had higher sense of belonging to the field of psychology.

Interestingly, engagement coping was not found to have a significant, direct effect on sense of belonging. Traditional mediation analysis suggests that these two variables must be significant to show mediation exists (Baron & Kenny, 1986). However, more modern mediation analysis procedures do not require a test of joint significance (Hayes, 2018). Hayes (2018) suggests that these traditional criteria are irrelevant as these tests act as gatekeeper to running a potentially significant mediation analysis. Also, according to Hayes (2018), simply running a test of indirect effect maintains statistical power.

But what then should we make of a non-significant direct relationship between engagement coping and sense of belonging? Szymanski and Lewis (2016) suggested that engagement styles of coping have both costs and benefits which may negate one another and result in unexpected outcomes. Szymanski and Lewis (2016) discussed the potential unexpected results of using engagement coping as experiencing the "futility associated with trying to modify experiences that are often uncontrollable and chronic" (p. 238). The findings in this study that the indirect effect had a significant effect, but the direct path did not, may suggest that using engagement coping may indeed take mental, emotional, or instrumental resources that negate sense of belonging when the frequency of microaggressions.

Given the complexity and unexpected results of engagement coping on outcomes in previous studies (i.e., Moody et al., 2023, Szymanski & Lewis, 2016), this study attempted to explore conditions in which engagement coping may be more helpful; and one in which the individual victim of the microaggression is not fully responsible. This study suggested a potential

interaction between engagement coping and moderator: racism-related social support. These hypotheses were not supported by the study data. At no level of the moderator did the moderated mediation have an indirect significant effect between racism and sense of belonging. Although social support did have a significant positive, direct relationship with sense of belonging, social support does not seem sufficient in buffering the costs of engaging with racism and microaggression experiences. This may indicate the need to explore how the institutional structures and processes interact with engagement coping, social support and sense of belonging.

Preliminary and Post-hoc Findings

Looking at the distribution of the data respondents reported relatively few microaggressions, except in the case of Environmental Microaggressions. In this aspect, students overwhelmingly indicated that the academic environment did not represent their racial identity. These findings suggest that while representation of BIPOC in the field of C/HSP is increasing (APA, 2018), there remains a need for faculty to increase the diversity of their learning materials. Additionally, higher education administrators need to take seriously the call for diversity in hiring practices. Further, many have called for adjustments to tenure or promotion requirements such as those that consider the invisible roles that BIPOC faculty have in working with a diverse population of students (e.g., Lin & Kennette, 2022).

Racial group identification and years in the program were significantly positively related to reported frequency of microaggressions. There were no racial group differences in microaggressions as a whole, suggesting that racial microaggressions that occur in graduate C/HSP academic settings occur equally across groups. There were, however, racial group differences when looking at specific subscales. The main racial group differences were between Black or African American respondents and other racial groups on five of the microaggression

subscales. Black and African American students, at times, expressed significantly more of these microaggressions than other groups while at other times expressed significantly less than some groups. It may be, given the historical context of race and anti-Blackness in the United States, Black or African American students have different experiences within their academic settings than those of other BIPOC graduate students. As years in the program increase, opportunities for racism also increase.

In addition to race having a significant effect on use of engagement coping, students age and years in the program were also negatively correlated. These two variables also lend themselves to the suggestion by Szymanski and Lewis (2016) and Moody et al. (2023) that use of engagement coping is taxing which may especially be true over time. As students age and as they progress through the program, students who may have attempted to use engagement coping may have ceased doing so because of the frustration or cost of attempting to change individual or systemic behaviors.

Engagement coping was also affected by Sexual Orientation and Gender. In this regard, holding a lesbian, gay, bisexual, queer plus (LGBQ+) identity or a genderqueer and gender non-conforming identity resulted in a greater likelihood of using Engagement Coping compared to heterosexual and cis-male or cis-female counterparts. Although minority stress theory speculates that multiple minority identities results in more negative outcomes (Meyer & Frost, 2013), research related to intersectional use of Engagement Coping with racism is sparse. Hagai et al. (2021) conducted qualitative research that suggested younger, LGBTQ folks are more likely to engage in social justice work because of increased sense of community. Understanding the intersectionality within the experience of racism and use of racism-related coping could further our understanding of this crucial topic.

Racism-related social support was negatively related to years in the program and type of program enrolled in (Masters v. Doctoral). Like use of Engagement Coping and frequency of Racial Microaggressions, the longer that students were enrolled, the less likely they were to perceive support. The impact that years in a program has across three of the four variables suggests that the more students experience racism within the setting, the less likely they are to both engage in Education/Advocacy and Resistance Coping and are less likely to perceive racism-related support. It may be that students who have experienced racism earlier in their program attempted to use Engagement or attempted to seek out support but were left wanting. Given the strength of the association between social support and sense of belonging, this is somewhat alarming. However, without longitudinal data to explore the frequency of microaggressions, use of racism-related coping, and attempts to receive support over time, we cannot make these causal conclusions. To my knowledge, no previous research has reported the influence of time in the program across these variables so further replication and exploration is necessary.

In regard to sense of belonging to the field of C/HSP, the type of program was significantly impacted sense of belonging. Master's students in general were more likely to endorse Sense of Belonging to the field than doctoral students. Specific mean group differences were found between master's in counseling students and clinical psychology doctoral students where master's in counseling students were more likely to endorse higher sense of belonging. Although years in the program were non-significant, we could assume that a similar experience may be playing out. Nevertheless, difference between master’s in counseling and PhD in Clinical Psychology students is interesting in its own right. Although many similarities exist across these

professions, differences in the histories of the professions, professional values, and professional identities could explain some of these differences. Additional research is warranted.

Additionally, SES was found to have a significant effect on sense of belonging to C/HSP. Specifically, mean group differences were found in that lower SES students reported significantly less sense of belonging than those from upper SES backgrounds. Previous research has shown this relationship in regard to student's sense of belonging to their graduate program (Ostrove et al., 2011). This study adds to our understanding by findings suggesting the intersection of SES and Race to the lower sense of belonging graduate students experience, rather than race or SES alone.

Limitations and Future Directions

Scales were modified and developed specifically for this study. Although reliability estimates were satisfactory, the validity of the REMS modified to focus on a singular setting has not been fully tested. The study data for this scale resulted in a non-normal distribution. Student respondents typically reported experiencing minimal microaggressions, however qualitative studies are rife with examples of multiple experiences of racism and microaggressions within academic settings. Environmental microaggressions were also not significantly related to the other, more interpersonal scales. Taken together, we can infer that there appears to be a need to develop specific scales to understand the experience of racial microaggressions in graduate school.

Further, there are many avenues in which graduate students interact with members of the field that offer opportunities for additional microaggressions as well as support and belonging. As each of these settings impact professional socialization, it may be important to understand the differential role these settings have on students' sense of belonging to the field. While there is

some recent research regarding the experience of microaggression in clinical training settings (i.e., Gonzales et al., 2023), this research does not make the connection to sense of belonging to the field or how microaggressions impact career. Focusing on microaggressions impacts on future or early career professionals is worth additional research as this could impact retention of diverse students.

Additionally, the sample appeared to violate assumptions of homogeneity of variances but only when testing the effect of race on the modified REMS. The sample collected was unequal in size between racial groups, however this also reflected the differences in enrollment of racial groups in C/HSP graduate programs (Callahan et al., 2018). Because the violations occurred, inferences made regarding the role of racial group membership should be made cautiously. Nevertheless, it appeared as though Black or African American students responded differently than other groups. Understanding more about this potential group difference in further studies, or when developing a new scale, appears to be prudent.

Second, the racism-related social support scale was also modified for the purpose of this study and resulted in non-normally distributed data. This scale consisted of only five items. Given the non-normal distribution of responses to this scale and the strength of the relationship of social support to sense of belonging, it could be well argued that a more robust scale be developed through a more thorough analysis of the literature, theory, and factor analysis.

As explored in the discussion section, interpersonal social support, either emotional or instrumental, may not be sufficient in understanding the connection between racism in academic settings and sense of belonging to the field. A new direction for research would be to explore the role of institutional processes in students' sense of belonging within the context of racism. It could be argued that sense of belonging to the field of C/HSP may be too distal as processes

within an academic setting may relate more to sense of belonging to the graduate school. To this end, understanding how sense of belonging to a program impacts students' beliefs about their belonging to the field would be vital.

Additionally, given the distressing findings that suggest that the longer a student is enrolled the less they perceive racism-related support from students and faculty, research could be developed to probe this finding further. Specifically, this study looked at the perception that such support would be available rather than students identifying *if* this support had been provided following acts of racism in the academic environment. Identifying if this support was offered, could open additional lines of inquiry as to the nature of support provided. Additionally, it may be important to understand the actions taken by individuals as well as the system; are there policies in place to handle racism and how does this impact sense of belonging?

As our understanding of identity continues to grow, so does our need for intersectional research. This study aimed to look specifically at the role of race and ethnicity, but these identities alone do not encapsulate the identities of the respondents nor the potential discrimination that they experience. Looking at the effects of key demographic variables in this study, such as the impact of SES on sense of belonging or sexual and gender identity's effect on coping, there is a need to understand how these intersecting identities impact student success and their future as counselors and psychologists.

Implications

Recently, APA published "Educational Guidelines for the Ethical and Respectful Treatment of Graduate Students." (2023). These are framed around creating a culture of equity and respect through support for graduate students, policy and procedures, professional socialization activities, and social and political responsiveness. It is suggested that by following

these guidelines programs will develop a more respectful and equitable approach to graduate students. Graduate training is challenging no matter the racial or ethnic identity of students. However, BIPOC students face particular challenges as a result of historic marginalization within predominately white academic spaces. BIPOC graduate trainees are tasked, in ways that white trainees are not, to cope with ongoing discrimination within and outside the academic space.

The APA Guidelines and the results of this study underscore the importance of caring for BIPOC students as whole humans in need of care, support, and professional socialization. These needs do not occur in a vacuum, and institutions are not insulated from the sociopolitical context of white supremacy or other oppressive forces. Students experience racial/ethnic microaggressions within C/HSP programs and this impacts their connection to the field. While students must, and do, develop their own coping skills, and seek support, training programs have a responsibility to equitably care for and support the physical and mental health needs of their students (APA, 2023).

It is important that programs actively work to reduce interpersonal microaggressions within various academic settings including classrooms, research labs, and advising meetings. BIPOC students who have experienced discrimination should not be solely responsible for actively resisting or educating their classmates or faculty when microaggressions occur. Faculty and students may benefit from trainings on how to interrupt racism effectively and appropriately within the academy or elsewhere. This could also have the added benefit of aiding clinicians in supporting BIPOC clients and members of their community. This may be especially appropriate for doctoral programs whose students have more opportunities, given the length of program, to experience racism and feel a lack of social support.

Programs and institutions must also work to reduce environmental microaggressions which includes increasing the diversity of individuals in positions of power within the program and university. Further, reducing environmental microaggressions includes actively incorporating books and academic articles from BIPOC authors or those that center the narrative of BIPOC in a positive light. This includes being aware of the content and tone of classroom discussions and lectures regarding BIPOC communities. Faculty professors should intentionally seek out new research from a variety of sources including publications from APA's Division 45.

BIPOC faculty and researchers face many challenges including difficulty publishing research on race and racism in higher-impact journals which in turn impacts their tenure or professional status (Lin & Kennette, 2022). Institutional leaders should take seriously the call to change promotion or tenure criteria to be inclusive of the work that BIPOC faculty often engage in such as informal mentorship. In so doing, some have suggested this would increase retention of BIPOC faculty, which would have the impact of increasing representation and decreasing the experience of environmental microaggressions by BIPOC students.

Implications also exist for constituents outside of academic settings. Clinical supervisors and training directors have a key role in providing a supportive space outside of academia in which students could feel a sense of belonging to the field. Many students, especially those at the masters-level, may not be interested in pursuing a career in academia. Retention of BIPOC counselors and psychologists in the clinical arena is likely essential for these students. Supportive clinical supervisors and training directors can provide a safe space to explore reactions to school-based microaggressions which could increase students' ability to cope and potentially engage in addressing the racism.

Conclusion

This study utilized a moderated mediation model to explore the potential indirect effect of engagement coping and racism-related social support from peers/faculty on the direct relationship between racism and sense of belonging to C/HSP. Findings supported this direct relationship which situated the findings within the field belonging literature base. However, the indirect role of engagement coping, and social support were not supported by the study data. Racism-related coping literature bases seem to be more complex and show similar unexpected, non-significant findings. This study suggested that social support (defined in this study as) does not have significant moderating relationship on coping and sense of belonging. However, racism-related social support, particularly in the context of academic settings, is relatively unexplored so this study offers a basis for additional exploratory analysis. Finally, several demographic variables had significant relationships with the main study variables. It could be that these variables could or should be controlled in future research. In conclusion, academic programs and educational institutions have a responsibility to provide professional socialization to all students. As BIPOC students increasingly attend C/HSP graduate programs, it is imperative that programs work to reduce racism at interpersonal and environmental levels.

APPENDIX A

RECRUITMENT LETTER

My name is Erica Pinney, a fourth-year doctoral candidate in the Counseling Psychology Ph.D. program at Loyola University Chicago. I am conducting my dissertation study on **"BIPOC Trainees Sense of Belonging to the fields of Counseling and Psychology."** Your participation in this study will greatly help understand the racial experiences of BIPOC (Black, Indigenous, and People of Color) graduate students within counseling and psychology programs, particularly in regard to how BIPOC students cope and experience support from their faculty and peers. This survey will take approximately **15-20 minutes** to complete.

To participate, you must:

1. self-identify as a BIPOC (Black, Indigenous, Native American, Native Hawaiian, Asian, Pacific Islander, Latinx, Middle Eastern, North African, multiracial, multiethnic, and/or biracial) graduate student.
2. (1) currently enrolled in a graduate counseling (i.e., counselor education and supervision, clinical mental health counseling, school counseling, etc.) or health service psychology program (i.e., clinical, counseling, or school psychology)
    a. OR (2) you must have been enrolled in one of these graduate programs within the past 2 years.

3. You must be 18 years or older and reside in the United States.

Your participation in this study is anonymous. However, at the completion of the survey, you will be asked to enter your email address, if you wish, to **enter a raffle to win one of twenty $25 Amazon gift cards**.

If you are interested in this research, please click the link below:
https://luc.co1.qualtrics.com/jfe/form/SV_b2Zg2HEkdvZ7Oia

Your participation is greatly appreciated.

Sincerely,

Erica Pinney, M.Ed.
Doctoral Candidate
Counseling Psychology, Loyola University Chicago

Matthew Miller, PhD.
Professor, Co-Graduate Program Director,
Counseling Psychology, Loyola University Chicago

APPENDIX B

CONSENT FORM

CONSENT TO PARTICIPATE IN RESEARCH

Project Title: A conditional mediation analysis of BIPOC Graduate Students' Sense of Belonging to the field of Counseling and Health Service Psychology

Researchers: Erica Pinney, M.Ed. and Matthew Miller, PhD

You are being asked to take part in a research study being conducted by Erica Pinney, a doctoral candidate in Counseling Psychology at Loyola University Chicago, under Dr. Matthew Miller's supervision. The purpose of this study is to examine experiences of BIPOC graduate counseling and psychology students in regard to the experience of racism, sense of belonging, perceptions of support, and coping strategies. Approximately, 200-300 BIPOC current or recently enrolled (within 2 years) graduate students residing in the US will be asked to participate in this study. Please read this form carefully and ask any questions you may have before deciding whether to participate in this study.

Purpose: The purpose of this study is to examine how race-based experiences and support received during graduate training impact trainee's sense of belonging to the fields of counseling and psychology.

Procedures: If you agree to be in the study, you will be asked to answer a set of questionnaires about your demographic information, sense of belonging, and other racial experiences as a BIPOC graduate student. It should take 15-20 minutes to complete the survey.

Risks/Benefits: There are no foreseeable risks involved in participating in this research beyond those experienced in everyday life. There are no direct benefits to you from your participation, but you may gain a greater understanding about yourself in relation to racial experiences that have occurred during your graduate program. You will also be helping counseling/psychology professionals and program administrators in their development of culturally informed, inclusive training programs.

Compensation: At the completion of the survey, you may choose to enter a raffle with a chance to win one of twenty $25 Amazon gift cards. You are free to withdraw from the study at any moment, but the compensation is only for completed surveys. If you opt into participating in the raffle, you will be redirected to another survey to enter your email address. This will ensure that your responses confidential. A representative of The Graduate School at Loyola University Chicago will be provided with raffle winners email address to distribute the $25 Amazon gift card.

Confidentiality: Confidentiality will be maintained to the degree permitted by the technology used. Please do not indicate your name or other identifying information on the questionnaire. Information obtained as a result of this survey will be kept confidential. There is no way a participant can be identified in this study. All data will be kept in a password protected file for

five years after completion and publication of the study. Only the listed researchers will have access to the data.

Voluntary Participation: Participation in this study is voluntary. If you do not want to be in this study, you do not have to participate. Even if you decide to participate, you are free not to answer any question or to withdraw from participation at any time without penalty.

Contacts and Questions: If you have questions about this research study, please contact Erica Pinney at epinney@luc.edu. If you have questions about your rights as a research participant, you may contact the Loyola University Chicago Office of Research Services at (773) 508-2689.

Statement of Consent: By completing the survey, you are agreeing to participate in the research. Your completion of the survey will indicate consent for an informed participation. If you decide not to participate in this study, you may simply disregard this survey. Thank you very much for your time and effort.

Sincerely,

Erica Pinney, M.Ed.

Matthew Miller, PhD

APPENDIX C

DEMOGRAPHICS SURVEY

Please answer all the demographic questions below. Your responses will be used to describe participants in general, and at no time will they be reported individually. Please do not omit any question.

D1. Do you identify as Trans?

- Yes
- No
- Unsure

· If yes, D2. Which of the following best describes your gender identity?

- Agender
- Genderqueer
- Man
- Woman
- Gender Non-Conforming
- Questioning
- Trans Man
- Trans Woman
- I describe my gender identity as: _____

· If no, D3. Which of the following best describes your gender identity?

- Man
- Gender Non-Conforming
- Questioning
- Woman
- I describe my gender identity as: _____

· D4. What is your age?

- _____

· D5. Which of the following best describes your racial or ethnic identity? (please select all that apply)

- Asian/Asian American
    - For example, Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Hmong, Laotian, Thai, Pakistani, Cambodian, and so on.
- Black/African American
    - For example, African American, Haitian, Nigerian, and so on.
- White/European American
    - For example, German, Irish, French, and so on.
- Latino/a/x

    - Please note that this category historically has been referred to as “Hispanic,” for example, Mexican, Mexican American, Puerto Rican, Cuban, Argentinian, Colombian, Dominican, Nicaraguan, Salvadoran, and so on.
- Native/Native American/Indigenous People
    - For example, Navajo, Mayan, Tlingit, and so on
- Native Hawaiian
- Middle Eastern
- North African
- Pacific Islander
    - For example, Guamanian or Chamorro, Samoan, Fijian, Tongan, and so on.
- I describe my racial or ethnic identity as: _____

· D6. Which of the following best describes your generational status?

- First generation (I was not born in the US)
- Second generation (at least one of my parents or guardians were not born in the US, but I was)
- Third generation and beyond
- I don’t know
- Other: _____

· D7. Which of the following best describes your citizenship or immigration status?

- U.S. Citizen
- U.S. Permanent Resident
- Other citizenship
- Other (including undocumented, refugees, and asylum seekers)
- Prefer not to disclose

D8. Please indicate your highest level of education completed:

- Did not receive high school diploma or GED
- High School Diploma, GED
- Trade school/technical school/certification
- Associate’s Degree
- Bachelor’s Degree
- Professional Degree (e.g., JD, MD)
- Graduate Degree
- Other (please specify): _____

D9. Please indicate your current graduate degree program

- PhD Clinical Psychology
- PsyD Clinical Psychology
- PhD Counseling Psychology

- PhD School Psychology
- Master's in Counseling (clinical mental health counseling, community counseling, school counseling)
- Other (please specify): _____

D10. How many years have you been enrolled in your current degree program:

- _____

D11. Geographic Region of your primary residence

- Rural
- Suburban
- Urban
- Other (please specify):_____

D12. In which socio-economic class have you spent the majority of your life?

- o Lower Class
- o Working Class
- o Middle Class
- o Upper Middle Class
- o Upper Class
- o Other (please specify): _____
- D16. How would you identify your religion/spirituality?
- o Agnostic
- o Atheist
- o Buddhist
- o Catholic
- o Christian
- o Hindu
- o Jewish
- o Mormon/Latter-Day Saints
- o Muslim
- o Unitarian Universalist
- o No religious affiliation
- o Other Faith/Religious Tradition (please specify): _____

D13. How would you identify your sexual identity/sexual orientation? (please select all that apply)

- o Asexual
- o Bisexual
- o Heterosexual/Straight

- o Lesbian/Gay
- o Pansexual
- o Polyamorous
- o Queer
- o Questioning
- o None of these best describes my sexual orientation, I identify as: _____

D14. Do you identify as a person with (a/an) (please select all that apply):

- o Autism
- o Deaf-Blindness
- o Deafness
- o Emotional Disturbance
- o Hearing Impairment
- o Intellectual Disability
- o Multiple Disabilities
- o Orthopedic Impairment
- o Other Health Impairment
- o Specific Learning Disability
- o Speech or Language Impairment
- o Traumatic Brain Injury
- o Visual Impairment including Blindness
- o I do not identify as a person with a disability
- o I do not identify with any of these categories, but I do consider myself a person with a disability (please explain below).
- § _____

APPENDIX D

MODIFIED RACIAL AND ETHNIC MICROAGGRESSIONS SCALE

Racial and Ethnic Microaggressions Scale (based on Nadal et al., 2011)

Please indicate the number of times the following have occurred in the past 6 months *in your academic training environment* (i.e., classes, advising, research labs, formal and informal meetings with classmates and faculty, etc.).

1 = I did not experience this event in the past 6 months
2 = I experienced this event 1-3 times in the past 6 months
3 = I experienced this event 4-6 times in the past 6 months
4 = I experienced this event 7-9 times in the past 6 months
5 = I experienced this event 10 or more times in the past 6 months

1. I was ignored at school because of my race.
2. Someone's body language showed they were scared of me, because of my race
3. Someone assumed that I spoke a language other than English
4. I was told that I should not complain about race.
5. Someone assumed that I grew up in a particular neighborhood because of my race.
6. Someone avoided walking near me on the street because of my race
7. Someone told me that they were color-blind
8. Someone avoided sitting next to me in a public space because of my race
9. Someone assumed that I would not be intelligent because of my race.
10. I was told that I complain about race too much.
11. I received substandard service in stores compared to customers of other races.
12. I observed people of my race in prominent positions at my school
13. Someone wanted to date me only because of my race
14. I was told that people of all racial groups experience the same obstacles.
15. My opinion was overlooked in a group discussion because of my race.
16. Someone assumed that my work would be inferior to people of other racial groups.
17. Someone acted surprised at my scholastic or professional success because of my race
18. I observed people of my race discussed positively in class discussions
19. I observed that someone of my race is a tenured faculty member, dean, or upper administrator in my program
20. Someone did not believe me when I told them I was born in the U.S.
21. Someone assumed that I would not be educated because of my race.
22. Someone told me that I was "articulate" after they assumed I wouldn't be.
23. Someone told me that all people in my racial group are all the same.
24. I observed people of my race portrayed positively in lectures
25. A faculty member or student was unfriendly or unwelcoming toward me because of my race
26. I was told that people of color do not experience racism anymore.
27. Someone told me that they "don't see color."
28. I read textbooks or journals in which a majority of contributions featured people from my racial group.
29. Someone asked me to teach them words in my "native language."
30. Someone told me that they do not see race.
31. Someone clenched their purse or wallet upon seeing me because of my race

32. Someone assumed that I would have a lower education because of my race
33. Someone of a different racial group has stated that there is no difference between the two of us.
34. Someone assumed that I would physically hurt them because of my race.
35. Someone assumed that I ate foods associated with my race/culture every day
36. Someone assumed that I held a lower paying job because of my race.
37. I observed people of my race portrayed positively in textbooks assigned in my courses
38. Someone assumed that I was poor because of my race.
39. Someone told me that people should not think about race anymore.
40. Someone avoided eye contact with me because of my race.
41. I observed that someone of my race receives awards and accolades for their contributions to the field.
42. Someone told me that all people in my racial group look alike.
43. Someone objectified one of my physical features because of my race
44. A faculty member or fellow student treated me differently than White students.
45. Someone assumed that I speak similar languages to other people in my race.

APPENDIX E

COPING WITH DISCRIMINATION SCALE

Coping with Discrimination Scale (Wei et al., 2010)

This is a list of strategies that some people use to deal with their experiences of discrimination. Please respond to the following items as honestly as possible to reflect how much each strategy best describes the ways you cope with discrimination. There are no right or wrong answers.

1 (never like me), 2 (a little like me), 3 (sometimes like me), 4 (often like me), 5 (usually like me), and 6 (always like me)

1. I educate others about the negative impact of discrimination.
2. I respond by attacking others' ignorant beliefs.
3. I educate myself to be better prepared to deal with discrimination.
4. I get into an argument with the person.
5. I try to stop discrimination at the societal level.
6. I do not directly challenge the person (reverse scored).
7. I help people to be better prepared to deal with discrimination.
8. I try not to fight with the person who offended me.
9. I educate others about the negative impact of racism.
10. I directly challenge the person who offended me.

APPENDIX F

PERCEIVED RACISM-RELATED SUPPORT FROM FACULTY/PEERS SCALE

Perceived racism-related support from peers/faculty

Instructions: For the questions below, assume that you have experienced racism from someone in your academic training program. Using the 0–9 scale, show how likely you do you believe you would be to experience each of the following situations.

Not at All				Moderately Likely					Extremely Likely
0	1	2	3	4	5	6	7	8	9

If you were to experience racism in your program, how likely would you be to:

1. have access to a faculty or peer role model (i.e., someone you can look up to and learn from by observing).
2. feel emotional support from other peers or faculty in your program
3. feel that there are faculty or program peers “like you” who validate your experience.
4. feel that your peers or faculty mentors support your decisions to act (or not) in the wake of this experience
5. have access to a faculty mentor or peers who could offer you advice and encouragement.

APPENDIX G

REVISED C/HSP SENSE OF BELONGING SCALE

Revised from Math Sense of Belonging Scale (Good et al., 2012)

Today we have some questions we would like you to answer about your experience in the counseling/psychology professional community. When we mention the counseling/psychology community, we are referring to the broad group of people involved in that field, including the students or faculty in a course as well as professionals you encounter in other spaces like those in clinical supervision or at research conferences. We would like you to consider your membership in the counseling/psychology community broadly.

By virtue of being/having recently been enrolled in a counseling/psychology graduate program, you could consider yourself a member of the counseling/psychology community. Given this broad definition of belonging to the counseling/psychology community, please respond to the following statements based on how you feel about that group and your membership in it.

There are no right or wrong answers to any of these statements; we are interested in your honest reactions and opinions. Please read each statement carefully, and indicate the number that reflects your degree of agreement.

Strongly Disagree Strongly Agree
1 2 3 4 5 6 7 8

When I am in a counseling/psychology setting,

1. I feel that I belong to the counseling/psychology community.
2. I consider myself a member of the counseling/psychology world.
3. I feel like I am part of the counseling/psychology community.
4. I feel a connection with the counseling/psychology community.
5. I feel like an outsider.
6. I feel accepted.
7. I feel respected.
8. I feel disregarded.
9. I feel valued.
10. I feel neglected.
11. I feel appreciated.
12. I feel excluded.
13. I feel like I fit in.
14. I feel insignificant.
15. I feel at ease.
16. I feel anxious.
17. I feel comfortable.
18. I feel tense.
19. I feel nervous.
20. I feel content.
21. I feel calm.
22. I feel inadequate.
23. I wish I could fade into the background and not be noticed.
24. I try to say as little as possible.
25. I enjoy being an active participant.
26. I wish I were invisible.

27. I trust the testing materials to be unbiased.
28. I have trust that I do not have to constantly prove myself.
29. I trust my instructors to be committed to helping me learn.
30. Even when I do poorly, I trust my instructors to have faith in my potential

Please describe the types of settings that you called to mind when responding to questions regarding the “counseling/psychology community.” _____

REFERENCE LIST

Alvarez, A.N., Liang, C.T.H., & Neville, H.A. (Eds.). (2016). *The cost of racism for people of color: Contextualizing experiences of discrimination.* American Psychological Association.

Allen, K., Kern, M. L., Vella-Brodrick, D., Hattie, & Waters, L. (2018). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review, 30*, 1-34.

Allen, K.-A., Kern, M. L., Rozek, C. S., McInereney, D., & SAlavich, G. M. (2021). Belonging: A review of conceptual issues, an intergrative framework, and directions for future research. *Australian Journal of Psychology, 73*(1), 87-108.

Allen, K.-A., Cordoba, B. G., Ryan, T., Arslan, G., Slaten, C. D., Ferguson, J. K., Bozoglan, B., Abdollahi, A., & Vella-Brodrick, D. (2022a). Examining predictors of school belonging using a socio-ecological perspective. *Journal of Child and Family Studies, 32*(9), 2804-2819.

Allen, K.-A., Gray, D. L., Baumeister, R. F., & Leary, M. R. (2022b). The need to belong: A deep dive into the origins, implications, and future of a foundational construct. *Educational Psychology Review, 34*, 1133-1156.

American Psychological Association. (1997). *Diversity and Accreditation.* https://www.apa.org/pi/oema/resources/brochures/accreditation

American Psychological Association. (2018). *Demographics of the U.S. psychology workforce: Findings from the 2007-16 American Community Survey.* American Psychological Association.

American Psychological Association, APAGS-BEA Work Group. (2023). *Equitable and respectful treatment of students in graduate psychology programs.* Retrieved from https://www.apa.org/about/policy/guidelines-equitable-treatment-students.pdf.

Atkins, S.L., Fitzpatrick, M.R., Poolokasingham, G., Lebeau, M., & Spanierman, L.B. (2017). Make it personal: A qualitative investigation of white counselors' multicultural awareness development. *The Counseling Psychologist, 45(*5), 669-696.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual strategic, and statistical considerations. *Journal of*

Personality and Social Psychology, 51(6), 1173-1182. https://doi.org/10.1037/0022-3514.51.6.1173

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529. https://doi.org/10.1037/0033-2909.117.3.497

Bonafacio, L., Gushue, G. V., & Mejia-Smith, B. X. (2018). Microaggressions and ethnic identity in the career development of Latina college students. *The Counseling Psychologist, 46*(4), 505-529.

Bourdieu, P. (1983). The forms of capital. In J.G. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241-258). Greenwood Press.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3,* 77-101.

Brondolo, E. M., ver Halen, N. B., Pencille, M., Beatty, D., & Contrada, R. J. (2009). Coping with racism: A selective review of the literature and a theoretical and methodological critique. *Journal of Behavioral Medicine, 32*(1), 64-88.

Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.

Brown, S. D. & Lent, R. W. (Eds.) (2013). Career development and counseling: Putting theory and research to work (2nd Ed.). New York: Wiley.

Callahan, J.L., Smotherman, J.M., Dziurzynski, K.E., Love, P.K., Kilmer, E.D., Niemann, Y.F., & Ruggero, C.J. (2018). Diversity in the professional psychology training-to-workforce pipeline: Results from doctoral psychology student population data. *Training and Education in Professional Psychology, 12*(4), 273-285.

Carter, R.T. & Pieterse, A.L. (2020). *Measuring the effects of racism: Guidelines for the assessment and treatment of race-based traumatic stress injury.* Columbia University Press.

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*(2), 267-283.

Chui, H. & Li, X., & Luk, S. (2021). Does peer relationship matter? A multilevel investigation of the effects of peer and supervisory relationships on group supervision outcomes. *Journal of Counseling Psychology,* Advance Online Publication. http://dx.doi.org/10.1037/cou0000553

Clark, C. R., Mercer, S. H., Zeigler-Hill, V., & Dufrene, B. A. (2012). Barriers to the success of ethnic minority students in school psychology graduate programs. *School Psychology Review, 41*(2), 176-192.

Costa, P. L., McDuffie, J. W., Brown, S. E. V., He, Y., Ikner, B. N., Sabat, I.E., Miner, K. N. (2023). Microaggressions: Mega problems or micro issues? A meta-analysis. *Journal of Community Psychology, 51* (137-153).

Council for Accreditation of Counseling and Related Education Programs. (2016). *2016 CACREP standards.* Retrieved from: https://www.cacrep.org/for-programs/2016-cacrep-standards

Daniel, C. (2007). Outsiders-within: Critical race theory, graduate education, and barriers to professionalization. *Journal of Sociology and Social Welfare, 34*(1), 25-42.

de la Luz Reyes, M., & Halcon, J. J. (1988). Racism in academia: The old wolf revisited. *Harvard Educational Review, 58*(3), 299-314.

Dreikurs Ferguson, E. (2020). Adler's motivational theory: An historical perspective on belonging and the fundamental human striving. *The Journal of Individual Psychology, 76*(1), 51-58.

Dong, Y. & Peng, C. J. (2013). Principled missing data methods for researchers. *SpringerPlus, 2:*222. https://doi.org/10.1186/2193-1801-2-222

Duncan, B. L. (1976). Differential social perception and attribution of intergroup violence: Testing the lower limits of stereotyping of Blacks. *Journal of Personality and Social Psychology, 34*(4), 590–598. https://doi.org/10.1037/0022-3514.34.4.590

Felder, P. P. & Barker, M. J. (2013). Extending Bell's concept of interest convergence: A framework for understanding the African American doctoral student experience. *International Journal of Doctoral Studies, 8*, 1-20

Frost, J. (N.D.) *Benefits of Welch's ANOVA compared to the classic one-way ANOVA.* Statistics by Jim. https://statisticsbyjim.com/anova/welchs-anova-compared-to-classic-one-way-anova/

Gay, G. (2004). Navigating marginality en route to the professoriate: graduate teaching assistants of color learning and living in academic. *International Journal of Qualitative Studies in Education, 110*(8), 1015-1022.

Golden, A., R., Griffin, C. B., Metzger, I. W., & Cooper, S. M. (2018). School racial climate and academic outcomes in African American adolescents: The protective role of peers. *Journal of Black Psychology, 44*(1), 47-73.

Gomez, M.L., Khurshid, A., Freitag, M.B., & Lachuk, A.J. (2011). Microaggressions in graduate students' lives: How they are encountered and their consequences. *Teaching and Teacher Education, 27*, 1189-1199.

Gonzales, R. G., Cabirou, L., Pinney, E., Hill, L., Daskalova, P., & Rossi, B. (unpublished manuscript). Racial microaggressions in clinical supervision.

Good, C., Rattan, A., & Dweck, C.S. (2012). Why do women opt out? Sense of belonging and women's representation in mathematics. *Journal of Personality and Social Psychology, 102 (4),* 700-717.

Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools, 30*, 79-90.

Goodenow, C. & Grady, K. E. (1993). The relationship of school belonging and friends' values to academic motivation among urban adolescent students. *Journal of Experimental Education, 62*(1), 60-71.

Gopalan, M. & Brady, S. (2020). College students' sense of belonging: A national perspective. *Educational Research, 49*(2), 134-137.

Guiffrida, D. G., Lynch, M. F., Wall, A. F., & Abel, D. S. (2013). Do reasons for attending college affect academic outcomes?: A test of a motivational model from a self-determination theory perspective. *Journal of College Student Development, 54*(2), 121-139.

Hagai, E. B., Annechino, R., Young, N., & Antin, T. (2021). Intersecting sexual identities, oppressions, and social justice work: Comparing LGBTQ baby boomers to millennials who came of age after the 1980s AIDS epidemic. *Journal of Social Issues, 76*(4) 971-992. doi:10.1111/josi.12405.

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* Guilford Press.

Hayes, A. F., & Rockwood, N. J. (2020). Conditional process analysis: concepts, computation, and advances in the modeling of contingencies of mechanisms. *American Behavioral Scientist, 64*(1), 19-54.

Henfield, M. S., Owens, D., & Witherspoon, S. (2011). African American students in counselor education programs: Perceptions of their experiences. *Counselor Education and Supervision, 50,* 226-242.

Henfield, M.S., Woo, H., & Washington, A. (2013). A phenomenological investigation of African American counselor education students' challenging experiences. *Counselor Education and Supervision, 52,* 122-136.

Holcomb-McCoy, C. & Bradley, C. (2003). Recruitment and retention of ethnic minority counselor educators: An exploratory study of CACREP-Accredited counseling programs. *Counselor Education & Supervision, 42,* 231-243.

Johnson-Bailey, J., Valentine, T.S., Cervero, R.M., & Bowles, T.A. (2008). Lean on me: The support experiences of Black graduate students. *The Journal of Negro Education, 77*(4), 365-381.

Jones, H.A., Perrin, P.B., Heller, M.B., Hailu, S., & Barnett, C. (2018). Black psychology graduate students' lives matter: Using informal mentoring to create an inclusive climate amidst national race-related events. *Professional Psychology: Research and Practice, 49*(1), 75-82.

Kelloway, E. K. (2015). *Using Mplus for structural equation modeling: A researcher's guide* (2nd Ed.) Sage.

Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramind of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science, 5*(3), 292-314.

Keum, B.T. & Miller, M.J. (2020). Social justice interdependence among students in counseling psychology training programs: Group actor-partner interdependence model of social justice attitudes, training program norms, advocacy intentions, and peer relationships. *Journal of Counseling Psychology, 67*(2), 141-155.

Lazarus, R. S. & Folkman, S. (1984). *Stress, Appraisal, and Coping.* Springer.

Leary M.R., Kelly K. M., Cottrell C. A., & Schreindorfer L. S. (2013) Construct validity of the Need to Belong Scale: Mapping the nomological network. *Journal of Personality Assessment, 95*(6), 610–624.

Lent, R. W., Brown, S. D., Brenner, B., Chopra, S. B., Davis, T., Talleyrand, R., & Suthakaran, V. (2001). The tole of contextual supports and barriers in the choice of Math/Science educational options: A test of Social Cognitive Hypotheses. *Journal of Counseling Psychology, 48*(4), 474-483.

Lewis, J. A., Mendenhall, R., & Browne Hunt, M. (2021). Racial microaggressions and sense of belonging at a historically White university. *American Behavioral Scientist, 65*(8), 1049-1071. https://doi.org/10.1177/0002764219859613

Lilienfeld, S. O. (2017). Microaggressions: Strong claims, inadequate evidence. *Perspectives on Psychological Science, 12*(1), 138-169.

Lin, P. S. & Kennette, L. N. (2022). Creating an inclusive community for BIPOC faculty: Women of color in academia. *Springer Social Science, 2:*246. https://doi.org/10.1007/s43545-022-00555-w

Lott, B. & Rogers, M. R. (2011). Ethnicity matters for undergraduate majors in challenges, experiences, and perceptions of psychology. *Cultural Diversity and Ethnic Minority Psychology, 17*(2), 204-210.

Lui, P. P. (2020). Racial microaggression, over discrimination, and distress: (In)Direct associations with psychological adjustment. *The Counseling Psychologist, 48*(4), 551-582.

Lui, P. P. & Quezada, L. (2019). Associations between microaggression and adjustment outcomes: A meta-analytic and narrative review. *Psychological Bulletin, 145*(1), 45-78.

MacKinnon, D. P., Lockwood, C. M., & Williams, J. (2004). Confidence limits for the indirect effect: Distribution of the product and resampling methods. *Multivariate Behavioral Research, 39*(1), 99-128.

Maslow, A. H. (1943). A theory of human motivation. *Psychological Review, 50*(4), 370–396. https://doi.org/10.1037/h0054346

Mellor, D. (2004). Responses to racism: A taxonomy of coping styles used by Aboriginal Australians. *American Journal of Orthopsychiatry, 74* (1), 56-71.

Miller, A. N. & Orsillo, S. M. (2020). Values, acceptance, and belongingness in graduate school: Perspectives from underrepresented minority students. *Journal of Contextual Behavioral Science, 15,* 197-206.

Miller, M. J., Sendrowitz, K., Connacher, C., Blanco, S., de la Pena, C. M., Bernardi, S., & Morere, L. (2009). College students' social justice interest and commitment: A social-cognitive perspective. *Journal of Counseling Psychology, 56*(4), 495-507.

Meeuwisse, M., Severiens, S. E., & Born, M. P. (2010). Learning environment, interaction, sense of belonging and study success in ethnically diverse student groups. *Research in Higher Education, 51*(6), 528-545.

Mekawi, Y. & Todd, N. R. (2021). Focusing the lens to see more clearly: Overcoming definitional challenges and identifying new direction in racial microaggressions research. *Association for Psychological Science, 16*(5), 972-990.

Meyer, I. H. & Frost, D. M. (2013). Minority stress and the health of sexual minorities. In C. J. Patterson & A. R. D'Augelli (Eds.), *Handbook of psychology and sexual orientation* (pp. 252–266). Oxford University Press.

Moder, K. (2010). Alternatives to *F*-test in one way ANOVA in case of heterogeneity of variances (a simulation study). *Psychological Test and Assessment Modeling, 52,* (4), 343-353.

Montoro, J. P., Kilday, J. E., Rivas-Drake, D., Ryan, A. M., Umana-Taylor, A. J. (2021). Coping with discrimination from peers and adults: Implications for adolescents' school belonging. *Journal of Youth and Adolescence, 50*, 126-143.

Moody, A.T., Lewis, J. A., & Owens, G. P. (2023). Gendered racism, coping, and traumatic stress among black women: The moderating roles of the strong black woman schema and womanist attitudes. *Psychology of Women Quarterly, 47*(2), 197-212.

Murphy, M. C., Steele, C. M., & Gross, J. J. (2007). Signaling threat: how situational cues affect women in math, science, and engineering settings. *Psychological Science, 18*(10), 879-885.

Nadal, K. L. (2011). The racial and ethnic microaggressions scale (REMS): Construction, reliability, and validity. *Journal of Counseling Psychology*, *58*(4), 470–480. https://doi.org/10.1037/a0025193

Neville, H. A., Awad, G. H., Brooks, J. E., Flores, M. P., & Bluemel, J. (2013). Color-blind racial ideology: theory, training, and measurement implications in psychology. *American Psychologist, 68*(6), 455-466. DOI: 10.1037/a0033282.

Ostrove, J.M., Stewart, A.J., & Curtin, N.L. (2011). Social class and belonging: Implications for graduate students' career aspirations. *Journal of Higher Education, 82(*6).

Pearson, J. E. (1986). The definition and measurement of social support. *Journal of Counseling & Development, 64*(6), 390-395. https://doi.org/10.1002/j.1556-6676.1986.tb01144.x

Pierce, C., Carew, J. G., Pierce-Gonzalez, D., & Wills, D. (1978). An experiment in racism: TV commercials. *Education and Urban Society, 10*(1), 61-87.

Pike, G.R. & Kuh, G.D. (2006). Relationships among structural diversity, informal peer relationships and perceptions of the campus environment. *Review of Higher Education, 29*, 425-450.

Proctor, S. L., Nasir, A., Wilson, T., Li, K. & Castrillon, P. (2018). Retention and persistence of African American students in school psychology programs. *Psychology in the Schools, 55*(5), 506-522.

Protovinik, J.J. & Foss, L.L. (2009). An exploration of themes that influence the counselor education doctoral student experience. *Counselor Education & Supervision, 48,* 239-256.

Purdie-Vaughns, V., Steele, C. M., Davies, P. G., & Ditlmann, R. (2008). Social identity contingencies: How diversity cues signal threat or safety for African Americans in mainstream institutions. *Journal of Personality and Social Psychology, 94*(4), 615-630.

Ragland Woods, C.C., Chronister, K.M., Perez, A., & Woods, W.E. (2021). Racial battle fatigue: The experiences of Black/African American, Biracial Black, and Multiracial Black identified graduate students. *Journal of Black Psychology, 47*(4-5), 219-243.

Schlomer, G. L., Bauman, S. & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology, 57*(1), 1-10.

Seward, D.X. (2014). Multicultural course pedagogy: Experiences of master's-level students of color. *Counselor Education and Supervision, 53,* 62-79.

Sherif, M. (1988). *The Robbers Cave experiment: intergroup conflict and cooperation* (1st Wesleyan ed.). Wesleyan University Press.

Shin, R.Q., Smith, L.C., Goodrich, K.M., & LaRosa, N.D. (2011). Attending to diversity representation among Council for Accreditation of Counseling and Related Educational Programs (CACREP) master's programs: A pilot study. *International Journal for the Advancement of Counselling, 33,* 113-126.

Skinner, E. A., Edge, K., Altman, J., & Sherwood, H. (2003). Searching for the structure of coping: a review and critique of category systems for classifying ways of coping. *Psychological Bulletin, 129*(2), 216-269. doi: 10.1037/0033-2909.129.2.216

Slaten, C. D., Elison, Z. M., Lee, J.-Y., Yough, M., & Scalise, D. (2016). Belonging on campus: A qualitative inquiry of Asian international students. *The Counseling Psychologist, 44*(3), 383-410.

Slaten, C., Ferguson, J., Allen, K.-A., & Vella-Brodrick, D. (2016a). School belonging: A review of the history, current trends, and future directions. *The Educational and Developmental Psychology, 33*(1), 1-115.

Slaten, C. D., Yough, M. S., Shemwell, D. A., Scalise, D. A., Elison, Z. M. & Hughes, H. A. (2016b). Eat, sleep, breathe, student: Understanding what it means to belong at a university from the student perspective. *Excellence in Higher Education, 5*(1), 1-5.

Solozano, D., Ceja, M., & Yosso, T. (2000). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *Journal of Negro Education, 69*(1/2), 60-73.

Spanierman, L. B., Clark, D. A., & Kim, Y. (2021). Reviewing racial microaggressions research: Documenting targets' experiences, harmful sequelae, and resistance strategies. *Perspectives on Psychological Science, 16*(5). 1037-1059

Stanislawski, K. (2019). The coping circumplex model: An integrative model of the structure of coping with stress. *Frontiers in Psychology, 10,* 1-23

Steele, C. M. (1997). A threat in the air: How stereotypes shape intellectual identity and performance. *American Psychologist, 52*(6), 613-629.

Steele, C. M., Spencer, S. J., Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. *Advances in Experimental Social Psychology, 34,* 379-440. https://doi.org/10.1016/S0065-2601(02)80009-0

Strayhorn, T.L. (2018). *College students' sense of belonging: A key to educational success for all students.* Routledge.

Sue, D. W., Alsaidi, S., Awad, M. N., Glaeser, E., Calle, C. Z., & Mendez, N. (2019). Disarming racial microaggressions: Microintervention strategies for targets, white allies, and bystanders. *American Psychologist, 74*(1), 128-142.

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. *The American Psychologist, 62*(4), 271-286.

Szymanski, D. M., & Lewis, J. A. (2016). Gendered racism, coping, identity centrality, and African American college women's psychological distress. *Psychology of Women Quarterly, 40*(2), 229-243.

Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student leaving. *The Journal of Higher Education, 59*(4), 438-455. https://doi.org/10.2307/1981920

Thacker, N. & Barrio Minton, C. A. (2021). Minoritized professionals' experiences in counselor education: A review of research. *Counselor Education & Supervision, 60*, 35-50.

Toarmina R. J. & Gao, J. H. (2013). Maslow and the Motivation Hierarchy: Measuring satisfaction of the needs. *American Journal of Psychology, 126*(2), 155-177.

Tomarken, A. J., & Waller, N. G. (2005). Structural equation modeling: Strengths, limitations, and misconceptions. *Annual of Clinical Psychology, 1*, 31-65.

Twale, D.J., Weidman, J. C., & Bethea, K. (2016). Conceptualizing socialization of graduate students of color: Revisiting the Weidman-Twale-Stein framework. *The Western Journal of Black Studies, 40*(2), 80-94.

United States Census Bureau. (2016, October 12). *Facts for features: Hispanic Heritage Month 2016.* https://www.census.gov/newsroom/facts-for-features/2016/cb16-ff16.html#:~:text=56.6%20million&text=Hispanics%20constituted%2017.6%20percent%20of%20the%20nation's%20total%20population.

Utsey, S.O., Belvet, B., Hubbard, R.R., Fischer, N.L., Opare-Henaku, A., & Gladney, L.L. (2012). Development and validation of the prolonged activation and anticipatory race-related stress scale. *Journal of Black Psychology, 39*(6), 532-539.

Warnock, D. M., & Appel, S. (2012). Learning the unwritten rules: Working class students in graduate school. *Innovative Higher Education, 37*(4), 307-321.

Wei, M. Alvarez, A. N., Ku, T.K., Russell, D. W, & Bonett, D. G. (2010). Development and validation of a coping with discrimination factor structure, reliability, and validity. *Journal of Counseling Psychology, 57*(3), 328-344.

Weidman, J. C., Twale, D. J., & Stein, E. L. (2001). *Socialization of graduate and professional students in higher education: A perilous passage?* ASHE-ERIC Higher Education Report, 28(3), Jossey-Bass.

Williams, M. T. (2020). Microaggressions: Clarification, evidence and impact. *Perspectives on Psychological Science, 15*(1), 3-26.

Williams, M. T., Skinta, M. D., & Martin-Willett, R. (2021). After Pierce and Sue: A revised racial microaggressions taxonomy. *Association for Psychological Science, 16*(5), 991-1007.

Winley, L. (2020). Experiences of graduate level students of color with race in psychology diversity courses. (Publication Number. 443) [Doctoral Dissertation, National Louis University]. Dissertations.

Wolf, E. J., Harrington, K. M., Clark, S. L., & Miller, M. W. (2013). Sample Size Requirements for Structural Equation Models: An Evaluation of Power, Bias, and Solution Propriety. *Educational and Psychological Measurement*, *73*(6), 913–934. https://doi.org/10.1177/0013164413495237

Woods, R. L. (2001). Invisible women: the experiences of Black female doctoral students at the University of Michigan. In R. O. Mabokela & A. L. Green (Eds.). *Sisters of the academic: Emergent Black women scholars in higher education.* (pp-104-115). Stylus Publishers.

Xu, C. & Lastrapes, R. E. (2022) Impact of STEM sense of belonging on career interest: The role of STEM attitudes. *Journal of Career Development, 49*(6), 1215-1229.

Yosso, T., Smith, W. A., Ceja, M., & Solorazano, D. G. (2009). Critical race theory, racial microaggressions, and campus racial climate for Latino/a undergraduates. *Harvard Educational Review, 79*(4), 659-690.

VITA

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