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WHITE COUNSELORS' EXPOSURE TO BLACK INDIVIDUALS AND THEIR COUNSELING EFFECTIVENESS WITH BLACK CLIENTS

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ABSTRACT

This study examined the relationship between White counselors' exposure to Black individuals and their counseling effectiveness with Black college clients. This study used three secondary data sets, including the clinical treatment data gathered from the Center for Collegiate Mental Health (CCMH), neighborhood demographic data obtained through Census 2020 data set, and university demographic data reported through the Integrated Postsecondary Education Data System (IPEDS). A sample of 994 African American/ Black college students who sought counseling at a university counseling center between 2015 and 2019 was included in the analyses. These clients were seen by 142 White counselors who worked at 46 university counseling centers. This study used multilevel linear regression, multiple linear regression, and multilevel logistic regression to test Allport's intergroup contact theory.

The results indicated that White counselors did not significantly vary in producing positive treatment outcomes with Black clients. However, living in environments with a lower percentage of Black people, higher racial diversity, and higher levels of anti-Black racism predicted better treatment outcomes for Black college clients who received counseling from White counselors. Moreover, White counselors did differ in retaining Black clients in treatment. However, the percentage of Black individuals in the working and living environments of White counselors, the racial diversity of White counselors' living environments, and the level of anti-Black racism in the state did not explain White counselors' differential effectiveness in retaining Black clients in counseling. Limitations and implications were discussed.

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Chapter One: INTRODUCTION

Research has consistently shown the negative consequences of anti-Black racism on Black college students' mental health (Hope et al., 2018; Okazaki, 2009; Pieterse et al., 2012; Williams & Williams-Morris, 2000). These consequences include elevate stress (Hope et al., 2018), depression, anxiety, worse well-being, lower self-regard, and poor health (Okazaki, 2009). Although the counseling utilization rate of Black college students is no different from students from other races/ethnicities, it is predicted by the percentage of Black staff in counseling centers and the percentage of Black students in each institution (Hayes et al., 2011). In other words, Black students are more likely to seek help from a university counseling center if there are more Black counselors in the counseling center and more Black students in the university. Moreover, some evidence suggested that Black clients also tend to have a higher counseling dropout rate (percentage of clients who did not attend their last scheduled appointment) than White clients (Sue et al., 1974). This might be explained by Black clients' cultural mistrust (Nickerson et al., 1994; Whaley, 2001), different cultural understanding of mental health (Charles et al., 2021; Watkins & Neighbors, 2007), and mental health stigma (Masuda et al., 2012). When Black college student clients experience the stress caused by racism yet get treated in a mental health system that isn't designed for them, it is dangerous to assume that the quality of counseling delivered to Black clients is the same as their White counterparts.

Statement of the Problem

Exceptional counselors can produce consistently and significantly better treatment outcomes than other counselors (Barkham et al., 2017). The main aim of counselor education programs is to train counselors who can effectively work with clients from diverse backgrounds.

However, researchers have found differential counselor effectiveness with racial/ethnic minority (REM) clients (Hayes et al., 2016; Owen et al., 2012). Some counselors are better than others in producing positive treatment outcomes (Hayes et al., 2016) and having fewer dropouts (Owen et al., 2012) with REM clients, and this is not explained by counselors' race/ethnicity, suggesting some White counselors can be more effective working with REM clients than other White counselors.

Cultural comfort might explain White counselors' differential effectiveness in working with REM clients. According to Owen et al. (2017), 50% of the variance in REM clients' dropout is explained by counselors' cultural comfort, suggesting that counselors who are comfortable engaging in conversations about clients' cultural identity and experiences related to their identity are likely to have fewer REM clients drop out from counseling. Moreover, cultural comfort is negatively associated with clients' psychological distress after controlling for session number, indicating that counselors with higher levels of cultural comfort are likely to produce more positive change for clients (Bartholomew et al., 2020). Presumably, White counselors who are more comfortable inviting clients to have direct and indirect conversations about Black clients' racial identity and experiences of being Black in the U.S. are more likely to produce better treatment outcomes and fewer counseling dropouts with Black college clients.

One possible factor that might explain White counselors' cultural comfort working with Black clients is the amount of contact they have with Black individuals in their working and living environments. Allport (1954) proposed the intergroup contact theory, which states that interactions with members of cultural groups different from one's own could reduce prejudice and enhance positive perceptions. Intergroup contact involves four processes: first, through contact with outgroup members (people who do not share the same group membership as oneself), one could learn more about the outgroup and potentially correct negative stereotypes of members in the outgroup; secondly, once an individual has contact with outgroup members, they will potentially change their behaviors following the acceptance of outgroup members and as a result, change attitudes towards outgroup members; thirdly, despite the uncomfortable initial contact with outgroup members, continued contact with outgroup members may reduce one's anxiety interacting with outgroup members and enable the development of empathy towards outgroup members; fourthly, after exposure to outgroup members, one will have a broader view of the world and re-evaluate the group norms and customs that one grew up with (Pettigrew, 1998).

People reduce prejudice towards outgroup members through three types of generalizations: generalization across situations, generalization from the outgroup individual to the outgroup, and generalization from the immediate outgroup to other outgroups (Pettigrew, 1998). One will develop positive attitudes towards an outgroup member if they have had multiple optimal interactions. Then, one can generalize positive attitudes from a single outgroup member to the entire outgroup if the outgroup member's group membership is salient. Finally, one can generalize positive attitudes from the outgroup with whom one had direct contact to other outgroups. To understand how White counselors could develop cultural comfort working with Black clients through the lens of intergroup contact theory, White counselors who have more positive interactions with Black individuals in their life are likely to generate positive attitudes, reduce prejudice, and develop empathy towards the Black people, and as a result, are likely to be more effective in counseling Black college student clients.

Van Laar and colleagues (2005) studied the effect of random assignment of interethnic roommates on college students' attitudes towards outgroup members. They found that living with Black roommates enhanced students' intergroup attitudes, positive affect towards Blacks, and ethnic diversity of their friend circle, and decreased students' racism. Furthermore, they found that interethnic interaction increased White students' sense of interethnic competence and their comfort being around people from other racial and ethnic groups. Extrapolating from this study, it is plausible that living in an area with a relatively large Black people is likely to produce opportunities for White counselors to have interethnic contact with Black people, as suggested by Dinh et al. (2008). Dinh and colleagues found that White students who live in cities with a higher percentage of Asian people reported more intercultural contact with Asians/Asian Americans, and their extent of intercultural contact with Asians and Asian Americans was directly associated with positive attitudes toward Asians and Asian Americans, awareness of institutional discrimination, and understanding of racial issues. It is reasonable to infer that living in areas with a higher percentage of Black people might allow White counselors more opportunities for positive intergroup interactions with Black individuals and enhance their knowledge of and comfort with Black people.

White counselors' interactions with Black individuals on campus may affect their comfort with Black student clients. Gleditsch and Berg (2017) found that the number of REM college students advised by White faculty members was directly proportional to the number of REM colleagues with whom White faculty members worked. The authors posited that faculty members with cross-cultural contacts in the workplace are likely to generalize positive experiences with REM colleagues to REM students and therefore are more open to advising students from different racial and ethnic backgrounds. Although an advisory relationship is different from a counseling relationship, we could infer that White counselors who work in a university with a higher percentage of Black staff and faculty members are likely to have more opportunities to develop favorable attitudes toward Black clients through multiple positive interactions with their Black colleagues. Moreover, Owen and colleagues (2021) studied the relationship between the racial/ethnic composition of the student body in a university and counseling outcomes with White and REM clients in the university counseling center. They found that mental health disparities between White and REM clients are larger in universities with a higher percentage of White students, suggesting counseling services are less effective for REM clients than for White clients on predominantly White campuses. It is possible that in universities with a lower percentage of REM students, counselors will have fewer opportunities to have contact with REM students and therefore are less effective when counseling REM clients. Therefore, White counselors who work on campuses with a higher percentage of Black students are more likely to have positive interactions with Black students resulting in greater cultural comfort when working with Black students in counseling.

In summary, White counselors who live and work in environments with a higher percentage of Black people are likely to have more contact with Black people and therefore have the potential to reduce prejudice, negative stereotypes, and discomfort interacting with Black people. From these positive experiences with Black people, White counselors may have a broader worldview and be more motivated to enrich their knowledge about the Black culture and Black clients' experiences. In counseling, these White counselors would likely be more willing to learn about Black clients' cultural heritage and take more initiatives in inviting Black clients to have conversations about their unique cultural experiences and be able to hold space to process Black clients' identity exploration and healing. Consequently, White counselors with greater cultural comfort working with Black clients will produce better treatment outcomes and keep clients engaged in counseling, thus having fewer counseling dropouts with Black college clients.

Purpose of the Study

The study examines environmental factors that might influence counselors' treatment effectiveness with Black college clients. Prior research has studied counselor characteristics that were predictive of their treatment effectiveness with REM clients (e.g., Hook et al., 2013; Owen et al., 2017). However, limited studies have examined how environmental factors, including the racial and ethnic diversity in one's living and working environment, might influence a counselor's treatment effectiveness with REM clients. As suggested by intergroup contact theory, more contact with people from different racial and ethnic groups is likely to reduce White counselors' prejudice toward REM members and increase their comfort working with REM clients, leading to positive treatment outcomes and fewer counseling dropouts for REM clients. Environmental factors, including the percentage of Black people in White counselors' working and living environment, are likely to influence their treatment effectiveness with Black college clients. The current study will test the intergroup contact theory in counselors' differential effectiveness with Black clients and extend the existing literature by adding environmental factors.

Research Questions

The current study aims to examine four research questions. The first research question examines if some White counselors are better than others in their treatment effectiveness with Black clients. I predict that White counselors will differ in producing better treatment outcomes and fewer counseling dropouts for Black clients. The second research question aims to study if one's likelihood of having direct contact with the Black people in their living environment will predict their treatment effectiveness with Black clients. I predict that a higher percentage of Black people in one's living area will significantly predict better treatment outcomes and fewer counseling dropouts with Black college clients. The third research question examines if counselors' likelihood of having contact with Black individuals in their working environment will predict their treatment effectiveness with Black clients. I predict that a higher percentage of Black faculty members, Black students, and Black staff in the university where counselors work will significantly predict White counselors' better treatment outcomes and fewer counseling dropouts with Black college clients. Finally, the fourth research question aims to test if the likelihood of interacting with people from other race/ethnicity will predict White counselors' treatment effectiveness with Black clients. I predict that White counselors who live in an area with more racial and ethnic diversity are likely to generalize positive attitudes toward other REM groups to Black people and have better treatment outcomes and fewer counseling dropouts with Black clients.

Chapter Two: LITERATURE REVIEW

Black students on college campuses are vulnerable to anti-Black racism and thus are at a high risk of developing psychological distress (Hope et al., 2018; Okazaki, 2009; Pieterse et al., 2012; Williams & Williams-Morris, 2000). Moreover, college counselors are found to be differentially effective in working with racial-ethnic minority clients (Drinane et al., 2016; Hayes et al., 2015; Hayes et al., 2016; Imel et al., 2011; Owen et al., 2012). This difference in counseling effectiveness might partially be explained by counselors' level of cultural comfort working with clients from different cultural backgrounds (Bartholomew et al., 2020; Owen et al., 2017). Intergroup Contact Theory (Allport, 1954) states that increased contact with outgroup members is likely to decrease one's prejudice towards outgroup members. Presumably, White counselors who live and work in an area with a higher percentage of Black peopleare likely to have more opportunities to interact with Black people and cultivate cultural comfort working with Black clients, resulting in better treatment outcomes and fewer counseling dropouts with Black clients. This chapter will develop each of these arguments pertaining to Black students' mental health, differential counselor effectiveness, Allport's theory, and White counselors' cultural comfort in counseling Black clients.

Anti-Black Racism and Black College Students' Mental Health

Anti-Black racism has a profound effect on Black students on college campuses, including their mental health (Hope et al., 2018; Okazaki, 2009; Pieterse et al., 2012; Williams & Williams-Morris, 2000). Among 1,559 Black college students who responded to an online survey, 17% screened positive for elevated suicide risk, and of these students, 66% denied current mental health service utilization (Busny et al., 2021). Several factors have been found to influence Black college students' mental health, including their religious engagement and gender identity (Cokley et al., 2013), ethnic identity exploration and resolution (Delaney et al., 2022), and endorsement of stereotypes (Donovan & West, 2015). Cokley and colleagues found that Black college students with higher religious engagement and lower religious struggle had less depression and anxiety. They further examined gender differences and found that religious engagement was negatively associated with depression for Black women compared to Black men and reduced anxiety for Black women but increased anxiety for Black men. When looking at Black students by gender, ethnic identity exploration was found to be negatively associated with GPA among Black male college students with high anxiety, but the association was not significant among Black male students with low anxiety (Delaney et al., 2022). In addition, they found that ethnic identity resolution was negatively associated with GPA among Black men with high levels of depressive symptoms, but the relationship was not significant among Black males with low levels of depressive symptoms (Delaney et al., 2022).

The Strong Black Women stereotype is an expectation that Black women should be resilient, emotionally contained, and self-sacrificing (Donovan & West, 2015). The Strong Black Women (SBW) stereotype also impacts Black female college students' depressive symptoms when facing stress (Donovan & West, 2015). Donovan and West found that the SBW stereotype moderates the association between stress and depressive symptoms for Black women. Specifically, for Black women with low SBW endorsement, their stress level was not associated with depressive symptoms. In contrast, for Black women with moderate and high SBW endorsement, their stress level was positively associated with depressive symptoms.

Black college students are especially vulnerable to mental health struggles in stressful environments with high anti-Black racism. A meta-analysis of 66 studies found a positive association between perceived racism and psychological distress for Black Americans (Pieterse et al., 2012). In addition, the positive association between perceived racism and psychiatric symptoms (e.g., depression, anxiety) was more robust than quality of life indicators (Pieterse et al., 2012), suggesting anti-Black racism has a more significant impact on Black students' mental health. Racial microaggressions can also affects Black students' mental health. Racial microaggressions are defined 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" (Sue et al., 2007, p. 271). Hope et al. (2018) found that the experience of racial/ethnic microaggressions is positively associated with stress for Black college students at the end of the first year, and this relationship is more robust for students with higher political activism compared to students with lower political activism. Leath and Jones (2021) examined the association between Black college students' perceptions of institutional climate and their mental health. They found that Black students who perceived the campus as more welcoming to racial and ethnic minority students reported lower anxiety levels. Given the prior findings, it is reasonable to infer that institutional climate might influence Black college students' mental health. Regarding the racial composition of the institution, Black men attending a predominantly White institution reported greater alcohol consumption and more mental health problems compared to Black men attending a minority-serving institution (Barry et al., 2017). Contradictory to Barry et al.'s findings (2017), Mushonga and Henneberger (2020) found that Black students attending historically Black colleges and universities and those attending predominantly White institutions did not differ in reported positive mental health, which is composed of social, emotional, and psychological well-being. The discrepancy in the findings might result from the different operationalization of mental health. The actual effect of institutional type on Black students' mental health remains inconclusive.

Beyond the institutional influence on Black college students' psychological distress, the societal impact of racism also affects counseling effectiveness with Black clients (Price et al., 2021). Price and colleagues aggregated people's explicit attitudes toward race, racial prejudice, and race-related public policies as measured in three sources (the General Social Survey, the American National Election Survey, and Project Implicit) and calculated a score representing the level of anti-Black racism for each state in the U.S. Their meta-analysis revealed that anti-Black racism was inversely related to mental health treatment effects in studies with majority-Black youth but was unrelated to effect sizes in studies with majority-White youth, controlling for study covariates. In other words, treatments were less efficacious for Black youth in states with higher anti-Black racism compared to states with lower anti-Black racism, but as expected, treatment efficacy was the same for White youth regardless of the level of anti-Black racism in the state. One possible explanation is that Black youths in higher racism states experienced the consistent and ongoing distress caused by racism during the course of treatment and therefore improved at a slower pace. Moreover, they found that the effect size difference between low and high racism states was moderately large but not statistically significant at the end of treatment. However, at follow-up, the effect size difference between low and high racism states increased and became statistically significant. That means the anti-Black environment may undermine treatment gains for Black youths and exaggerate mental health disparities.

Although the counseling utilization rate (the percentage of students seeking mental health treatment at the university counseling center relative to the entire student body) of Black college students is found to be relatively the same as students from other races/ethnicities, their counseling utilization is predicted by the percentage of Black staff in the counseling center as well as the percentage of Black students in the university (Hayes et al., 2011). In other words, Black students are less likely to seek counseling services from a counseling center with a low percentage of Black staff in a university or with a low percentage of Black students. In addition, African American college students are less likely than White students to report having thought that they might like to try mental health treatment, be willing to seek professional mental health services if they were experiencing psychological problems, and or to have received past or current mental health services (Charles et al., 2021). Potential barriers for Black students to seek counseling services include cultural mistrust (Nickerson et al., 1994; Whaley, 2001), different cultural understanding of mental health (Charles et al., 2021; Watkins & Neighbors, 2007), mental health stigma (Masuda et al., 2012), preference for treatment type (Charles et al., 2021), and accessibility (Busby et al., 2021; Leath & Jones, 2021). Cultural mistrust was found to be predictive of the help-seeking attitudes of Black students. Specifically, higher levels of mistrust of Whites were associated with more negative attitudes about seeking help from a predominantly White staffed clinic (Nickerson et al., 1994). Leath and Jones (2021) also found that Black students reported barriers to therapy, including inadequate representation of Black counselors. A meta-analysis of 22 studies revealed a significant association between cultural mistrust and African Americans' psychological functioning (Whaley, 2001). Moreover, Whaley found that the influence of African Americans' cultural mistrust on their attitudes and behaviors in mental health settings is not different from that in other social situations, suggesting African American clients are likely to experience cultural mistrust of counselors from a different cultural background and as a result hesitate to seek help from non-Black counselors.

The prevailing narratives on the concept of mental health are based on the experience of White men, and research has found that Black college students' understanding of mental health and counseling success is different from White college students (Charles et al., 2021; Watkins & Neighbors, 2007). A qualitative study (Watkins & Neighbors, 2007) with 46 Black male college students revealed that for Black male college students, mental health means success in functioning, balance, and coping. In addition, some defined it as having control over one's life, the practice of self-concealment (one's ability to conceal their emotions), psychological stability and making good decisions. Black male college students also believed that they experience depression differently than White men, because they "did not have time to be sad and had too much to worry about" (Watkins & Neighbors, 2007, p. 276). In addition, they believed how they define and express depression may be unfamiliar to health professionals. Furthermore, they shared that when they talk about mental health among themselves, they use jargon or slang unfamiliar to mental health professionals, but they would use "formal" mental health terminologies with health professionals. Regarding indicators of counseling success, White college students are more likely to choose symptom improvement and return to baseline functioning than African American college students. In contrast, African American college students are more likely to consider learning coping skills, gaining personal insight and understanding, and improved problem-solving as indicators of counseling success compared with White college students (Charles et al., 2021). These two studies indicated that Black college students view and experience mental health struggles differently than White college students. Therefore, assessing Black students' mental health status and counseling outcomes using indicators developed for White clients may not capture their experience of mental health problems and counseling effectiveness. Moreover, the counseling services offered at college counseling centers may not meet Black students' counseling needs. Compared to White students, African American students reported a stronger preference for group, family, and couples therapy (Charles et al., 2021). African American students also indicated a stronger preference for structured sessions and a more assertive and dominant interpersonal style of the therapist compared to White students (Charles et al., 2021).

Other reasons for Black students' underutilization of counseling services are stigmas on seeking mental health services. Masuda and colleagues (2021) found that mental health stigma and self-concealment were negatively associated with help-seeking attitudes among Black college students. However, having prior counseling experience was associated with more favorable help-seeking attitudes and lower mental health stigma. Busy et al. (2021) also found that the perceived problem severity, time, fear, and stigma are frequently endorsed barriers for Black college students to seeking mental health treatments. In addition, mental health treatments are difficult to access in some universities. Black students reported barriers to therapy, including advertising/promotion of services, long wait lists/limited availability of services, and session costs (Leath & Jones, 2021). Given the reasons mentioned above, it is crucial for counselors to provide culturally responsive counseling to Black college students and improve their mental health, especially in institutions with high anti-Black racism.

Differential Counselor Effectiveness

Exceptional counselors produce consistently and significantly better treatment outcomes than other counselors (Barkham et al., 2017). Understanding factors influencing counselors' differential effectiveness in producing better outcomes has clinical and educational implications. It not only helps enhance clients' treatment outcomes but also informs counselor education and supervision in preparing counselor trainees with the potential to provide effective treatment for clients.

In 1978, Martindale argued that most published counseling studies could not be generalized beyond the counselors included in the specific study because the counselors' differential effectiveness was not considered. Some common problems in statistical analyses include treating counselors as a fixed effect, which assumes all counselor types were included in the study, or disregarding the counselor effect at all. Crits-Christoph and Mintz (1991) reiterated the importance of treating the counselor effect as a random term and reanalyzed ten counseling outcome studies. They found that the counselor effect mainly varied across studies. Wampold and Brown (2005) examined variability in clients' treatment outcomes in the context of managed care in a naturalistic study and found that counselors accounted for about 5% of the variance in clients' outcomes, controlling for client problem severity. Furthermore, they also concluded that neither counselor age, gender, experience, professional degree, nor client age, gender, or diagnosis substantially accounted for the variability in client treatment outcomes across counselors. Kraus et al. (2016) studied the counselor effect across 12 domains (sexual functioning, work functioning, violence, social functioning, panic/anxiety, substance abuse, psychosis, quality of life, sleep, suicidality, depression, and mania), and found that counselor effectiveness was relatively stable across domains, except for mania and violence. Exceptional counselors remained above average in all domains when working with their subsequent clients. Owen et al. (2019) also found that counselors whose aggregate outcomes with their first 30 clients were high and clients' variance in outcomes was low were more likely to have better outcomes with their subsequent clients. On the other hand, counselors whose aggregate outcomes with their first 30 clients were low and the variance of the outcomes was high were more likely to have lower outcomes with their subsequent clients. In other words, high-performing counselors are generally effective in producing better treatment outcomes and are consistent in their ability to facilitate clients' healing.

Researchers attempted to explain the variability in counselor effectiveness and found that counselor characteristics (Allen, 1967; Cologon et al., 2017; Heinonen & Nissen-Lie, 2019; Jackson & Thompson, 1971; Johnson et al., 1967), client severity (Owen et al., 2019; Saxon & Barkhan, 2012; Yonatan-Leus et al., 2019), and client preference (Cabral & Smith, 2011; Swift et al., 2018) were associated with counselor effectiveness. Allen (1967) measured 26 counselor trainees' psychological openness and counseling effectiveness. He found that the more openly the students expressed their feelings in counseling and/or in their case presentation in the supervision group, the more likely they will be rated highly in counseling competence by their supervisors. Jackson and Thompson (1971) examined the relationship between counselors' cognitive flexibility and tolerance of ambiguity with their counseling effectiveness as rated by supervisors by watching counseling tapes and concluded that neither counselor's cognitive flexibility nor their tolerance of ambiguity were significantly associated with counselor's effectiveness. However, they found that the most effective counselors were more likely to have positive attitudes towards themselves, most people, most clients, and counseling compared with least effective counselors. Johnson and colleagues (1967) studied the association between a series of personal traits of counselors and peer-rated counselor effectiveness, supervisor-evaluated counselor effectiveness, client-rated counseling experience, and counselor's academic effectiveness (academic achievement in the program) based on counselor's gender. The four outcome measures were highly correlated, and they found that effective male counselor trainees were seen as "confident, friendly, affable, accepting, and likable," and female counselor trainees were perceived as effective if they were outgoing, efficient, confident, assertive, and person-centered. They concluded that most effective male and female counselors were more like each other compared with least effective counselors in their own gender. However, the results are limited as it treated gender as a dichotomized variable instead of considering varying gender identities with which counselors might identify themselves.

Regarding treatment outcomes, Heinonen and Nissen-Lie (2019) provided a systemic review of the professional and personal characteristics of effective counselors, and they concluded that counselors who have a secure attachment style, higher emotional intelligence, and better reflective functioning are more likely to produce better treatment outcomes for clients. Cologon et al. (2017) studied the role of counselor reflective functioning and counselor attachment style in predicting counselor effectiveness. They found that clients of counselors with high reflective functioning had more symptom reduction than clients of counselors with medium reflective functioning. For counselors with low reflective functioning, there were no notable changes in their clients' symptom reduction over time. In other words, a counselor's reflective functioning is positively associated with their counseling effectiveness. Surprisingly, they found that the counselor's reflective functioning explained 70.5% of the variance in counselor effectiveness. In addition, they found that the counselor's attachment style moderated the relationship between the counselor's reflective functioning and their effectiveness. Specifically, although counselors with a high level of reflective functioning generally are more effective, counselors with high attachment anxiety are more effective than those with low attachment anxiety. On the other hand, for counselors with a low level of reflective functioning, counselors with high attachment anxiety are much less effective than counselors with low attachment anxiety. Results suggested that the high attachment anxiety of the counselor magnified the association between the counselor's level of reflective functioning and their counseling effectiveness. The variability in counselor effectiveness might partially be explained by the client's initial distress and risk (Saxon & Barkham, 2012; Yonatan-Leus et al., 2019). Saxon and Barkham analyzed a large practice-based data set of clients seeking counseling services in the U.K. from 2000 and 2008 and found that counselors accounted for 6.6% of the variance in treatment outcomes for clients at average severity. However, as the client's intake severity (baseline distress) increased, variability in counselor effectiveness also increased, suggesting that counselor effectiveness had more variability when working with clients with higher severity. In other words, counselors had more comparable effectiveness when working with clients with less severe symptoms, but when working with clients with greater problem severity, some counselors produced much worse treatment outcomes than others. Contradictory to Saxon and Barkham's findings, Yonatan-Leus et al. (2019) conducted an exploratory analysis on counselor effects in yearlong psychodynamic therapy with 65 clients and 24 counselors and found that counselor effects were more influential when working with clients with low severity compared with clients with high severity. The difference in findings of these two studies might result from a couple of factors—the imbalanced sample size, different settings, and different populations. The participants in Saxon and Barkham's study (2012) consisted of 10,786 clients with a mean age of 45 in primary care settings who were seen for 6 or 7 sessions; whereas clients in Yonatan-Leus et al. (2019)'s study consisted of 65 clients with a mean age of 25 at a university counseling center, who received counseling once a week for a year. It is possible that with participants from only one counseling center, the findings from Yonatan-Leus et al.'s study (2019) cannot be generalized. It is also possible that since university counseling centers usually does not require a diagnosis for service, clients' baseline severity is different from the sample included in Saxon and Barkham's study (2012). Owen et al. (2019) studied the counselor effect with a sample of 73,079 college student clients in university counseling centers and found that effective counselors remained effective in producing better outcomes regardless of client severity. More studies are needed to conclude the effectiveness of client severity on a counselor's effectiveness.

Counseling is a dynamic process, and both parties influence the success of counseling. Cabral and Smith (2011) conducted a meta-analysis to review the research on racial/ethnic matching and found, in general, clients showed a moderately strong preference for racially/ethnicnally similar counselors and were more likely to rate racial/ethnic matched counselors higher. On the contrary, they found minimal difference in treatment outcomes for matched and unmatched counseling dyads. However, when looking at the association between racial/ethnic matching and treatment outcomes, racial/ethnic matching produced mildly better outcomes for African American clients, whereas it did not matter for White clients. This finding suggested that counselors' differential effectiveness might be explained by racial/ethnic matching/mismatching of the specific counselor-client dyads.

Similarly, Swift et al. (2018) conducted a meta-analysis on accommodating client preference in counseling and found the effect of preference accommodation on clients' counseling dropout and outcomes was significant. Specifically, they found that clients who were accommodated in their counseling preference were less likely to have premature termination and had better treatment outcomes. They also examined the potential moderators for the association between preference accommodation and client's counseling dropout and outcomes and found that preference accommodation had a stronger influence on the counseling process and outcome compared with client satisfaction. Moreover, they found that the type of preference and treatment options did not moderate the association between preference accommodation and treatment outcomes, suggesting the impact of preference accommodation on treatment outcomes remained the same across different preference types and treatment types. This meta-analysis indicated that clients came to counseling with certain preferences and expectations and matching the counseling approach and counselor characteristics are likely to produce better treatment outcomes and retention. However, the meta-analysis did not provide evidence for the association between preference accommodation and treatment outcomes for various racial/ethnic groups. Therefore the effect of racial/ethnic matching on counseling dropout and outcomes for different racial/ethnic groups cannot be inferred.

Counselor Effectiveness with Marginalized Clients

Sue and Sue (1977) argued that traditional counseling in the U.S. was embedded in some generic characteristics that create barriers to effective cross-cultural counseling. As traditional counseling in the U.S. adopted a Western framework and was developed from working with White middle-class male clients, the same approach and expectations of counseling may not apply to what Sue and Sue called “third-world groups,” who are racial-ethnic minorities in the U.S. Sue and Sue (1977) proposed three main categories of barriers to effective cross-cultural counseling for racial and ethnic minority clients, including language barriers, class-bound values, and culture-bound values. One example of language barriers given by Sue and Sue is that for bilingual immigrant clients, counseling in English might create misunderstanding between counselor and client. Even for some Black clients whose first language is English, they might use words and phrases from the “Black language” that White counselors may not understand. If clients do not use “standard English,” counselors might assume they are inferior and less competent. Some class-bound values can also hinder minority clients’ treatment success (Sue & Sue, 1997). Sue and Sue argued that clients from a lower-class background might operate in a survival mode and therefore scheduling appointments weeks ahead and using an indirect counseling approach may not meet their needs to get immediate solutions. Beyond class-bound values, Sue and Sue claimed that some clients might come from a culture where unstructured and indirect counseling could create discomfort and ambiguity.

Moreover, American counseling expects the client to take the lead and initiate conversation, whereas for minority clients, they might see counselors as authority figures and therefore be uncomfortable leading the conversation (Sue & Sue, 1977). Minority clients' shorter statements that result from respect might be interpreted differently by their counselors as passive or resistant. Similar cultural conflict and misunderstanding include personal space, eye contact, and the use of silence. Sue and Sue argued that some conversation conventions and "universal" body language could have different meanings across cultures. Therefore, counselors may be at risk of misinterpreting the client's behavior and intentions. Finally, they pointed out that the concept of mental health varies across cultures. Yet, some counselors might impose a Westernized concept of a healthy mental state on minority clients and treat ideas and beliefs deviant from traditional counseling concepts as pathological. As a result, minority clients may experience less optimal outcomes and have higher treatment dropouts.

Sue and Sue were among the first to lay out the barriers to effective cross-cultural counseling with racial-ethnic minority clients. A decade later, Hall and Malony (1983) echoed Sue and Sue's idea that counselors from mainstream cultures are at risk of imposing their value system on cultural minority clients and therefore be less effective with clients from a different cultural background. They hypothesized that highly dominant counselors would be more effective with culturally similar clients than culturally different ones. In contrast, less dominant counselors would be more effective than highly dominant counselors when working with clients from a different cultural background, as they would be more open to understanding clients' cultural values.

Although ethnic diversity in the U.S. has changed since 1977, and honoring diversity and adopting a multicultural approach are among the core professional values of the counseling profession (American Counseling Association, 2014), counselors today in the U.S. still differ in their effectiveness working with racial-ethnic minority clients (Drinane et al., 2016; Hayes et al., 2015; Hayes et al., 2016; Imel et al., 2011; Larrison & Schoppelrey, 2011; Owen et al., 2012). For example, Imel et al. (2011) examined racial/ethnic disparities in counselor effectiveness by looking at treatment outcomes for adolescents with a cannabis-related disorder in an outpatient setting and found that White and racial/ethnic minority (REM) clients did not differ in their treatment outcomes, but clients' treatment outcomes varied across counselors. They also examined racial differences in clients' treatment outcomes within each counselor's caseload. They found that some counselors have similar treatment outcomes with White and REM clients, some produce better outcomes with White clients than REM clients, and some produce better outcomes with REM clients than White clients. In other words, counselors vary in their treatment effectiveness with REM clients.

Owen et al. (2012) examined racial/ethnic disparities in client's treatment dropout within counselor's caseload. They found that REM clients are more likely to drop out from counseling than White clients, and counselors accounted for 7.3% of the variance in client's termination status. Moreover, their results indicated that some counselors are more likely to have their REM clients drop out from counseling compared with their White clients, and vice versa, whereas for some other counselors, the dropout rate of their White and REM clients is consistent. Another important finding is that counselors' racial/ethnic status and the interaction between clients' and counselors' racial/ethnic status were not significant predictors of clients' dropout, indicating that racial/ethnic match and mismatch did not matter in predicting client's unilateral termination. Owen et al.'s findings are consistent with Imel et al.'s (2011) findings, suggesting that some counselors are better than others when working with REM clients.

Hayes and colleagues (2015) examined symptom change for REM college students seen by counselor education and counseling psychology trainees in a university training clinic. They found that there was no difference in symptom change between White and REM clients. However, they found that counselors accounted for 8.7% of the variance in client's treatment outcomes, and 19.1% of the variance in client's treatment outcomes that varied across counselors was explained by client's REM status. In order words, counselors differ in their treatment effectiveness, and their client's REM status partially explains this difference. Similar findings were replicated in Hayes et al. (2016), where they found no difference in treatment outcomes between White and REM clients, and some counselors were better than others in their effectiveness with REM clients compared with White clients and vice versa. They also examined counselors' demographic variables, including gender, race/ethnicity, highest degree completed, discipline, years since licensed, and type of staff position in the counseling center, as well as counselor's theoretical orientation. However, none of the above variables were significant predictors of differences in counselors' effectiveness with REM versus White clients. Drinane et al. (2016) also found that although counselors did not differ in their ability to facilitate change in clients' well-being and life functioning when working with White and REM clients, they did differ in their ability to facilitate symptom change with either White or REM clients. Consistent with previous findings on counselors' effectiveness with REM clients, the above studies provided empirical support that some counselors are better than others in creating positive change for REM clients. However, it is worth noting that the above studies combined all racial/ethnic minority clients into one group, as well as REM counselors. Given the cultural variations within REM communities, future studies are needed to examine counselors' effectiveness for each racial/ethnic group.

Kivlighan et al. (2019) studied the intersectionality of a client's racial/ethnic identity and gender identity on the counselor's effectiveness, and they found that client's presenting distress and change in distress over the course of treatment were not predicted by the client's REM status, gender, or the interaction between race-ethnicity and gender. However, they found that counselors vary in their effectiveness with REM clients and their effectiveness with White men, White women, women of color, and men of color, which showed that counselors differed in their effectiveness as a function of client's intersecting race-ethnicity and gender identities. However, this study's limitation is obvious that race-ethnicity and gender identity were dichotomized into White vs. REM and men vs. women, overlooking the spectrum of gender identity and the variability within REM clients. This study further illustrated that counselors differ in treatment effectiveness with clients from certain cultural backgrounds.

Other than the counselor's effectiveness with REM clients regarding unilateral termination and treatment outcomes, researchers also studied the counselor effect on the counseling process (Morales et al., 2018) and the client's perception of the counselor's competence (Fuertes & Brobst, 2002). Morales et al. (2018) studied the counselor effect due to client's racial/ethnic status on the client- and counselor-rated working alliance and real relationship. They found that some counselors have stronger growth in client-rated working alliance and real relationship with REM clients than with White clients, and some counselors have stronger growth in client-rated working alliance and real relationship with White clients than with REM clients. On the contrary, for counselor-rated working alliance and real relationship, they found that although counselor-rated working alliance and real relationship differed across counselors, the difference did not appear to be a function of the client's REM status. This discrepancy between the client's perception of the growth of working alliance and real relationship and the counselor's perception of them seems to suggest that counselors might not be aware of their differential effectiveness when working with REM and White clients in developing working alliances and real relationships.

Fuertes and Brobst (2002) examined the role of a client-rated counselor's multicultural competence on client's treatment satisfaction. They found that the counselor's multicultural competence was correlated with the client's treatment satisfaction, the client's perception of the counselor's attractiveness, trustworthiness, and expertness, and the client's perception of the counselor's empathy. In addition, they reported that the client's perception of the counselor's multicultural competence explained 4% of the variance in the client's treatment satisfaction above and beyond the client's level of multicultural awareness, client's perception of the counselor's attractiveness, trustworthiness, expertness, and empathy. However, after splitting the sample into White clients vs. REM clients, the counselor's multicultural competence no longer contributed to the client's treatment satisfaction for White clients, whereas, for REM clients, it explained a significantly larger variance in the client's treatment satisfaction (16%). This study illustrated the importance of a counselor's multicultural competence in REM clients' treatment satisfaction.

Cultural Comfort

Owen and colleagues (2011) proposed the concept of multicultural orientation, which was defined as "a 'way of being' with the client, guided primarily by counselors' philosophy or values about the salience of cultural factors (e.g., racial/ethnic identity, client's cultural background) in the lives of counselors as well as clients" (p. 274). Owen and colleagues made a distinction between multicultural orientation (MCO) and multicultural competence, as the latter was considered "ways of doing," and represented how counselors could incorporate their multicultural awareness and knowledge during counseling (p. 274-275). Owen's MCO model consists of three interrelated components: cultural humility, cultural opportunities, and cultural comfort (Owen, 2013). These three components each represent different aspects of cross-cultural counseling. Cultural humility emphasizes the cognitive flexibility and psychological openness of the counselor. Cultural opportunity refers to the behaviors of counselors during the session. These are moments where counselors were able to engage in conversations related to clients' cultural heritage. Cultural comfort emphasizes the competence of the counselor to create space for cultural conversation and the ability to manage culture-related countertransference. Together, these three components describe counselors' "way of being" when a client's salient cultural identity is present.

Cultural humility refers to the intra- and interpersonal components of the counselor, which requires the counselor to maintain an other-oriented rather than self-oriented perspective, and interact with those from a different cultural background with respect and lack of superiority (Hook et al., 2013). Cultural humility was found to be associated with a stronger working alliance and better treatment outcomes, and its contribution to working alliance was above and beyond general multicultural competence (Hook et al., 2013).

Cultural opportunities refer to the moments during counseling when counselors can explore and understand clients' cultural heritage (Owen, 2013). A qualitative study conducted by Trevino et al. (2021) explored ways in which cultural opportunities occur in counseling and how counselors engage in those opportunities. They categorized ways in which cultural opportunities arise as 1) exploring how the client's expressed feelings were tied to their salient social identity; 2) understanding how the client's social identity influenced their daily experience; 3) using the client's significant social relationship to understand their community and cultural background; 4) learning about how client's previous diagnosis, presenting concerns, coping strategies were informed by their culture. They also found three themes of the process of cultural opportunities: 1) using client's language to explore their culture; 2) some counselors and clients briefly discussed cultural topics but did not go in-depth; and 3) sometimes cultural topics were not immediately discussed in counseling but were brought back later. Trevino et al.'s study (2021) detailed cultural opportunities in counseling and how counselors addressed cultural topics. Owen et al. (2016) examined the relationship between a counselor's cultural humility and missed cultural opportunities on counseling outcomes. They found that a counselor's cultural humility was positively associated with treatment outcomes, whereas missed cultural opportunities were negatively associated with treatment outcomes.

Moreover, they found an interaction between cultural humility and missed cultural opportunities on treatment outcomes. Specifically, missed cultural opportunities were associated with worse treatment outcomes for counselors with low cultural humidity but were not associated with treatment outcomes for counselors with high cultural humidity. It can be inferred that culturally humble counselors are likely to repair the ruptures created by missed cultural opportunities and produce positive counseling outcomes.

The third component, cultural comfort, refers to a counselor's level of ease in engaging in direct or indirect conversations involving clients' cultural heritage in counseling (Owen, 2013). Counselors with greater cultural comfort are more likely to invite clients to explore their cultural identity and experience during counseling and have more potential to enrich their cultural knowledge. Owen et al. (2017) examined the role of cultural comfort in REM clients' unilateral termination. They found that cultural comfort explained about 50% of the variance in client dropout and 6.1% of the variance in the racial/ethnic disparities of client's counseling dropout in counselor's caseload. In other words, REM clients' premature termination can be partially explained by their counselor's level of cultural comfort. In addition, Bartholomew et al. (2020) found that the client perception of counselor cultural comfort is negatively associated with client psychological distress, controlling for session number, suggesting that counselor cultural comfort can predict treatment outcomes.

The concept of cultural comfort is tied closely with the idea of cultural countertransference (Davis et al., 2018) and therefore can be understood through the lens of cultural countertransference. According to Stampley and Slaght (2004), cultural countertransference happens when counselors' "cultural biases are projected onto culturally different clients, thereby influencing the counseling relationship" (p. 336). Gelso and Mohr (2001) proposed two types of cultural countertransference—cultural countertransference and culturally reinforced countertransference. Cultural countertransference refers to counselors' "culture-related distortions" of the client or "rigid interpersonal behaviors" rooted in counselors' direct or indirect experiences with REM members (Gelso & Mohr, 2001, p. 59). Beyond cultural countertransference, they also proposed the concept of culturally reinforced countertransference, which emphasized the "culture-related distortions of or rigid interpersonal behaviors" in response to the client that were connected and partially rooted in counselors' unresolved conflicts from early childhood experiences (Gelso & Mohr, 2001, p. 60). Based on their definition, cultural countertransference happens when counselors project culture-related unresolved conflicts on REM clients and/or when counselors generalize their direct or indirect experiences with REM members to their REM clients.

Stampley and Slaght (2004) conducted a qualitative study on counselors' cultural countertransference. They found three main origins of cultural countertransference: "1) family beliefs and messages, 2) societal and environmental influence, and 3) personal life experience" (p. 338). For instance, when the client's family beliefs conflicted with the family messages that the counselor received, counselors might experience cultural countertransference resulting from incongruence between the counselor's expectation of the client's family values and the family beliefs that the client held. In addition, counselors might have been socialized to have negative stereotypes about racial/ethnic minorities, which might cause their anxiety in interacting with clients from these racial/ethnic minority groups in fear of confirming negative stereotypes of their clients. Finally, due to overgeneralization, negative prior cross-cultural interactions could increase the counselor's discomfort working with clients in the same cultural group. Failure to manage cultural countertransference could lead to cultural discomfort, hindering the counseling process and worsening treatment outcomes.

Multicultural orientation is associated with the client's rating of the working alliance and real relationship (Owen et al., 2011) and general counseling outcomes (Davis et al., 2018). Owen et al.'s study (2011) showed that client-rated counselor MCO was positively associated with client's treatment outcomes after controlling for their initial distress. They also found that the clients' perception of their counselor's MCO was positively associated with the client-reported working alliance and real relationship with their counselors. In addition, the working alliance was found to mediate the relationship between the client's perception of the counselor's MCO and the treatment outcome. In other words, counselors with a stronger MCO are likely to form better alliances with their clients, producing better treatment outcomes. However, the mediation effect of working alliance on the association between MCO and treatment outcomes was only significant for White client-White counselor dyads and REM client-REM counselor dyads. One possible explanation might be that counseling factors other than working alliance (e.g., client's transference, counselor's countertransference management, etc.) might be more important in a cross-cultural counseling relationship. Further research is needed to explore the relationship between a counselor's MCO and treatment outcomes.

Intergroup Contact Theory

One way to improve cultural comfort is through interacting with outgroup members, as suggested by Intergroup Contact Theory (Allport, 1954). Outgroup members are defined as people who do not share membership of a specific cultural group. Allport (1954) first proposed the intergroup contact hypothesis (which later was called intergroup contact theory) and suggested that intergroup contact could reduce prejudice under conditions of equal status contact between members of the minority and majority group for shared goals, and the positive effects of intergroup contact would be facilitated through institutional support, including law, custom, or local atmosphere.

Pettigrew (1998) synthesized the literature on intergroup contact and proposed four processes of change through intergroup contact:(1) learning about the outgroup, (2) changing behavior, (3) generating affective ties, and (4) ingroup reappraisal. Learning about the outgroup is the initial step of intergroup contact, through which negative stereotypes of the outgroup can be corrected and therefore reduce prejudice. Changing behavior could lead to attitude change, as the new situation comes with new expectations, which in cases of intergroup contact, include the acceptance of outgroup members. People might experience an incongruency between their old prejudice and new behavior and would therefore change their attitudes towards outgroup members. After repetitive contact with outgroup members, people may feel more comfortable with the intergroup interactions. Generating affective ties refers to the fact that although the initial intercultural contact can be uncomfortable and might induce adverse reactions such as anxiety, continued contact could reduce the anxiety and foster the development of empathy. Finally, ingroup reappraisal means that after exposure to outgroup members, people would have a broader view and reevaluation of their ingroup norms and customs. People might have less contact with ingroup members due to increasing outgroup contact and have less bias towards members of the outgroups. These four processes explain how intergroup contact could reduce prejudice towards outgroup members through behavioral, affective, and cognitive channels.

Pettigrew (1998) also proposed three types of generalization, which are (1) generalization across situations, (2) generalization from the outgroup individual to the outgroup, and (3) generalization from the immediate outgroup to other outgroups. The first type of generalization follows from multiple incidents of optimal intergroup interaction. The second type of generalization happens when contact effects generalize from the outgroup individual to the entire outgroup when group membership is salient. The third type of generalization refers to the generalization of positive views of outgroup members other than the outgroup with whom the person had direct contact. All three types of generalizations have shown evidence for increasing intergroup contact and reducing prejudice towards outgroup members (Pettigrew & Tropp, 2006).

Allport’s intergroup contact hypothesis (1954) was partially supported by Pettigrew and Tropp’s (2006) meta-analysis, which found that intergroup contact was associated with decreased prejudice; however, Allport’s four conditions were not necessary to achieve positive outcomes. Later, a meta-analysis of 73 studies (Lemmer & Wagner, 2015) also confirmed intergroup contact theory and found that interventions based on the intergroup contact theory could improve ethnic attitudes, and the effects of intervention could be sustained over time. In addition, they also concluded that both direct (in person) and indirect (virtual, extended, etc.) contact interventions were effective, even in areas with a history of prolonged intergroup conflicts. Although contact intervention had a positive effect for racial-majority and minority members, the positive impact was greater for majority group members than minority group members. Lastly, they confirmed that the positive impact of contact interventions could be generalized to the entire target outgroup and other ethnic outgroups. Intergroup contact theory also showed cross-nation validation. Gundelach (2014) conducted a cross-national analysis on ethnic diversity and outgroup trust and found that people from ethnically heterogeneous societies showed more outgroup trust than people living in ethnically homogenous environments. All of the above showed evidence for contact theory, which argues that increased intergroup interaction could reduce prejudice and decrease discomfort when interacting with outgroup members.

However, as suggested in Lemmer and Wagner's meta-analysis (2015), the positive effects of intergroup contact were more significant for racial majorities than for racial minorities. Irizarry (2013) studied Black workers' perception of prejudice and found that regardless of the racial concentration of the interaction context, interracial contact in primary school, current residential neighborhood, or the workplace did not affect Blacks' perception of prejudice. This might result from Black Americans' experience of prejudice and discrimination in their everyday life that increased intergroup interaction, particularly with racial majority members, would not decrease their perception of prejudice from outgroup members.

Van Laar and colleagues (2005) examined the effect of randomly assigned interethnic roommate contact on college students' attitudes towards outgroup members. Results showed that students of all ethnicities living with randomly assigned outgroup roommates generally demonstrated improved intergroup attitudes by the end of the academic year. For White and Asian students, interethnic interaction increased their sense of interethnic competence and decreased their sense of unease when being around outgroup members. However, students' outgroup exposure to White or Asian roommates increased some indicators of prejudice, which is contradictory to contact theory. This might be partially explained by power dynamics in interethnic interaction, where ethnic minority students might experience racism when living with students from a racial group that holds more power.

Residing in ethnically diverse neighborhoods creates opportunities for interethnic interactions, as suggested by Dinh et al. (2008). They examined the effect of inter-racial interaction with Asians and Asian Americans on White college students' attitudes towards Asians and Asian Americans, awareness of discrimination, and racial issues. They found that White students residing in cities with a higher percentage of Asian people endorsed more intercultural contact with Asians/Asian Americans, and the extent of intercultural contact with Asians and Asian Americans was positively associated with positive attitudes towards Asians and Asian Americans, awareness of institutional discrimination, and awareness of racial issues. This study showed that living in a culturally diverse area could increase one's chance of cross-cultural interaction with outgroup members, fostering positive attitudes towards outgroup members and awareness of institutional discrimination and racial issues.

Cross-cultural interactions occur not only in one's living environment but also in one's working environment. Gleditsch and Berg (2017) studied non-Hispanic White faculty members' attitudes towards students from different racial groups and found that White faculty members who graduated from a high school with more racial minority students and who currently worked with more racial minority colleagues were likely to advise more racial minority college students. This study suggested that for White faculty members, both prior experiences of cross-cultural interactions and current cross-cultural contacts in the workplace are associated with their openness and willingness to work with students from a racial group other than their own.

Intergroup Contact Theory and Counselors' Cultural Comfort

Counselors are social beings and have no reason to be an exception to intergroup contact theory. Therefore, it is reasonable to hypothesize that counselors who live and work in an ethnically diverse area would have less prejudice towards outgroup members and therefore have greater cultural comfort when working with clients from a different racial background. Research on contact theory suggests that the relationship between counselor's interracial contact and cultural comfort might be different for white and racial-ethnic minority counselors. White counselors who have greater exposure to racial and ethnic diversity are likely to have greater cultural comfort working with racial-ethnic minority clients and therefore produce better treatment outcomes; whereas this association for racial-ethnic minority counselors might be weaker as interracial contact with outgroup members for racial minority counselors may not necessarily create more positive attitudes and perceptions of racial majorities. Larrison and colleagues (2011) found that counselors vary in their ability to facilitate positive changes with Black and White clients, and they found that the counselors' differences in treatment outcomes were explained by counselors' scores on multicultural counseling relationships. Here, multicultural counseling relationships refer to "counselors' interactional process with the minority client, such as the counselors' trustworthiness, comfort level, stereotypes of the minority client, and worldview" (Sodowsky et al., 1994). This suggests that when a counselor is more comfortable working with REM clients is more open to diverse cultures, they are likely to equally effective with Black and White clients.

Summary

Prior studies have suggested that counselors differ in their effectiveness in facilitating positive change with clients, and this difference is partially due to the client's race/ethnicity. That is, some counselors are better than others in producing positive treatment outcomes with REM clients, and others are better at working with White clients than REM clients. Counselors' differential effectiveness influenced by clients' race/ethnicity might result from the discomfort counselors experience when working with clients from a different cultural background. In particular, counselors with less exposure to Black people might hold stereotypes or prejudice toward this population due to the limited interactions with outgroup members. It is common for people to overgeneralize the negative experience with an outgroup member to negative attitudes and perceptions towards the entire outgroup when interethnic contacts are limited. Moreover, because people tend to live with people with similar group membership, negative stereotypes towards Black people might be enhanced through greater interaction with ingroup members and less contact with Black people. Therefore, White counselors living in an area with a low Black people will have limited contact with Black people, resulting in a lack of corrective cultural experiences provided by intergroup contact.

White counselors with negative perceptions, attitudes, or prejudice toward Black people are likely to experience cultural discomfort when counseling Black clients. This cultural discomfort can result from conflicts of values due to cultural variances, negative and limited prior contact with Black individuals, and negative societal messages. The cultural discomfort that

White counselors experience will influence their ability to be present with the client, as well as engage in culture-related topics that might be important for understanding Black clients' worldviews and experiences. White counselors who struggle to understand and respect clients' worldviews or engage with the client in conversations related to their salient identity might result in clients dropping out of counseling or failing to improve in counseling.

Therefore, living and working in an area with a higher Black people will likely give counselors more opportunities to interact with Black people, through which they could foster positive attitudes toward this group and correct prior negative stereotypes or experiences. White counselors who live and work in an area with a higher Black people are also likely to have the opportunity to cultivate openness to different cultural values and beliefs, and create greater cultural comfort in working with Black clients. White counselors with greater cultural comfort will be more effective in working with Black clients, having fewer counseling dropouts, and producing better treatment outcomes. Based on Price et al.'s (2021) findings, the treatment gains of counseling might be undermined by systemic racism against Black clients. However, it is still predicted that culturally responsive counseling will cultivate resilience in Black clients, provide a healing space for their distress, and combat the negative influence of anti-Black racism on Black clients' mental health.

Research Questions and Hypotheses

The current study has four main research questions: (1) Do White counselors differ in producing better treatment outcomes and fewer counseling dropouts with Black college student clients? (2) Does living in environments with a larger percentage of Black people predict White counselors' better treatment outcomes and fewer counseling dropouts with Black college student clients? (3) Does working in environments with a larger percentage of Black people predict

White counselors' better treatment outcomes and fewer counseling dropouts with Black college student clients? (4) Does living in an environment with higher racial diversity predict White counselors' better treatment outcomes and fewer counseling dropouts with Black college student clients? To address these four research questions, eight hypotheses are proposed below.

Hypothesis 1: White counselors vary in their ability to produce positive treatment outcomes for Black clients.

This hypothesis is to replicate the findings from prior studies on counselors' effectiveness with REM clients (e.g., Drinane et al., 2016; Hayes et al., 2016; Imel et al., 2011). I hypothesize that counselors will account for a significant amount of variance in their Black clients' differential post-treatment distress, controlling for pre-treatment distress. That is, some White counselors are better than others in producing positive treatment outcomes with Black clients.

Hypothesis 2: The percentage of the population in counselors' living environment that is Black will predict White counselors' treatment outcomes for Black clients.

This hypothesis is developed from prior studies on intergroup contact theory, which claimed that greater exposure to outgroup members would increase ethnic attitudes and decrease prejudice towards the outgroup, resulting in greater cultural comfort with outgroup clients and better treatment outcomes. Therefore, I hypothesize that the percentage of the Black people in White counselors' living environment will be associated with lower post-treatment distress for Black clients, controlling for pre-treatment distress. Specifically, the percentage of Black residents in the area where the university counseling center is located will significantly predict lower post-treatment distress, controlling for pre-treatment distress.

Hypothesis 3: The percentage of the population in counselors' working environment that is Black will predict White counselors' treatment outcomes for Black clients.

Similar to the rationale above, I hypothesize the percentage of the Black people in White counselors' working environment will be associated with lower post-treatment distress for Black clients, controlling for pre-treatment distress. Specifically, the percentage of Black students, staff, and faculty in the university will significantly predict lower post-treatment distress, controlling for pre-treatment distress.

Hypothesis 4: The racial diversity of the area where the university counseling center is located will predict White counselors' treatment outcomes for Black clients.

This hypothesis tests if the higher likelihood of running into someone from a different racial and ethnic group in White counselors' living environment will predict better treatment outcomes for Black clients. Based on findings from Lemmer and Wagner (2015), which states that the positive impact of contact interventions will be generalized to the entire targeted outgroup and other ethnic outgroups, I predict that the more likely a White counselor is to interact with any REM member, the more likely they will have decreased prejudice and negative attitudes towards Black people, and therefore have better treatment outcomes with Black clients.

Hypothesis 5: There is a significant counselor effect on Black clients' unilateral termination.

As informed by Owen et al.'s study (2012), I expect a significant counselor effect on Black clients' counseling dropouts.

Hypothesis 6: The percentage of the Black people in White counselors' living environments will be negatively associated with Black clients' likelihood of unilateral termination.

Similar to the rationale for Hypothesis 2, I hypothesize that Black clients of White counselors who live in an area with a higher percentage of the Black people are less likely to drop out of counseling compared to clients of White counselors who live in an area with a lower percentage of the Black people.

Hypothesis 7: The percentage of the Black people in White counselors' working environments will be negatively associated with Black clients' likelihood of unilateral termination.

Similarly, I hypothesize that Black clients of White counselors who work in a university with a higher percentage of the Black people are less likely to drop out of counseling compared to clients of White counselors who work in a university with a lower percentage of the Black people.

Hypothesis 8: The racial diversity of the area where the university counseling center is located will predict Black clients' unilateral termination within a White counselor's caseload.

Similar to the rationale for Hypothesis 4, I predict that the greater exposure to racial and ethnic diversity will increase a White counselor's cultural comfort working with Black clients and thus have fewer Black clients drop out from counseling. In other words, the diversity index of the area where the university counseling center locates will be negatively associated with Black clients' likelihood of counseling dropout.

Chapter Three: METHODOLOGY

Data Sources

The current study will use three national data sets—one each from the Center for Collegiate Mental Health (CCMH), the Census 2020, and the Integrated Postsecondary Education Data System (IPEDS). CCMH currently has more than 700 college and university counseling centers as members and was established aiming to connect practice and research to promote evidence-based practice that benefits college students, mental health professionals, and researchers (CCMH, 2021a). CCMH collects treatment information, client and counselor demographic information, and data on counseling center characteristics from affiliated college counseling centers. Census 2020 includes population information in communities throughout the United States. IPEDS includes interrelated surveys conducted annually by the National Center for Education Statistics and gathers data on the racial and ethnic composition of the students, instructional faculty members, and full-time and part-time staff at each university.

Participants

Clients. Participants are college students seeking mental health treatment in CCMH-member university counseling centers who gave consent to contribute their de-identified data for research purposes from 2015 to 2019. Participants consist of 994 students who self-identified as African American/Black and were seen by a White counselor.

Counselors. A total of 142 counselors nested within 46 university counseling centers who self-identified as White.

Instruments

Standardized Data Set (SDS)

The SDS is a measure used by CCMH to collect client demographic information, including age, gender identity, sexual orientation, racial and ethnic background, country of origin, international student status, academic status, prior counseling experience, current financial situation, etc. (CCMH, 2021b). The SDS also collects provider information, including gender, age, race/ethnicity, highest degree, the discipline of the highest degree, licensure status, and position type.

A sample item on both the client and counselor version of the SDS is “What is your race/ethnicity?” with the following options:

1. African American/ Black
2. American Indian or Alaskan Native
3. Asian American/ Asian
4. Hispanic/ Latino/a
5. Native Hawaiian or Pacific Islander
6. Multi-racial
7. White
8. Self-identify (please specify) (CCMH, 2021b).

Counseling Center Assessment of Psychological Symptoms (CCAPS-62 & CCAPS-34)

The CCAPS-62 is a multi-dimensional instrument developed for clinical use in college counseling centers (Locke et al., 2011). The CCAPS-62 is widely used in college counseling centers and has 62 items, consisting of 8 subscales—Depression, Generalized Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Family Distress, Hostility, and Substance Use. The response of each item is based on a five-point Likert scale (0-4), with 0 representing “not at all like me” and 4 representing “extremely like me.” CCAPS-62 has shown good internal consistency ranging from .781 (Academic Stress) to .913 (Depression), convergent validity to respective referent measures, ranging from .566 (Hostility) to .811 (Substance Use), and one-week retest reliability, ranging from r = .782 (Generalized Anxiety) to r = .927 (Depression) in a non-clinical sample (Locke et al., 2011). In addition, Locke and colleagues examined the internal consistency of the CCAPS subscales for various cultural groups. The subscale internal consistency estimates for African Americans ranged from 0.75 to 0.91, demonstrating good reliability.

The CCAPS-34 is a shorter version of the CCAPS-62 that was created for repeated measurement to monitor treatment progress and outcomes (Locke et al., 2012). The CCAPS-34 comprises 34 items from the CCAPS-62, making up to 7 subscales (Depression, Generalized Anxiety, Social Anxiety, Academic Distress, Eating Concerns, Hostility, and Alcohol Use). Locke et al.'s (2012) study showed that the CCAPS-34 has good internal consistency for each subscale, ranging from .760 (Academic Distress) to .820 (Depression), strong convergent validity (convergent correlations with referent measures were all above .50), and good test-retest stability.

Nordberg et al. (2018) extracted 20 items from CCAPS-34 using a bifactor model and created the Distress Index, which can be used as a general measure of distress. The Distress Index includes items from the Depression, Generalized Anxiety, Social Anxiety, Academic Distress, and Hostility subscales and has demonstrated good two-week test-retest reliability (r = .88) and convergent validity with other outcome measures (e.g., Outcome Questionnaire-45). Because the 20 items on the Distress Index are included in both the CCAPS-62 and CCAPS-34, it is commonly used to compare distress levels assessed by the CCAPS-62 and CCAPS-34, at intake and subsequently. Treatment outcome is assessed by the mean score of the Distress Index subscale of clients' last administered CCAPS-62 or CCAPS-34, controlling for their initial distress. This score represents the general level of distress of the client when they terminate the treatment. Client initial distress will be measured by the mean score of the Distress Index subscale of clients' first administered CCAPS-62 or CCAPS-34, representing clients' level of general distress before treatment.

Counseling Dropout

Counseling dropout in the current study is operationalized as non-attendance of the last scheduled individual counseling session. If a client did not attend their last scheduled appointment, they would be considered dropping out of counseling. Counseling dropout will be coded as a binary variable (0=no, 1=yes), representing if the client dropped out from treatment.

U.S. Census 2020

The percentage of the Black people in the area where the university counseling centers are located will be obtained through the U.S. Census 2020 public data. According to the Census Bureau, census tracts are "small, relatively permanent statistical subdivisions of a county or equivalent entity," and tracts, on average about 4000 inhabitants, provide the neighborhood's racial and ethnic composition (U.S. Census Bureau, 2022, section. 8). The current study will use a variable called "Hispanic by Race" in the Census 2020 dataset to get the percentage of the non-Hispanic Black people in the tract and the county where university counseling centers are located. The Diversity Index of the tract where university counseling centers are located, which describes the probability of two random people in a tract being from different racial and ethnic groups, will be used to operationalize the likelihood of counselors' exposure to diversity in the neighborhood. The Diversity Index was also calculated based on the "Hispanic by Race" variable in Census 2020 dataset using the formula provided in Massey and Denton (1988).

IPEDS

Institutional data will be collected from the IPEDS data set. The percentage of Black/African American student enrollment calculated using an unduplicated 12-month headcount will represent the probability of counselors' exposure to Black/African American students on campus. The percentage of Black/African American staff will be calculated using the "full- and part-time staff by race/ethnicity" variable. Finally, the percentage of Black faculty members on campus will be calculated using the "full-time instructional staff, by race/ethnicity" variable. Together, these three variables should represent a White counselor's likelihood of having contact with Black individuals in their working environment.

State-Level Anti-Black Racism

This study used the anti-Black racism factor score reported in Price et al. (2021) as an indicator of state-level anti-Black cultural racism. The anti-Black racism factor score was calculated as a composite index of 31 items from 3 different sources—the General Social Survey, the American National Election Survey, and Project Implicit, representing individual explicit attitudes of race, racial prejudice, and race-related public policies (Price et al., 2021). The measure showed high internal consistency (standardized alpha = 0.97).

Procedure

Clients will fill out the SDS and CCAPS-62 before their initial session and then be administered CCAPS-34 during their course of treatment to monitor the treatment progress. These procedures are part of the university counseling centers' routine clinical practice and have been approved by each college's IRB board. CCMH provided the researcher with a dataset of client treatment data merged with IPEDS institutional data and Census tract data. The institutional id, counselor id, and client id will be deidentified so the identity of the participating clients, counselors, and institutions will remain anonymous to the researcher.

Because some clients might be seen by multiple counselors over the course of 4 years, only clients' data with their first counselor will be included in the analysis. Eligible clients are those who attended individual counseling sessions and have completed Standardized Data Set (SDS) and at least two administrations of Counseling Center Assessment of Psychological Symptoms (either CCAPS-34 or CCAPS-62). The first CCAPS should be completed within 14 days of starting the treatment, and the final CCAPS should be completed within 14 days of the last attended appointment.

Counselors who self-identified with a race or ethnicity other than White will not be included in the current analysis due to the limited sample size. Finally, to accurately calculate the counselor effect on clients' dropout and treatment outcomes, counselors who worked with fewer than 5 Black clients will be excluded from the analysis. According to Kerkhoof and Nussbeck (2019), the minimum sample size for level-2 units (counselors) and level-3 units (counseling centers) for a three-level random effect multilevel model with continuous dependent variables is 15 and 35, respectively. Therefore, the estimated sample size of clients, counselors, and centers should produce unbiased estimates. Moineddin et al. (2007) tested the minimum sample size for a two-level logistic regression. They found that a minimum of 100 level-2 units and 50 level-1 subjects within each unit were required for unbiased estimation of parameters. The current study will not meet this standard for the number of Black clients seen by each counselor, so caution is recommended when interpreting results for the three-level logistic regression.

Proposed Data Analysis

To test Hypotheses 1, 2, 3, and 4, multilevel linear regression models will be used to fit the data using SAS 9.4 program. To test Hypothesis 1, a single-level model with only client-level covariate (presenting distress) will be specified.

$$Final\ Distress = Beta0 + Beta1(Pretreatment\ Distress) + e$$

Then, a 2-level random intercept model will be specified, adding a level-2 clustering unit (counselor).

$$Level\ 1{:}\ Final\ Distress = Beta_{0j} + Beta_{1j}(Pretreatment\ Distress)_{ij} + e_{ij}$$

$$Level\ 2{:}\ Beta_{0j} = Gamma_{00} + u_{0j}$$

$$Beta_{1j} = Gamma_{10}$$

If there is a significant counselor effect on client treatment outcome, intercept variance should have a *p*-value < .05. To test the percentage of variance in client treatment outcomes explained by counselors, the intraclass correlation coefficient could be calculated using the equation in Hox et al. (2018, p. 13):

$$\text{Rho} = \text{sigma}_{u0}^2 / (\text{sigma}_{u0}^2 + \text{sigma}_e^2)$$

To test Hypothesis 2, 3, and 4, a 3-level random intercept model will be specified, adding level 3 predictors (*Black People Percentage of Tract; Diversity Index of Tract; Black Student Percentage of University; Black Staff Percentage of University; and Black Faculty Percentage of University*).

$$Level\ 1{:}\ (Final\ Distress)_{ijk} = Beta_{0jk} + Beta_{1jk}(Pretreatment\ Distress) + e_{ijk}$$

$$Level\ 2{:}\ Beta_{0jk} = Sigma_{00k} + u_{0jk}$$

$$Beta_{1jk} = Sigma_{10k}$$

$$Level\ 3{:}\ Sigma_{00k} = Gamma_{000} + Gamma_{001}(Black\ People\ Percentage\ of\ Tract) +$$
$$Gamma_{002}(Diversity\ Index\ of\ Tract) + Gamma_{003}(Black\ Student\ Percentage\ of\ University) +$$

$Gamma_{004}$*(Black Staff Percentage of University)* + $Gamma_{005}$*(Black Faculty Percentage of University)* + v_{00k}

$Sigma_{10k} = Gamma_{100}$

For the fixed effects results, if *Black People Percentage of Tract* is found to significant, we will find support to Hypothesis 2. If *Black Student Percentage of University, Black Staff Percentage of University,* and *Black Faculty Percentage of University* were found to be significant, we will find support for Hypothesis 3. In addition, if the *Diversity Index of Tract* were found to be significant, we will find support for Hypothesis 4.

To fully capture the racial composition of counselors' living environment, the above analyses were also conducted using county-level predictors, including the percentage of Black individuals in the county and diversity index of the county. Additionally, anti-Black racism score and its interaction with the percentage of Black people of tract and county, respectively, will be added to the model as an additional factor that might affect treatment outcomes.

To test Hypotheses 5, 6, 7, and 8, multilevel logistic regressions will be used to fit the data. To test Hypothesis 5, a single-level model without any predictors will be specified.

Logit (Dropout = 1) = $Beta_{0jk}$

Then, a 2-level random intercept model will be specified, adding level-2 clustering units (counselors).

Level 1: Logit [Pr(Dropout = 1)] = $Beta_{0j}$

Level 2: $Beta_{0j} = Gamma_{00} + u_{0j}$

If there is a significant counselor effect on client counseling dropout, intercept variance should have a p-value < .05. To test the percentage of variance in client odds of counseling dropout explained by counselors, the intraclass correlation coefficient could be calculated using the equation in Hox et al. (2018, p. 157):

$$\text{Rho} = \text{sigma}_{u0}^2 / (\text{sigma}_{u0}^2 + \pi^2/3)$$

To test Hypothesis 6, 7, and 8, a 3-level random intercept model will be specified, adding level-3 predictors (*Black People Percentage of Tract; Diversity Index of Tract; Black Student Percentage of University; Black Staff Percentage of University; and Black Faculty Percentage of University*).

Level 1: Logit [Pr(Dropout = 1)] = $Beta_{0jk}$

Level 2: $Beta_{0jk} = Sigma_{00k} + u_{0jk}$

Level 3: $Sigma_{00k} = Gamma_{000} + Gamma_{001}$*(Black People Percentage of Tract)* + $Gamma_{002}$*(Diversity Index of Tract)* + $Gamma_{003}$*(Black Student Percentage of University)* + $Gamma_{004}$*(Black Staff Percentage of University)* + $Gamma_{005}$*(Black Faculty Percentage of University)* + v_{00k}

For the fixed effects results, if *Black People Percentage of Tract* is found to be significant, we will find support for Hypothesis 6. If *Black Student Percentage of University, Black Staff Percentage of University,* and *Black Faculty Percentage of University* were found to be significant, we will find support for Hypothesis 7. In addition, if the *Diversity Index of Tract* were found to be significant, we will find support for Hypothesis 8.

Similarly, the above analyses regarding counseling dropout were also conducted using county-level variables. Anti-Black racism factor score and its interaction with the percentage of Black people in the tract and in the county, respectively were added into the final model.

Chapter Four: RESULTS

Sample Descriptive Statistics

Table 1-5 shows the demographic information for Black college clients included in the current analysis, including gender identity (Table 1), sexual orientation (Table 2), academic status (Table3), prior counseling experience (Table 4), and mean scores of initial and final distress by each CCAPS subscale (Table 5). The counseling dropout rate for the entire sample was 22.54%. The descriptive data for center-level predictors are included in Table 6.

Treatment Outcome

Hypothesis 1: White counselors vary in their ability to produce positive treatment outcomes for Black clients.

A random intercept null model was specified with only the control variable, initial distress, to predict clients' final distress. A random intercept was not significant, $p = 0.0974$, suggesting White counselors do not significantly differ in producing treatment outcomes with Black college clients, after controlling for clients' initial distress. Hypothesis 1 was not supported. An intraclass correlation coefficient (ICC) was calculated, ICC = 0.026, suggesting 2.6% of the variability in clients' treatment outcomes is accounted for by counselors in this study, leaving 97.4% of the variance to be accounted for by other unknown factors.

Hypothesis 2: The percentage of the population in counselors' living environment that is Black will predict White counselors' treatment outcomes for Black clients.

A three-level model could not be specified because there was not enough counselor-level variance to be estimated after introducing the counseling center cluster. Since all of the predictors were center-level predictors, a two-level random intercept model (level 1: client; level 2: counseling center) was specified. Results showed that the percentage of the population in counselors' living environment that was Black on both census tract level (Table 7) and county level (Table 8) was not a significant predictor of clients' final distress controlling for initial distress.

Hypothesis 3: The percentage of the population in counselors' working environment that is Black will predict White counselors' treatment outcomes for Black clients.

The percentage of Black students, staff, and faculty members, respectively, were added into the model. Results showed that the percentage of the population in counselors' working environment that is Black did not predict counselors' treatment outcomes for Black clients (see Table 7 and Table 8).

Hypothesis 4: The racial diversity of the area where the university counseling center is located will predict White counselors' treatment outcomes for Black clients.

The diversity index was calculated on both the census tract level and the county level. Results showed that racial diversity did not predict treatment outcomes on the tract or county level (see Table 7 and Table 8). However, after adding the anti-Black racism factor score and its interaction with the percentage of Black people in counselors' living environment into the model, at the tract level, more racial diversity and higher anti-Black racism score predicted better treatment outcomes (see Table 7). That is, White counselors who work at a university counseling center that is in an area with more racial diversity are likely to produce better treatment outcomes with Black clients compared with White counselors who work in an area with less racial diversity. Moreover, White counselors who work in a state with a higher level of anti-Black racism are likely to produce better treatment outcomes with Black college clients compared to White counselors who work in a state with a lower level of anti-Black racism. Racial diversity and anti-Black racism were not significant predictors of treatment outcomes at the county level, either as main effects or in interaction with one another (see Table 8).

Because a random intercept was not supported and Estimated G Matrix was not positive definite in the last model, suggesting there was not enough variance to be estimated in the final model, a multiple regression was used to test the effect of predictor variables on clients' treatment outcomes. Visual inspection showed that the data met the assumption for error normality but violated the assumption for constant error variance. Log transformation was performed on the outcome variable, but the data transformation did not correct the violation of the assumption for constant error variance. Weighted least squares regression was then performed as a robust estimation method, but since the parameter estimates were far different from the unweighted estimates, the results reported in this study used the unweighted parameter estimates. Cautions are suggested when interpreting the findings. Results from the multiple regression analysis showed that a lower percentage of the Black people, higher racial diversity, and higher anti-Black racism in White counselors' living environments predicted better treatment outcomes with Black college clients at the tract level (See Table 9). It's worth noting that the effect sizes of all significant predictors are small except for initial distress, which has a large effect size. However, these predictors were not significant at the county level (see Table 10). Pearson correlations among predictors are presented in Table 11 (tract level) and Table 12 (county level).

Counseling Dropout

Hypothesis 5: There is a significant counselor effect on Black clients' unilateral termination.

A random intercept null model was specified to predict clients' counseling dropout. A random intercept was significant, $p = 0.0195$, suggesting White counselors significantly differ in retaining Black college clients in counseling. Hypothesis 5 was supported. An intraclass correlation coefficient (ICC) was calculated, ICC = 0.0670, suggesting 6.7% of the variability in clients' counseling dropout is accounted for by counselors in this study, leaving 93.3% of the variance to be accounted for by other unknown factors.

Hypothesis 6: The percentage of the Black people in White counselors' living environments will be negatively associated with Black clients' likelihood of unilateral termination.

Because the random intercepts on both the counselor and the counseling center level in a three-level random intercept logistic model were not significant ($p = 0.0683$ and 0.0968, respectively), a two-level random intercept logistic model was specified (level 1: client, level 2: counseling center). Results showed that the percentage of the Black people in White counselors' living environments was not a significant predictor of Black clients' unilateral termination at both the tract and county levels (see Table 13 and Table 14). Hypothesis 6 was not supported.

Hypothesis 7: The percentage of the Black people in White counselors' working environments will be negatively associated with Black clients' likelihood of unilateral termination.

The percentage of Black students, Black faculty members, and Black staff were added to the model. Results indicated that the percentage of Black people in White counselors' working environments did not predict their Black clients' unilateral termination (see Table 13 and Table 14). Hypothesis 7 was not supported.

Hypothesis 8: The racial diversity of the area where the university counseling center is located will predict Black clients' unilateral termination within a White counselor's caseload.

The racial diversity of the area where the university counseling center is located was added to the model. Results showed that the racial diversity of White counselors' living environment at both the tract and the county level did not predict their Black clients' counseling dropout. All predictors remained not significant even after introducing the anti-Black racism score into the model (see Table 13 and Table 14). Hypothesis 8 was not supported.

Exploratory Analyses

One additional variable that was not considered previously was the number of Black college clients within each counselor's caseload. It is possible that White counselors who worked with more Black clients have gradually developed cultural comfort working with Black clients and therefore would have better treatment outcomes and fewer counseling dropouts with Black clients. Therefore, additional exploratory analyses were conducted. A two-level random intercept regression and a two-level random intercept logistic regression model were specified. Results showed that the number of Black clients within each counselor's caseload was not a significant predictor for treatment outcome ($p = 0.7476$) and counseling dropout ($p = 0.1951$).

A series of follow-up multiple regressions were conducted to test if Black college clients' initial distress, final distress, and change in distress scores were predicted by the percentage of Black people and racial diversity in the living environment, state-level anti-Black racism, and the percentage of Black students, staff, and faculty members in the university. Results showed that none of the above predictors significantly predicted Black college clients' initial distress on the tract level, $R^2 = 0.006$, F (6, 987) = 1.000, $p = 0.424$; or final distress on the tract level, $R^2 = 0.011$, F (6, 987) = 1.816, $p = 0.093$. However, the predictors did significantly predict distress change on the tract level, $R^2 = 0.019$, F (6, 987) = 3.248, $p = 0.004$. Specifically, a higher percentage of Black individuals in the census tract is associated with smaller distress change, suggesting less improvement, $p = 0.007$. A higher percentage of Black staff in the university is associated with larger distress change, suggesting more improvement, $p = 0.034$. A higher racial diversity of the neighborhood on the tract level is associated with more improvement, $p = 0.007$.

Finally, a higher anti-Black racism score is associated with more distress change, $p = 0.004$. The effect sizes of the above significant predictors are all small (absolute values of Beta range from 0.094 to 0.143). The findings aligned with our previous findings, and the significant effect of the percentage of Black staff on Black college students' distress change suggested that Black clients generally benefit from counseling more if there are more Black staff in the university, which is another support for Allport's intergroup contact theory. Similar analyses were conducted on the county level, and results showed that the center-level predictors were not significant predictors of initial distress, $R^2 = 0.006$, $F\,(6, 987) = 0.953$, $p = 0.456$; final distress, $R^2 = 0.008$, $F\,(6, 987) = 1.278$, $p = 0.265$; or distress change, $R^2 = 0.009$, $F\,(6, 987) = 1.557$, $p = 0.156$. Results are presented in Table 15 (tract level) and Table 16 (county level).

Chapter Five: DISCUSSION

The purpose of the current study is to examine if the percentage of Black people in White counselors' living and working environments and the racial diversity in their living environment will predict their counseling effectiveness with Black college clients. Prior research has shown that counselors differ in producing positive treatment outcomes with racial and ethnic minority clients (Imel et al., 2011; Hayes et al., 2015). Inconsistent with the previous findings, the current study showed that White counselors do not significantly vary in their ability to produce positive treatment outcomes with Black college clients. It is possible that compared to the two studies conducted a decade ago, counselors in the current study have developed stronger multicultural counseling skills and therefore do not vary in their ability to produce positive treatment outcomes with Black clients. This finding suggested that with the increasing emphasis on multicultural and social justice counseling competence in the field (e.g. Ratts et al., 2016), counselors have gained more training in working with people who are different from their own cultural background and, as a result, have less variability in their ability to produce better treatment outcomes with REM clients.

Furthermore, I hypothesized that White counselors who live and work in environments with a higher percentage of Black people would produce better treatment outcomes with Black college clients, based on Allport's intergroup contact theory (1954). However, contradictory to the hypothesis, results indicated that the percentage of the Black people in White counselors' living environments was positively associated with post-treatment distress with Black clients after controlling for initial distress. In other words, White counselors living in areas with a lower percentage of Black people produced better treatment outcomes compared to those who lived in areas with a higher percentage of Black people. One possible explanation is that, for Black clients who live in a neighborhood with a higher percentage of Black people, they might have the chance to have culture-related conversations with their families and friends in the community. Therefore, Black clients might not feel it necessary to bring up race-related topics in counseling as they have received adequate support from their community. Broaching behavior is defined as "a consistent and ongoing attitude of openness with a genuine commitment by the counselor to continually invite the client to explore issues of diversity" (Day-Vines et al., 2007, p. 402). Although the association between broaching behavior and treatment effectiveness has not been established in research, broaching behavior was found to be associated with cultural humility, cultural opportunities, and multicultural competence (King & Borders, 2019). For counselors who live in areas with a higher percentage of Black people, they might feel more confident in their knowledge about Black and African American culture and therefore spend less time in counseling sessions broaching racial dynamics in the counseling relationship and larger societal environment. Hartmann and colleagues found that White Americans' colorblind identification is associated with decreased perceptions of social distance from African Americans (2017). Specifically, White Americans who share racial colorblind beliefs are more likely to believe they share the same vision of America as African Americans and that they are more likely to have positive attitudes toward an interracial marriage of their children with an African American compared to White Americans who do not share racial colorblind beliefs. Based on this finding, it is likely for White counselors who live in communities with a higher percentage of Black people to feel close to their Black clients while also holding colorblind attitudes. King and Summers (2020) found that colorblind attitudes were negatively associated with broaching behaviors. Therefore, it is likely that for White counselors who live in areas with higher percentage of Black people, they might hold color-blind attitudes and therefore feel race-related conversations were not necessary for treatment, resulting in a lack of broaching behaviors when working with Black clients.

Moreover, I hypothesized that counselors living in an environment with higher racial diversity would produce better treatment outcomes with Black clients. Here, racial diversity refers to the probability of two random people in an area being from different racial and ethnic groups. A higher racial diversity suggests that people who live in this area would have a higher chance to interact with people who are from a cultural background different than their own. This hypothesis was supported by the findings. The racial diversity of White counselors' living environments was negatively associated with post-treatment distress, controlling for initial distress, suggesting that White counselors who live in an environment with higher racial diversity produced better treatment outcomes. This finding supported the hypothesis that for counselors who live in environments with higher racial diversity, they will have more opportunities to interact with people who are from different ethnic backgrounds and have decreased biases or prejudice toward outgroup members. White counselors who have greater exposure to racial and ethnic diversity are more likely to develop cultural comfort working with clients who have different group memberships, including Black clients. This finding supported Allport's intergroup contact theory (1954).

The findings on the percentage of Black people in White counselors' living environment and the racial diversity of their living environment seem to contradict each other regarding the intergroup contact theory. It is possible that the large percentage of Black people in the area doesn't necessarily lead to decreased biases toward the Black community. However, having more intercultural contact with people from various cultural backgrounds may help a counselor to reflect on their cultural upbringing, their biases and attitudes toward unfamiliar cultures, and the people associated with these cultures. White counselors would develop a greater awareness of cultural diversity in the world they live in and have more chances to reflect on themselves when the negative interactions are with diverse people from various cultural groups. However, when their intercultural interaction is limited to one specific cultural group, they may attribute any unpleasant or negative interactions to that particular cultural group and miss the opportunities for introspective self-reflection.

One of the limitations of intergroup contact theory is that it does not account for the influences of negative intergroup contact (McKeown & Dixon, 2017). Specifically, McKeown and Dixon argued that when intergroup contact was negative, it would increase prejudice, anxiety, and avoidance. It is possible that White counselors living in environments with a higher percentage of Black people might overgeneralize their negative interactions with their Black neighbor to the entire community and therefore have increased prejudice, anxiety, and avoidance when working with Black clients. However, when the negative intergroup contact is with a diverse group of people from various cultural backgrounds, they are less likely to overgeneralize their negative interactions to the entire Black community.

In addition, I hypothesized that White counselors who work at a university with higher percentage of Black faculty members, staff, and students would produce better treatment outcomes with Black college clients. This hypothesis is not supported by the results. This could be because counselors usually work in a rather isolated space on campus and only interact with other counselors in the counseling center and their clients. It is possible that counselors will have very limited interactions with other faculty members, staff, and the study body on campus and thus will not have the opportunity to have intercultural contact with people from different cultural backgrounds. A better predictor might be the racial composition of the counseling center staff, which is not available in the current dataset.

Finally, the current study took an exploratory approach to examine how state-level anti-Black racism might affect treatment outcomes with Black clients. Surprisingly, we found that White counselors working in an environment with a higher level of anti-Black racism produced better treatment outcomes compared to White counselors who worked in an environment with a lower level of anti-Black racism. One possible explanation is that for White counselors living in areas with a higher level of anti-Black racism, they might be more aware of how anti-Black racism affects the mental health of their clients, and the cultural identity of the White counselor and the Black client would become more salient in the counseling relationship. Therefore, White counselors might be more likely to broach race-related topics with their clients and clients might benefit from having a corrective experience with their White counselor, resulting in stronger working alliance and better treatment outcomes. Other exploratory analyses revealed that the percentage of Black people at the institution and the neighborhood where counseling centers were located, anti-Black racism attitudes, or racial and ethnic diversity around campus were not associated with Black college students' presenting distress. This finding suggests that institutional and neighborhood diversity did not necessarily influence Black college clients' initial distress level when presenting for counseling. Moreover, the number of Black clients within each counselor's caseload was not a significant predictor of treatment outcomes either, suggesting experience working with Black clients does not automatically translate to better counseling effectiveness with Black clients. One possible explanation is, to ensure enough power for a multilevel analysis, the current study used an inclusion criterion of at least five clients per counselor between 2014 and 2019, and therefore the study might have a selection bias of only including the competent counselors in the study, and thus less variability in treatment outcomes. However, this inclusion criterion is rather flexible and easy to be met. It should not create a huge selection bias that influences the results of the study.

Regarding the findings on counseling dropouts, none of the predictors in the current study significantly predicted Black clients' counseling dropouts. The percentage of Black people in White counselors' living and working environments was not associated with the counseling dropout of Black clients in White counselors' caseloads. Furthermore, the racial diversity and anti-Black racism in White counselors' living environments did not predict the likelihood of counseling dropout of their Black clients. However, White counselors did differ significantly in retaining Black clients in treatment, suggesting some White counselors are better than others working with Black clients. White counselors accounted for 6.7% of the variability of Black clients' counseling dropout in our study. This number is smaller compared with the counselor effect on counseling dropout from Xiao et al.'s paper (2017) for all counselors and clients, suggesting less variability in White counselors' ability to retain Black clients in treatment. However, the dropout rate reported in Xiao et al.'s paper was 15.9%, compared to the counseling dropout rate of 22.54% for Black clients working with White counselors in the current study. Black clients in the study still had a much higher counseling dropout rate compared to the national average. It is worth noting that the dropout in Xiao et al.'s paper was defined as a combination of last-session non-attendance with failure to achieve a reliable change index. The current study defined counseling dropout purely as last-session non-attendance.

Limitations

The current study has some limitations. First, using a multilevel modeling approach, the sample size at the counseling center level was small ($N = 46$). Moineddin et al. (2007) suggested using a minimum group size of 50 with at least 50 groups to provide an accurate estimation of multilevel logistic regression, and our current sample failed to meet the sample size expectations of such an analysis. Future studies are encouraged to examine the question with a larger sample size for counseling centers.

Secondly, the assumption for equal variance was violated for the multiple regression. After different data transformation methods (e.g., log transformation), the assumptions of normality and equal variance could not be met at the same time. Weighted least squares regression was tried to address the unequal variance of the residuals, but since the weighted least squares estimates of the coefficients differed substantially from the unweighted estimates, the unweighted estimates of the coefficients are reported in the current study. Therefore, the results of the current study should be interpreted with caution.

Thirdly, the data were collected in naturalistic settings and the design of the study was not experimental. In other words, the researcher does not have the control to randomly assign clients to counselors, and there might be a selection effect. In practice, it is likely that counseling centers might match clients to counselors' clinical interests or expertise and therefore assign Black clients to counselors who have better multicultural counseling competence. This might explain the lack of variability in White counselors' ability to facilitate positive treatment outcomes for Black clients, as White counselors who were assigned to work with Black clients might be the ones that have greater cultural comfort working with clients from a different cultural background. Future research is needed to test this hypothesis.

Moreover, the findings of the current study might be influenced by the ecological fallacy. According to Sedgwick (2015), "the ecological fallacy is the assumption that inferences made at the general practice level would apply to individual patients" (p. 1). In the current study, since all predictors are on the center level, there is a risk of using the center-level findings to infer individual counseling practices. However, the inference made from the center-level analysis does not mean all White counselors within the counseling center have the same approach when working with Black clients. Therefore, predictors on the center level (e.g. racial diversity and the percentage of Black people in the neighborhood) may not directly reflect White counselors' intercultural contact and their cultural comfort working with Black clients.

Finally, the current study used three secondary datasets, which limits the approach to answering the research question. For example, White counselors' living environments were operationalized to be the same as the neighborhood where the counseling centers are located. In reality, counselors may live far from campus due to various reasons (e.g., living costs, familial reasons, preferences, etc.). Therefore, the percentage of Black people and the racial diversity in counselors' living environment might not be an accurate estimation of their opportunities to have intercultural contact. However, if taking into consideration the neighborhood effects on Black college students' mental health, the racial diversity of the neighborhood surrounding college campuses might directly influence Black college students' mental health.

Implications and Future Studies

The current study partially supported the initial hypothesis that counselors living in neighborhoods with higher racial diversity would produce better treatment outcomes compared to those who live in less diverse neighborhoods. This finding emphasized the importance and benefits of racial and ethnic diversity and its influence on both members from the racial-majority group and racial-minority groups. Specifically, White counselors living in environments with higher diversity facilitate better treatment outcomes. This might be a result of continuous learning and understanding of different cultures based on intergroup contact. Black clients, on the other end, also thrive in environments with higher racial and ethnic diversity and inclusivity. Future research should design intervention programs based on intergroup contact theory to test if increased intergroup contact would increase counselor trainees' multicultural and social justice competence and, as a result, increase their counseling effectiveness working with clients from other racial and ethnic backgrounds.

Moreover, findings on the positive association between state anti-Black racism attitudes and treatment outcomes are contradictory to the hypothesis. Exploratory analyses showed that anti-Black racism attitudes did not affect Black clients' presenting distress. Future studies are encouraged to use a qualitative inquiry to explore how state anti-Black racism attitudes might affect the counseling relationship between White counselors and Black clients and how counselors and clients interpret this association. In addition, the current study showed a positive association between the percentage of Black people in White counselors' living environments and their treatment outcomes with Black clients, which is different from the hypothesis. Further studies could examine factors related to neighborhood effect (e.g., financial insecurity, crime rate) and their influence on counseling outcomes with Black college clients.

To address the ecological fallacy mentioned previously, future research could include predictors on the counselor level to understand how environmental factors affect counselors on a personal level and, as a result, influence their clinical work with Black clients. The current study used cultural comfort as an underlying factor to explain the association between intergroup contact and treatment effectiveness of White counselors working with Black clients. Future studies could collect data on counselors' cultural comfort, cultural humidity, cultural opportunity, and the tract number of counselors' physical addresses to better understand the influence of racial and ethnic diversity on counselors' work with clients.

The current study focused exclusively on counseling effectiveness with Black clients. To examine and address mental health and care disparities, future research could compare White counselors' counseling effectiveness with White clients in comparison with Black clients to fully answer the question of whether the insignificant counselor effect on treatment outcomes is due to the increased cultural competence. If White counselors' treatment outcomes with White and Black clients do not differ, we can conclude with confidence that multicultural counselor education has made progress toward providing culturally competent care to all clients regardless of racial background.

As the CCMH practice-research network keeps growing, it's hoped that future researchers can replicate this study with a larger sample size on the counseling center level to ensure enough statistical power for multilevel modeling analysis. Due to the limited sample size, the current study had to limit the examination of the influence of racial and ethnic diversity on counseling effectiveness to two groups—White counselors and Black clients. As more data is collected, it would be essential to examine the influence of racial and ethnic diversity on racial minority counselors' effectiveness with White and other racial minority clients for us to understand how diversity influences counseling effectiveness from a systemic level.

Finally, the current study used three national datasets that connected treatment data with institutional and neighborhood data. Future studies could consider understanding the influence of environmental factors on important counseling elements and outcomes. For example, future studies could examine the influence of neighborhood poverty (Firth et al., 2020), education attainment, employment status, and the availability of psychiatric and substance abuse hospitals on clients' presenting distress, suicidality, counseling effectiveness, and clinical load index. Moreover, factors related to student persistence and success (e.g., graduation rates, first-year retention rates) might also be influenced by counseling utilization and counseling effectiveness of marginalized college students. Future researchers are recommended to use quantitative research with nationally representative data to understand counseling effectiveness from a systemic lens.

Conclusion

The current study examined the association between racial and ethnic diversity in White counselors' working and living environments and their counseling effectiveness with Black college clients. Results partially supported the argument that when White counselors live in an environment with higher racial diversity, they are likely to facilitate better treatment outcomes with Black clients. It is hoped that counselors, regardless of their working and living environments, will be informed by the findings of the current research, stepping out of their comfort zone and actively seeking opportunities for intercultural contact. It is also recommended that counselors will broach conversations around cultural identities to work with clients' symptoms and experiences in the sociopolitical context. Counselors are expected to increase their understanding of how anti-Black racism influences Black clients' experiences, presenting concerns, and their counseling relationship with clients, and provide space in counseling sessions for clients to process their experiences of microaggression and discrimination in the larger society. Counselors can use the cross-cultural counseling relationship as a tool to provide a corrective cultural experiences for clients who have experienced negative cross-cultural interactions in life and work with clients with cultural responsiveness, humility, empathy, and care.

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Table 1. Gender Identity.

Gender Identity	Frequency	%
Woman	715	73.71
Man	242	24.95
Transgender	3	0.31
Self-identify	10	1.03

Note: N = 970, Missing = 24.

Table 2. Sexual Orientation.

Sexual Orientation	Frequency	Percent
Heterosexual / Straight	786	82.3
Lesbian	19	1.99
Gay	28	2.93
Bisexual	74	7.75
Questioning	25	2.62
Self-identify	23	2.41

Note: N = 955, Missing = 39.

Table 3. Academic Status.

Academic Status	Frequency	Percent
Freshman / First-year	167	17.23
Sophomore	216	22.29
Junior	248	25.59
Senior	240	24.77
Graduate/ Professional Degree Student	90	9.29
Non-student	1	0.10
Other	7	0.72

Note: N = 969, Missing = 25.

Table 4. Prior Counseling Experience.

Prior Counseling Experience	Frequency	Percent
Never	461	65.11
Prior to college	118	16.67
After starting college	71	10.03
Both	58	8.19

Note: N = 708, Missing = 286.

Table 5. CCAPS_34 Initial and Final Distress.

CCAPS_34 Subscales	Initial Distress Means (SD)	Final Distress Means (SD)
Depression	1.85 (1.00)	1.06 (0.91)
Generalized Anxiety	1.89 (1.00)	1.35 (0.96)
Social Anxiety	1.99 (1.05)	1.57 (0.96)
Academic Distress	1.96 (1.12)	1.50 (0.96)
Eating Concerns	0.90 (1.13)	0.60 (0.93)
Hostility	1.03 (0.95)	0.58 (0.71)
Alcohol Use	0.47 (0.79)	0.29 (0.62)
Distress Index	1.82 (0.83)	1.19 (0.79)

Note: N = 994, Missing = 0.

Table 6. Descriptive Data for Center-Level Predictors.

Variable	Mean (SD)
PercentBlackTract	0.15 (0.14)
PercentBlackCounty	0.20 (0.12)
DiversityIndex_Tract	0.91 (0.25)
DiversityIndex_County	1.15 (0.23)
PercentStudent	0.14 (0.07)
PercentFaculty	0.06 (0.03)
PercentStaff	0.11 (0.06)
Anti-Black Racism	0.53 (0.35)

Note: N = 994, Missing = 0.

Table 7. Results of Four Hierarchical Linear Models Predicting Final Distress on Tract Level

	Parameter estimates (SE)			
	Model 1	Model 2	Model 3	Model 4
	Fixed effects			
Intercept	0.05597	0.07120	0.1760	0.3592**
DI_first	0.6249***	0.6251***	0.6244***	0.6277***
PercentBlackTract	0.1707			0.5973
PercentFaculty		-0.5883		0.2182
PercentStaff		-0.6555		-1.1547
PercentStudent		0.8720		0.3109
DiversityIndex_Tract			-0.1007	-0.2573**
Anti-Black Racism				-0.1755*
PercentBlackTract* Anti-Black Racism				0.08547
	Random effects			
Residual - Center	0.01155	0.01415	0.01233	Estimated G Matrix is not positive definite.
Residual	0.3508***	0.3501***	0.3504***	0.3543***
Goodness of Fit -2LL	1808.3	1801.9	1809.4	1797.8
AIC	1812.3	1805.9	1813.4	1799.8

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

Table 8. Results of Four Hierarchical Linear Models Predicting Final Distress on County Level

	Parameter estimates (SE)			
	Model 1	Model 2	Model 3	Model 4
	Fixed effects			
Intercept	0.09495	0.07120	0.1024	0.1543
DI_first	0.6245***	0.6251***	0.6245***	0.6261***
PercentBlackCounty	-0.05938			-0.2356
PercentFaculty		-0.5883		-0.4649
PercentStaff		-0.6555		-0.07148
PercentStudent		0.8720		0.7745
DiversityIndex_County			-0.01754	-0.04247
Anti-Black Racism				-0.1059
PercentBlackCounty* Anti-Black Racism				-0.06274
	Random effects			
Residual - Center	0.01264	0.01415	0.01274	0.01517
Residual	0.3506***	0.3501***	0.3506***	0.3503***
Goodness of Fit -2LL	1808.9	1801.9	1810.1	1803.6
AIC	1812.9	1805.9	1814.1	1807.6

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

Table 9. Results for Multiple Regression Model Predicting Final Distress on Tract Level.

Variables	Model 1 Unstandardized B (Beta)	Model 2 Unstandardized B (Beta)	Model 3 Unstandardized B (Beta)	Model 4 Unstandardized B (Beta)
Intercept	0.026	0.082	0.234*	0.359**
DI_first	0.626 (0.657)***	0.625 (0.656)***	0.626 (0.657)***	0.628 (0.659)***
PercentBlackTract	0.203 (0.036)	0.416 (0.075)*	0.622 (0.112)**	0.597 (0.107)
PercentFaculty		-0.216 (-0.008)	-0.295 (-0.011)	0.218 (0.139)
PercentStaff		-1.045 (-0.077)	-1.140 (-0.084)	-1.155 (-0.086)
PercentStudent		0.323 (0.029)	0.477 (0.043)	0.311 (0.028)
DiversityIndex_Tract			-0.211 (-0.065)*	-0.257 (-0.080)**
Anti-Black Racism				-0.175 (-0.077)*
PercentBlackTract* Anti-Black Racism				0.085 (0.010)
R^2	0.4324	0.4349	0.4376	0.4424

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

Table 10. Results for Multiple Regression Model Predicting Final Distress on County Level.

Variables	Model 1 Unstandardized B (Beta)	Model 2 Unstandardized B (Beta)	Model 3 Unstandardized B (Beta)	Model 4 Unstandardized B (Beta)
Intercept	0.067	0.061	0.148	0.213
DI_first	0.625 (0.656)***	0.625 (0.656)***	0.625 (0.656)***	0.626 (0.657)***
PercentBlackCounty	-0.048 (-0.007)	-0.025 (-0.004)	0.104 (0.016)	0.029 (0.004)
PercentFaculty		-1.037 (-0.039)	-0.952 (-0.036)	-0.464 (-0.017)
PercentStaff		-0.401 (-0.030)	-0.494 (-0.037)	-0.390 (-0.029)
PercentStudent		0.777 (0.069)	0.770 (0.069)	0.576 (0.051)
DiversityIndex_County			-0.092 (-0.027)	-0.081 (-0.062)
Anti-Black Racism				-0.142 (-0.062)
PercentBlackCounty* Anti-Black Racism				-0.023 (-0.002)
R^2	0.4312	0.4324	0.4329	0.4368

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

Table 11. Pearson Correlations among Predictors on the Tract Level.

	DI last	DI first	Percent Black Tract	Percent Student	Percent Faculty	Percent Staff	Diversity Index Tract	Anti-Black Racism
DI_last	1.00							
DI_first	.66***	1.00						
PercentBlack Tract	.03	-.00	1.00					
PercentStudent	-.01	-.03	.67***	1.00				
PercentFaculty	-.04	-.05	.55***	.85***	1.00			
PercentStaff	-.02	-.02	.69***	.81***	.84***	1.00		
DiversityIndex Tract	-.01	.02	.61***	.46***	.35***	.41***	1.00	
Anti-Black Racism	-.06*	.01	-.08**	-.04	.05	-.01	-.18***	1.00

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

Table 12. Pearson Correlations among Predictors on the County Level.

	DI last	DI first	Percent Black County	Percent Student	Percent Faculty	Percent Staff	Diversity Index County	Anti-Black Racism
DI_last	1.00							
DI_first	.66***	1.00						
PercentBlack County	-.01	-.01	1.00					
PercentStudent	-.01	-.03	.65***	1.00				
PercentFaculty	-.04	-.05	.60***	.85***	1.00			
PercentStaff	-.02	-.02	.84***	.81***	.84***	1.00		
DiversityIndex County	-.04	-.02	.56***	.33***	.31***	.43***	1.00	
Anti-Black Racism	-.06*	.01	-.07*	-.04	.05	-.01	-.01***	1.00

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

Table 13. Results of Four Hierarchical Logistic Models Predicting Counseling Dropout on Tract Level.

Predictor	*SE*	*OR*	Goodness of Fit (-2LL)
Model 1			4573.43
Fixed effect			
Intercept	-1.3241***		
PercentBlackTract	0.5822	1.790	
Random effect			
Residual - Center	0.2005		
Model 2			4565.17
Fixed effect			
Intercept	-1.2449***		
PercentStudent	-1.1391	0.320	
PercentStaff	2.3438	10.421	
PercentFaculty	-1.8279	0.161	
Random effect			
Residual - Center	0.2465*		
Model 3			4573.73
Fixed effect			
Intercept	-1.3297**		
DiversityIndex_Tract	0.1058	1.112	
Random effect			
Residual - Center	0.2176*		

Model 4			4568.47
Fixed effect			
Intercept	-1.3329*		
PercentBlackTract	1.7992	2.670	
PercentStudent	-2.3249	0.098	
PercentStaff	0.5654	1.760	
PercentFaculty	1.5286	4.612	
DiversityIndex_Tract	-0.04443	0.957	
Anti-Black Racism	0.2466	1.013	
PercentBlackTract* Anti-Black Racism	-1.5445		
Random effect			
Residual - Center	0.2687*		

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

Table 14. Results of Four Hierarchical Logistic Models Predicting Counseling Dropout on County Level.

Predictor	*SE*	*OR*	Goodness of Fit (-2LL)
Model 1			4572.23
Fixed effect			
Intercept	-1.2262***		
PercentBlackCounty	-0.04022	0.961	
Random effect			
Residual - Center	0.2225*		
Model 2			4565.17
Fixed effect			
Intercept	-1.2449***		
PercentStudent	-1.1391	0.320	
PercentStaff	2.3438	10.421	
PercentFaculty	-1.8279	0.161	
Random effect			
Residual - Center	0.2465*		
Model 3			4573.66
Fixed effect			
Intercept	-1.4341**		
DiversityIndex_County	0.1907	1.210	
Random effect			
Residual - Center	0.2235*		

Model 4			4568.57
Fixed effect			
Intercept	-1.7755*		
PercentBlackCounty	-1.4591	0.093	
PercentStudent	-0.9044	0.405	
PercentStaff	6.1668	476.662	
PercentFaculty	-3.5814	0.028	
DiversityIndex_County	0.4134	1.512	
Anti-Black Racism	0.3175	0.972	
PercentBlackCounty* Anti-Black Racism	-1.7353		
Random effect			
Residual - Center	0.3033*		

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

Table 15. Results for Multiple Regression Model Predicting Initial Distress, Final Distress, and Distress Change on the Tract Level.

Variables	Initial Distress Unstandardized B (Beta)	Final Distress Unstandardized B (Beta)	Distress Change Unstandardized B (Beta)
Intercept	1.752***	1.451***	-0.301**
PercentBlackTract	-0.075 (-0.013)	0.590 (0.106)*	0.665 (0.140)**
PercentFaculty	--3.850 (-0.138)	-2.098 (-0.079)	1.752 (0.078)
PercentStaff	1.212 (0.086)	-0.426 (-0.032)	-1.638 (-0.143)*
PercentStudent	0.130 (0.011)	0.387 (0.035)	0.258 (0.027)
DiversityIndex_Tract	0.119 (0.035)	-0.182 (-0.056)	-0.301 (-0.110)**
Anti-Black Racism	0.053 (0.022)	-0.131 (-0.057)	-0.183 (-0.094)**
R^2	0.006	0.011	0.019

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

Table 16. Results for Multiple Regression Model Predicting Initial Distress, Final Distress, and Distress Change on the County Level.

Variables	Initial Distress Unstandardized B (Beta)	Final Distress Unstandardized B (Beta)	Distress Change Unstandardized B (Beta)
Intercept	1.923***	1.419***	-0.503***
PercentBlackCounty	-0.046 (-0.007)	-0.004 (-0.001)	0.042 (0.008)
PercentFaculty	-4.129 (-0.148)	-3.050 (-0.115)	1.079 (0.048)
PercentStaff	1.488 (0.105)	0.532 (0.039)	-0.956 (-0.083)
PercentStudent	0.273 (0.023)	0.746 (0.067)	0.473 (0.050)
DiversityIndex_County	-0.082 (-0.023)	-0.133 (-0.039)	-0.052 (-0.018)
Anti-Black Racism	0.041 (0.017)	-0.120 (-0.052)	-0.161 (-0.083)*
R^2	0.006	0.008	0.009

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

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EDUCATION

The Pennsylvania State University University Park, PA	**Ph.D. in Counselor Education and Supervision (CACREP-Accredited)**	May 2023
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PUBLICATIONS

Hayes, J.A., Cartwright, C., & **Zhao, F.** (in press). Training therapists to manage countertransference via reflective practice. In L.G. Castonguay and C.E. Hill (Eds.), *Training and psychotherapy.* Washington, DC: American Psychological Association.

Bartholomew, T. T., Keum, B. T, Lockard, A. J., Pérez-Rojas, A. E., Robbins, K. A., & **Zhao, F**. (2023). Measurement invariance and psychometric properties of the CCAPS for international student clients. *Journal of Clinical Psychology.* Advanced online publication. http://doi.org/10.1002/jclp.23476

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TEACHING EXPERIENCE

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CNED 554 Cross-Cultural Counseling — Summer 2022
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CNED 525 Tests in Counseling — Spring 2022
CNED 526 Counseling Research — Fall 2021
CNED 595A Counselor Education Counseling Practicum — Spring 2021
CNED 506 Individual Counseling Procedures — Fall 2020

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RHS 400W Case Management and Communication Skills — Spring 2021
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