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The Role of Pereceived Racial Discrimination On Help-Seeking Intention And Psychological Distress

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THE ROLE OF PERECEIVED RACIAL DISCRIMINATION ON HELP-SEEKING INTENTION AND PSYCHOLOGICAL DISTRESS

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ABSTRACT

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Based on their experiences of perceived discrimination, Black, Indigenous, and People of Color (BIPOC) college students should theoretically be in higher need of mental health care services as perceived discrimination often increases psychological distress. However, there is a documented disparity in the utilization of services. The Theory of Planned Behavior (TPB) suggests that those with higher levels of psychological distress should be more likely to seek services. This study analyzed the relationship between race, psychological distress, and perceived racial discrimination as predictors of help-seeking intention, specifically, with the hopes of understanding the potential moderating role perceived racial discrimination plays between psychological distress and help-seeking intention and how that role might differ across racial groups. A sample of 186 college student participants was used to address these questions. Though no significant findings were discovered, possible explanations for this and directions for future research are discussed.

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CHAPTER I

INTRODUCTION TO THE STUDY

This chapter will provide a brief overview of the literature and why this study is important. The theoretical framework will be introduced. The rationale for this study will be explained. Lastly, research questions, limitations to this study, and an overview of important terms will be provided.

Background

Research has demonstrated a significant increase in the utilization of college counseling centers across the country (Center for Collegiate Mental Health [CCMH], 2015). While college enrollment increased 5.6% from 2009-2015, the number of students utilizing college counseling centers increased 29.6%. That is more than seven times the rate of increase for total enrollment. Use has been increasing and so has the prevalence of mental health concerns and psychological distress in college students (Oswalt et al., 2020). Adjustment to college could play a role in this. Students with low levels of college adjustment are significantly more likely to experience psychological distress and depressive symptoms (Horgan et al., 2016). However, studies have found that only 10% of students with significant psychological distress will ever seek professional services (Marsh & Wilcoxon, 2015). With the documented rise in utilization of services, it is alarming to consider how many students are not seeking help that could be beneficial for them. This becomes an even more significant number when looking at Black, Indigenous, and People of Color (BIPOC) students (Lipson et al., 2018).

BIPOC students are more likely to experience perceived racial discrimination than their peers (Vasquez, 2009) and perceived racial discrimination has been linked to higher rates of psychological distress (Schmitt et al., 2014). Additionally, higher levels of distress have been linked to more frequent help-seeking behaviors (Shin et al., 2017). BIPOC students should, theoretically, be in higher need of psychological help if they are experiencing higher levels of distress, which therefore suggests they should have more intention to seek help and utilize services. But we continue to see racial disparities in the use of mental health services (Cook et al., 2017). African Americans and Latinx individuals use mental health services at around half the rate of White Americans and Asian Americans use these services at one-third the rate of White Americans (Substance Abuse and Mental Health Services Administration [SAMHSA], 2019).

These disparities have been documented for decades. In 1999, the Surgeon General released a statement regarding mental health that acknowledged the disparities in utilization and quality of care across race, with White Americans receiving far better and more frequent care (U.S. Department of Health and Human Services [DHHS], 1999). This report called for change and action regarding these disparities. Since then, The National Healthcare Quality and Disparities Reports have been released yearly to monitor changes. These reports have demonstrated that over time, these disparities have improved slightly (Agency for Healthcare Research and Quality [AHRQ], 2018). However, BIPOC Americans continue to receive less and worse care than White Americans.

Through the present study, I aim to examine the potential role that perceived racial discrimination may play in the relationship between psychological distress and help-seeking intention. Because of the historical actions and injustices that have occurred, many BIPOC

individuals do not seek help for mental health concerns because they lack access and are fearful of judgment or racism from the provider (Gulliver et al., 2010). Even discrimination from sources outside of the health care setting is associated with lower utilization of needed health care (Burgess et al., 2008); however, very few studies have examined the combined impact of these factors.

The Theory of Planned Behavior – Theoretical Framework

The Theory of Planned Behavior (TPB) has been utilized to understand intentions to perform a behavior (Ajzen, 1985). At the core, this theory asserts that intentions are the greatest predictors of behaviors and while we cannot fully predict behaviors, we can work to understand and predict intentions. It is theorized that people hold beliefs about behaviors and before acting, use those beliefs to make informed decisions about the behaviors. This is often done by weighing anticipated positive and negative consequences or the expectancy-value component of the model.

The TPB was developed out of the Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1975). After some revisions, the TPB evolved into a model where three aspects are understood to predict intention to perform a behavior: attitudes towards the behavior, subjective normative beliefs, and perceived behavioral control (Ajzen, 1985). Attitudes are formed from life experience and are a key element in understanding the expectancy-value model. Subjective normative beliefs stem from relationships and interactions with others in addition to societal norms and expectations. Perceived behavioral control was the last element added to this theory. Perceived behavioral control is an important piece for it acknowledges that if someone does not believe they will be successful, they will not engage in an action. The ideas around perceived behavioral control came from Bandura's theory of self-efficacy (Ajzen, 1991). Additionally,

behavioral control encompasses the external factors, such as exposure to environmental elements and economic hardship.

The TPB is widely accepted and used in the literature as a means of understanding and predicting intention towards help-seeking (Blais & Renshaw, 2013; Kroshus et al., 2016; Zorrilla et al., 2019). Favorable attitudes towards seeking help, favorable subjective norms, and higher perceived control should predict help-seeking intention (Ajzen & Fishbein, 1980). The present study utilized the TPB by measuring help-seeking intention following the suggested framework of Ajzen (2006).

Need for this Study

There is a clear disparity in the utilization of college counseling centers. Research has shown that those who perceive more barriers are less likely to seek help (O'Connor et al., 2014). Naturally, prior research has examined some of the barriers that could exist, mostly focusing on stigma and mental health literacy. Meta-analytic studies show that stigma does impact help-seeking (Clement et al., 2015). However, stigma was only the fourth highest ranking barrier. People appear to be more concerned that their confidentiality will not be respected, especially among racial minorities, and that they will not be understood. While stigma does appear to be a barrier in help-seeking, even when culturally competent interventions have been designed to address stigma for racial minority groups, help-seeking attitudes still did not improve (McLeod, 2017).

Another significant focus in the literature to address these disparities has been around mental health literacy (Spiker & Hammer, 2019). Many researchers have hypothesized that if mental health literacy were improved, intention to seek help would increase as well; however, interventions to increase mental health literacy among college students still did not increase help-

seeking intention (Ricks, 2018) and mental health literacy does not appear to explain racial disparities in college counseling usage (McNeal, 2015).

Prior research that has attempted to understand and address the disparities for BIPOC communities has not been successful. As discussed by Burkett (2017), researchers have often focused on stigma, fear, negative attitudes towards mental health help-seeking, and the lack of culturally sensitive treatments (Copeland, 2006; Holden & Xanthos, 2009; Jang et al., 2015; Thompson, et al., 2004). However, these studies have lacked focus on some important elements and statistically, appear to be missing components when it comes to explaining the disparity. Some researchers are calling for the field to take a step back and examine different areas that may be the reason for underutilization, named "obstructed use" (Burkett, 2017). Obstructed use factors include systematic oppression, perceived racial discrimination, historical trauma, environmental toxicity, cultural mistrust, and institutional inequalities when seeking help. Burkett (2017) has pointed out that while stigma and mental health literacy are likely important aspects of help-seeking intentions, a person who does not believe they will be safe in a system that is supposed to provide help is more concerned with other problems.

Clear links have been drawn in the research between psychological distress and help-seeking (Hohls et al., 2020). Some studies suggest higher levels of distress in BIPOC communities (e.g., Chen et al., 2019). One would assume that BIPOC individuals would then have higher levels of help-seeking intention, but this is not the case (Samuel, 2015). Perceived racial discrimination has a known relationship with higher levels of distress and lower levels of well-being (Schmitt et al., 2014). It has also been shown to be linked to decreased levels of help-seeking (Powell et al., 2016). Even with all this known research, I am unaware of any studies to date that have examined how perceived racial discrimination may moderate the relationship

between psychological distress and help-seeking. Logic from known research suggests that it should, yet there is not yet any support for this idea.

This potential relationship is a crucial link to study. Previous attempts to remedy the disparities in mental health services have been widely unsuccessful. Perhaps this is because we are trying to intervene in the wrong place. As we know from Maslow's (1954) hierarchy of needs, physiological needs and safety must be met before other needs can be addressed. If BIPOC individuals do not feel safe seeking help for psychological distress from formal sources, of course they are going to find other ways of coping. By examining this relationship, the present study can add to our understanding of the disparities in use as well as provide further justification for the field of psychology to continue taking a social justice stance in standing up for equity for BIPOC communities. Specifically, counseling psychologists can engage in social justice by increasing self-reflection, education around diversity, multiculturalism, and social justice, advocating for our client's needs, and participating in macro advocacy projects (e.g., political advocacy).

Study Purpose

The purpose of this study was to analyze the relationship between race, psychological distress, and perceived racial discrimination as predictors of help-seeking intention, specifically, with the hopes of understanding the potential moderating role perceived racial discrimination plays between psychological distress and help-seeking intention and how that role might differ across racial groups. This was done by means of a non-experimental, cross-sectional, correlational research design. Survey data were collected from a group of diverse college students to explore the constructs presented and their relationships.

Research Questions

The following research questions were created to examine how perceived racial discrimination might impact the relationship between psychological distress and help-seeking intention and how help-seeking intention might differ across race. The first question was asked to establish that the foundation of existing literature was applicable to this sample, the second question was asked to compare groups, and the third and fourth questions were specifically written to address the gap in understanding when it comes to perceived racial discrimination:

Q1 What is the relationship between psychological distress and help-seeking intentions in college students?

H1 Higher levels of psychological distress are associated with higher levels of help-seeking intention.

Q2 Are there significant differences in help-seeking intention scores between racial groups?

H2 Racial minority groups show significantly lower scores of help-seeking intentions.

Q3 Do psychological distress and race predict help-seeking intention?

H3 Psychological distress and race do predict help-seeking intention.

Q4 Does perceived racial discrimination moderate the relationship between psychological distress and help-seeking intention?

H4 Perceived racial discrimination does moderate the relationship between psychological distress and help-seeking intention.

Limitations

Several limitations exist within the present study. The first limitation stems from sampling methods. All participants in this study were members of one medium sized, Western university. This could skew results and additional replication studies are needed to generalize the results (Heppner et al., 2016). Additionally, by sampling through a university, participants already have some privilege and results may not be generalizable to those that do not pursue a

higher educational degree. Efforts were made to include a diverse group of students; however, the results of the current study cannot be assumed true for others without further research.

All measures used in the current study were self-report measures. This can influence results because the responses may be answered with an emotional response to questions and cannot be externally validated (Northrup, 1997). Participants may have answered questions inaccurately due to denial of symptoms or concerns for how their answers would be interpreted. Having the survey responses anonymous and confidential controls for this to an extent. Future studies utilizing other research methods are needed to corroborate the findings of this study.

Measurement was another limitation of this study. Each construct was measured with a single scale. This could potentially lead to measurement error and bias in capturing an understanding of the constructs.

Definition of Terms

*Psychological Distress: "*A state of emotional suffering characterized by symptoms of depression and anxiety" (Drapeau et al., 2012, pg. 105)

Perceived Racial Discrimination: "Individual interpretation of a negative life event having occurred as a result of racial discrimination" (Vasquez, 2009, pg. 16)

Help-Seeking Intention: One's intent or plan seeking help, specifically in terms of professional psychological services for the purposes of this study

BIPOC: Black, Indigenous, and People of Color, a term for those that do not consider themselves to be White and that demonstrates solidarity for these communities

Traditional College Students: For the purposes of this study, traditional college students are students enrolled in full-time credits (12 hours or more) and 24 years old or younger (following guideline aspects from the National Center for Education Statistics [NCES], 2020)

Summary

This study sought to understand the role perceived racial discrimination may play between psychological distress and intentions to seek help. As most previous work has focused on stigma and mental health literacy, there is a knowledge gap as to the implications and importance of perceived racial discrimination. The results of this study may serve as a foundation for future research with the full model of the Theory of Planned Action and as a justification for future social justice advocacy.

The following chapters will provide further detail on this study. Chapter II gives an in-depth literature review of the constructs, theory, available measures, and relevant history. Chapter III provides information on the methodology utilized including research design, procedure, participants, instruments, and data analysis. Chapter IV explores the results of the data collected. Chapter V discusses the interpretation of the results and implications.

CHAPTER II

REVIEW OF THE LITERATURE

This literature review provides theoretical and empirical support for the current study. First, the Theory of Planned Behavior will be present as the framework for the current study. After this, research on psychological distress, perceived racial discrimination, and help-seeking intention across college students and race will be explored and summarized as the variables for the present study. Next, the existing measurements for the constructs are overviewed. Finally, the theoretical framework is used to summarize and provide rationale and implication for the current study.

Theoretical Framework – The Theory of Planned Behavior

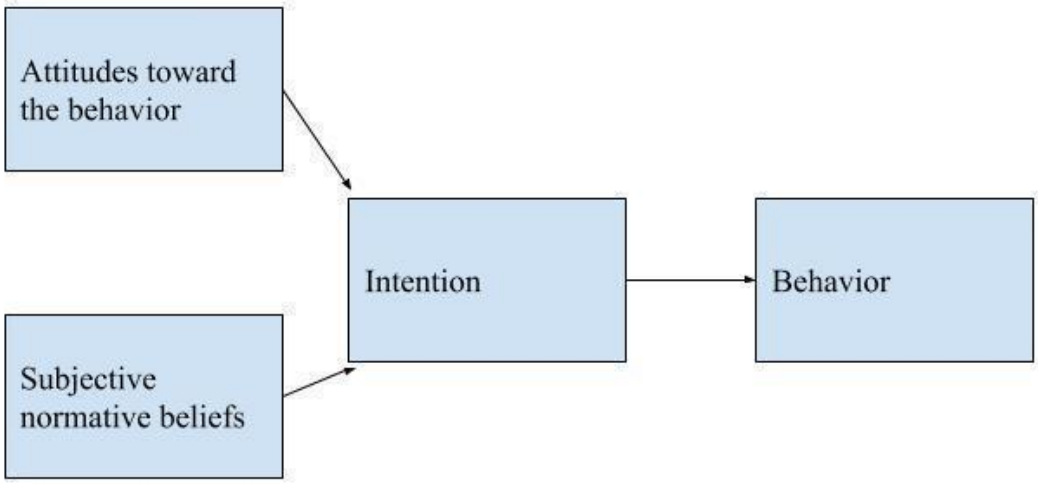
The Theory of Planned Behavior (TPB) was developed to understand the intentions one has to perform a behavior and how those intentions may influence action or behavior (Ajzen, 1985). It is theorized that people hold beliefs about behaviors and before acting, use those beliefs to make informed decisions about the behaviors. This is often done by weighing anticipated positive and negative consequences, the expectancy-value model. Theorists pointed out that this theory can only examine and predict intentions to perform a behavior and not performance of the behaviors themselves.

The TPB was developed out of the Theory of Reasoned Action (TRA; Fishbein & Ajzen, 1975). The TRA essentially asserts that attitudes and cognitions can be used to predict behavior. A person's intention to perform a behavior is the greatest predictor of the behavior happening.

Two factors were considered to contribute to intention: attitudes towards the behavior and normative social beliefs. Attitudes towards a behavior are formed from life experience and can only come from readily accessible memories. Subjective norms are the impact that others and societal pressures can have. These were theorized to directly cause intention, which could be used to predict behavior. However, that was where the TRA stopped (see Figure 1).

Figure 1

Theory of Reasoned Action

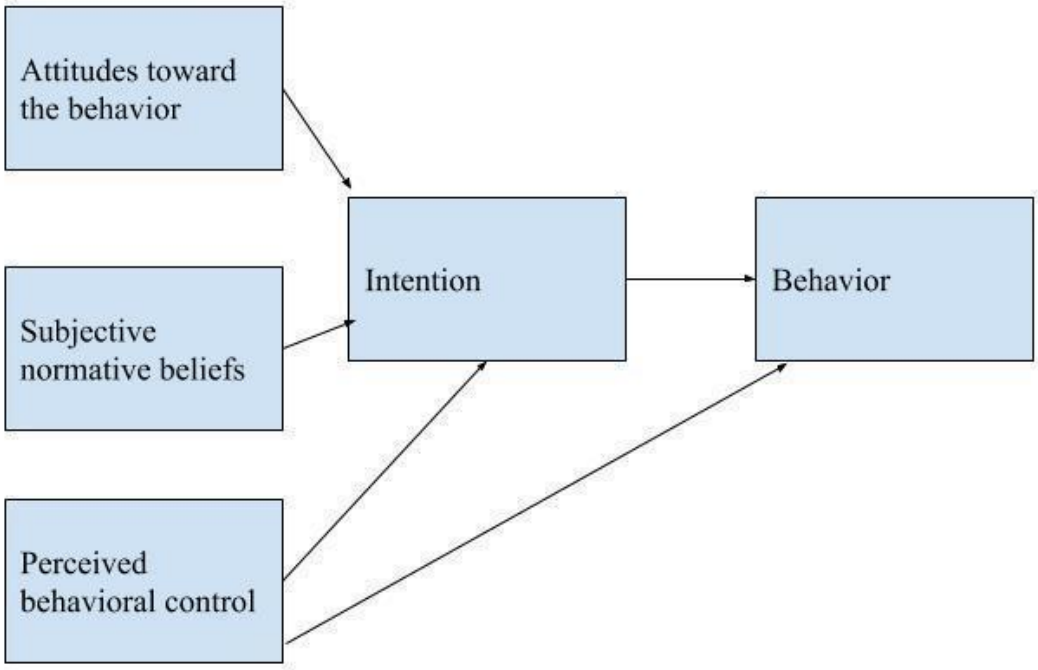


Following the creation of TRA, much research was conducted suggesting that while this is likely true, there is a piece missing (Ajzen, 1982; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). To improve upon the TRA, theorists began to examine what they were missing to understand intention and perhaps predict behavior (Ajzen, 1985). Through research, they concluded that even if someone wants to do something and believes they should, there are barriers that can impede the intention and the action. These can include access to necessary aspects of the behavior, thoughts, emotions, past behavior, and some parts of self-efficacy, such as information needed to complete the task and skills and abilities. Ajzen encompassed all of this

into a concept of perceived behavioral control. The idea being that if someone believes they could perform a behavior if they tried, they are more likely to follow through. This added aspect was also able to account for the variance missing in the TRA. Additionally, the inequities and marginalization that many people face when trying to perform goal directed behaviors were acknowledged, making this an applicable theory to people of any identity. By adding perceived behavioral control to the TRA, the TPB was formed (see Figure 2).

Figure 2

Theory of Planned Behavior



Within the TPB, there is not an assumption that people consciously evaluate each of these aspects before forming a behavior (Ajzen, 2012). There are some actions that take very little effort or attention because they are repetitively performed everyday (e.g., brushing one's teeth, driving to work, or typing; Ajzen, 1985). There are other actions that require thoughtfulness and intention. These are generally situations that present obstacles or new choices. However, using

the TPB, there is little difference in the ability to predict everyday behavior and behavior in novel situations (Ajzen, 2012). This suggests that the concept intention is still impacting one's routine, the process may just be less conscious than it is with new situations that require more conscious thought.

In summary, the TPB asserts that by considering one's attitudes towards a behavior, normative beliefs about the behavior, and perceived behavioral control, intention can be measured (Ajzen, 1985). By using intention and perceived behavioral control, researchers can predict behavior to a relatively high degree of success (Ajzen, 2011). Researchers have examined intention to utilize public transportation when a prepaid ticket was introduced to a college community and then followed up one year later (Bamberg et al., 2003). Using a sample of 1,316 college students, researchers demonstrated that intention to utilize bus transportation was able to predict the behavior of bus usage with some success with correlations ranging from 0.49 to 0.72. Ultimately, the theory is not meant to predict behavior but to predict intention (Ajzen, 2011). Because of outside factors that are not included in this model and are often unable to be measured, such as lack of access, inequities and marginalization, and unforeseen circumstantial barriers, intention cannot always predict behavior, though it clarifies it.

The TPB has been used in various studies examining racial group differences. Researchers have examined racial group differences in intentions towards safe work behaviors (Guerin et al., 2018), contraceptive decision making (DeMaria et al., 2019), and stress and coping (Blanchard, 2018). Additional studies have focused on specific racial groups and risky sexual behaviors (Broaddus et al., 2016), seeking medical treatment (Hasan et al., 2019), physical activity (Zhang et al., 2019), wellness (Amuneke-Nze et al., 2019).

The TPB is widely accepted and used in the literature as a means of understanding and predicting intention towards help-seeking (Blais & Renshaw, 2013; Kroshus et al., 2016; Zorrilla et al., 2019). It has even been frequently used specifically with college students (Amarasuriya et al., 2015; Barksdale & Molock, 2009; Dschaak et al., 2019; Hess & Tracey, 2013; Shea et al., 2017; Tedrick Parikh & Servaty-Seib, 2013). Attitudes towards help-seeking, subjective norms, and perceived behavioral control can predict one's intention to seek help (Ajzen & Fishbein, 1980). More specifically, favorable attitudes towards seeking help, favorable subjective norms, and higher perceived control should predict help-seeking intention, which can serve cautiously as a predictor to help-seeking behaviors.

Additionally, measures exist, such as the Mental Help-Seeking Intention Scale (MHSIS; Hammer & Spiker, 2018) that measure intention directly. Measuring intention is the best predictor of future behavior (Ajzen, 2011). Though many have studied intention through measuring each attitude towards help-seeking, subjective norms, and perceived behavioral control, Hammer and Spiker (2018) found that this single measure of intention accounts for the majority of variance and can predict future help-seeking behavior around 70% of the time. When compared to other measures of help-seeking intention (discussed in more detail later in this chapter), the MHSIS has the strongest support for a unidimensional construct and psychometric properties and stronger psychometric properties than many of the scales that measure attitudes towards help-seeking, subjective norms, and perceived behavioral control alone. Utilizing scales for these three aspects of the TPB could impact reliability and validity based on the efficacy of existing scales and likely do not measure intention as effectively as this unitary scale.

Psychological Distress in College Students

Recent research has demonstrated a sharp increase in the utilization of college counseling centers. While college enrollment increased 5.6% from 2009-2015, the number of students utilizing college counseling centers increased 29.6%, that is more than seven times the rate of increase for total enrollment (CCMH, 2015). More than 95% of college campuses report concern with meeting the growing needs of counseling for their students (Lipson et al., 2019). To accommodate for this recent increase, approximately 50 percent of college counseling centers are hiring additional staff (Association for University and College Counseling Center Directors [AUCCCD], 2018). On average, this still leaves one counselor on campus for every 1,737 students and students are waiting an average of 6.5 business days to attend their first session.

There is some research to support that it is not just utilization that is increasing but that the severity of mental health concerns and psychological distress are increasing as well (Oswalt et al., 2020). The top concerns among students' college counseling centers are reporting are depression, anxiety, and overall psychological distress (AUCCCD, 2018). In the spring of 2019, 54,497 college students were surveyed (American College Health Association [ACHA], 2019). Of those surveyed, 66.4% reported experiencing “overwhelming anxiety” and 72.0% reported feeling “very sad” in the past year (ACHA, 2019). Psychological distress is becoming more widespread for college students and perhaps more severe.

To some extent, this phenomenon does appear to be specific to those enrolled in colleges and universities. In a large-scale study, researchers compared the survey result data of 6,479 college student participants to age-matched general population data from national survey results (Stallman, 2011). They found very high levels of psychological distress in 19.2% of students. This is significantly greater from the general population data where only 3% of people reported

very high levels of distress. This difference in psychological distress for college students compared to the general population appears to hold true in some other countries (e.g., Ethiopia) as well (Tesfaye Kelemu et al., 2020; Tessema et al., 2019).

Even though there is an increase in the utilization of college counseling centers and 83.9% of students reporting elevated levels of psychological stress (Stallman, 2011), on average only 11.8% of students on college campuses are being served by counseling services (AUCCCD, 2018). Another study found that only 10% of students with significant psychological distress will ever seek professional services (Marsh & Wilcoxon, 2015). Some research suggests that while those college students with higher levels of psychological distress are more likely to use mental health services, around 75% of students with clinical levels of distress will never seek out help (Rosenthal & Wilson, 2008).

It is particularly concerning to consider the number of students that are not seeking services that could be beneficial to them when examining the rates of suicide among college students. Surveys have also shown an increase in suicidality among college students and suicide is currently the second leading cause of death among college aged individuals (Centers for Disease Control and Prevention [CDC], 2020). One study surveyed 5,572 college students across 12 countries and found that overall, 28.8% of participants endorsed suicidal thoughts and 7% reported at least one previous suicide attempt (Eskin et al., 2016). In all 12 countries, higher levels of psychological distress were related to higher odds of suicidal ideation. Data indicate that 28.4% of students that do utilize college counseling services report suicidal thoughts as their presenting concern (AUCCCD, 2018). This percentage has slowly increased each year since the start of this annual report in 2007 when 13.8% of students reported suicidal thoughts were their presenting concern (AUCCCD, 2007). This is data from students that have sought counseling.

These percentages could be even higher among those that do not seek help. Percentages vary across studies, likely depending on rate of survey response, but some research suggests that up to 34.2% of college students have seriously considered suicide (Turner et al., 2013).

Researchers have taken note of the disparities between utilization of mental health care services and psychological distress. Some data suggest that lack of mental health literacy and stigma are preventing students from seeking services (Gagnon et al., 2017). These concepts are like the attitude's aspect of the TPB. Others have acknowledged the cohort differences in the upbringing of Generation Z (Rickes, 2016). Researchers are beginning to hypothesize that today's college students have been greatly impacted by growing up in a time of recession, having technology be an integral part of their lives since birth, and being frequently exposed to violent events like wars and mass shootings (Di Blasia et al., 2016; Odgers & Russell, 2017; Thomée, 2018). With these cultural differences in Generation Z's lived experience, their beliefs, and attitudes from the TPB may be somewhat different than previous generations.

Adjustment to college could be another important factor in the prevalence of distress. The freshman year often marks the first-time individuals live on their own. Students are faced with the stress of school, a sudden increase in responsibilities, trying to make and maintain friendships, many encounter substance use for the first time (Boyle et al., 2016), and data suggest many are sexually assaulted (Bureau of Justice Statistics [BJS], 2014). Students with low levels of adjustment to college are significantly more likely to experience psychological distress and depressive symptoms (Horgan et al., 2016). These students could have lower levels of perceived behavioral control.

All these aspects of distress are not only important for helping the students but also for universities because higher levels of distress are linked to lower GPAs and retention rates

(Eisenberg & Lipson, 2014). Counseling services do appear to help in academic performance for 65.8% of clients and in retention for 63.2% (AUCCCD, 2018). The underutilization of services when distress is present could be a factor in retention that colleges and universities are able to attend to. Some universities and colleges appear to be noticing this and are providing additional funding and resources to provide support and mental health counseling to students (Lipson et al., 2019).

This problem between utilization and distress becomes even more apparent when focusing on racial minority college students. There is evidence that Black, Indigenous, and People of Color (BIPOC) students may have undetected mental health struggles (Chen et al., 2019; DeFreitas et al., 2018). Researchers utilized national data from 93,034 college students and found that racially diverse students were less likely to report psychiatric diagnoses than White students but more likely to endorse symptoms of depression. Other studies do not show differences in the prevalence of psychological distress across race but found that BIPOC students are significantly less likely to receive counseling services (Lipson et al., 2018). Researchers used national data from 43,374 students and found little variation in symptom prevalence across race. However, there were significant differences in the utilization of counseling services where White students are significantly more likely to seek and receive counseling. Researchers also noted the need for future research to examine the role that attitudes towards help-seeking may play in this disparity. Another study found that African American males underutilize mental health services even though they demonstrate significant psychological distress, African American women received more pharmacology for depression rather than counseling, and African Americans overall used college counseling services less than White Americans (Whaley & Dubose, 2018). When we consider that most college counseling centers offer free services to students, access to

care does not appear to be the barrier. The services that most college counseling centers provide (AUCCCD, 2018) allow us to examine what other factors might be impacting the utilization of services as cost, which is often a barrier in accessing services, is not relevant.

When considering more severe and persistent mental illness, higher rates of posttraumatic stress disorder have been noted among African Americans and less than half of minority individuals with PTSD sought treatment (Roberts et al., 2011). Another study also found higher rates of PTSD in African American participants (Alim et al., 2006). The disparities decreased when researchers controlled for SES. This could indicate a lack of access to services. However, one study compared mental health care utilization across racial groups between veterans (n = 1,124) and civilians (n = 7,439) (De Luca et al., 2016). With Veteran Affairs services available, access to care becomes less of a barrier. These researchers found that among veterans, there were no significant differences in the utilization of mental health care across race but there was among civilians. White participants did not differ in utilization, but BIPOC participants that were veterans were significantly more likely to utilize mental health care than civilians. Black and Latinx veterans were more than three times more likely to receive care than Black and Latinx non-veterans. A slightly higher percentage of veterans in the study utilized mental health care compared to non-veterans but this was not a statistically significant difference. Lack of access could be a potential reason for the differences in utilization that we continue to see. Additionally, veterans do experience mental illness at higher rates than civilians and there are significant pushes to encourage help-seeking among veterans. It is important to consider these aspects. Many college counseling centers offer free services (AUCCCD, 2018), which in theory should eliminate barriers to access but does not appear to impact the disparities. It is also possible that having an integrated care facility could increase utilization in the veteran

population. Of college counseling centers that are integrated with physical health services, 76% of directors report that they are better able to meet the needs of students (Anderson et al., 2010). While integrated care can help outcomes for racially diverse individuals, there are still several barriers related to mistrust of both medical and psychiatric providers (Sanchez et al., 2016). To my knowledge at this time, no studies have examined the role of integrated care on improving disparities in college counseling specifically but only in community based integrated care settings. This is a needed area of exploration for future researchers.

Researchers appear to agree that psychological distress is increasing in college students and becoming a problem across the country (Lipson et al., 2019). Research also continues to demonstrate disparities in the utilization of mental health care services, particularly for BIPOC individuals (Lipson et al., 2018). Even with access to free counseling services, BIPOC students are underutilizing those services (Whaley & Dubose, 2018). The present study posits that perceived racial discrimination could be the missing construct in understanding these phenomena in undergraduate college students.

Perceived Racial Discrimination

Perceived racial discrimination is the "individual interpretation of a negative life event having occurred because of racial discrimination" (Vasquez, 2009, pg. 16). This construct is important to measure because discrimination can have subjective meaning and consequences that depend on the privilege and identities that a person holds (Schmitt & Branscombe, 2002). Perceived racial discrimination is believed to result in pain so no matter the intention behind the behavior, it is important to the person being discriminated against. It is therefore crucial to measure perceived racial discrimination rather than blatant acts of discrimination because of the

consequences these events can have. In this study, perceived racial discrimination will include things like experiences of unfair treatment, racist name calling, and being misunderstood.

Specifically, with college students, perceived racial discrimination can have many negative impacts. BIPOC college students that experience perceived racial discrimination were more likely to have poor mental health and experience imposter feelings (McClain et al., 2016). Perceived racial discrimination in college students has been linked to significantly higher rates of risky behaviors such as substance use and risky sexual behaviors (Heads et al., 2017). Others have found that perceived racial discrimination is a strong predictor of poor sleep quality in college students (Hoggard & Hill, 2018). One student found that those who experience perceived racial discrimination are likely to have lower levels of adjustment to college. (Kiang et al., 2016). Others have found that these students are less likely to succeed academically in college, suggesting this could explain some of the racial disparities in academic performance (Stevens et al., 2018). Longitudinal national data indicate that from 2004-2019, campus culture was cited as a reason for leaving college by 34% of non-persisters and unsafe or hostile environments were noted by 17% of all non-persisters (National Survey of Student Engagement [NSSE], 2020). This number is likely higher for minority non-persisters. Overall, college students that experience perceived racial discrimination appear to be at higher risk for mental health difficulties, risky behaviors, and sleep difficulties and may be less likely to persist, adjust to, and succeed in college compared to their peers that do not experience discrimination.

There are several other impacts of perceived racial discrimination that have been explored in community-based samples. One meta-analytic study found that perceived racial discrimination is linked to higher rates of illness in BIPOC individuals (Gee et al., 2009). Another meta-analytic study found a relationship between higher perceived racial discrimination

and lower psychological well-being (Schmitt et al., 2014). There were larger effect sizes for marginalized groups (r = -0.24) compared to advantaged groups (r = -0.10). Perceived racial discrimination has been linked to higher rates of psychological distress and other mental and physical health concerns with Asian American (Syed & Juan, 2012; Tummala-Narra et al., 2018; Yip et al., 2008) African American (Goosby et al., 2015; Sims et al., 2016; Wagner & Abbott, 2007), and Latinx (Cheng et al., 2019; Garcini et al., 2018; Molina et al., 2019) identified individuals. Unfortunately, much of the research in psychology fails to be applicable to BIPOC communities because they are underrepresented in the research. Though this is in no way the fault of these groups but is the result of historical trauma, it can limit our understanding and generalizability.

Perceived racial discrimination can have a significant impact on the lives of those experiencing discrimination. However, very few studies have examined the role of perceived racial discrimination with help-seeking (Carter & Forsyth, 2010; Cheng et al., 2013; Tummala-Narra et al., 2018) and to the writer's knowledge, none have examined the potential moderating role between psychological distress and attitudes towards help-seeking. The present study aims to address this gap.

Help-Seeking Intention

While intention is only one aspect of the Theory of Planned Behavior (Ajzen, 1985), it is the greatest predictor of future behavior (Ajzen, 2012). In the field of psychology, we are unable to fully predict behaviors because of the unknown factors that impact people’s lives. However, the Theory of Planned Behavior can cautiously allow us to understand future behavior through measuring intention. While intention does not fully predict behavior, it is a strong predictor (Ajzen, 2011). Intention towards help-seeking is specifically being examined in the context of

help for mental health concerns for the purposes of this study. Help-seeking has been examined in the context of mental health extensively (e.g., Sagar-Ouriaghli et al., 2019; Schomerus et al., 2019; Spence et al., 2016) including multiple studies with diverse samples (e.g., Grupp et al., 2019; Suka et al., 2015, 2018; Yu et al., 2015) and in samples of college students (e.g., DeBate et al., 2018; Goodwin et al., 2016; Ibrahim et al., 2019; Seyfi et al., 2013).

One longitudinal study examined how help-seeking intentions and help-seeking behaviors differ (Nagai, 2015). Subjective needs positively impacted both help-seeking intention and behavior, depression symptoms negatively impacted help-seeking intention and positively impacted help-seeking behavior, and social support positively impacted help-seeking intention. The depression aspect of this study is confusing. Perhaps depression symptoms specifically impact intention and behavior differently as many who experience symptoms of depression struggle to follow through with actions (Radke et al., 2014), perhaps due to perceived behavioral control. Though there are some differences in intentions, attitudes, and behaviors, as discussed above, intention can be measured as a stand-alone construct in this theory.

Through understanding help-seeking intention in the context of mental health, some studies have found support for various interventions. One randomized control trial study found that effective psychoeducation can increase the intention to seek help in young adults for mental health concerns (Taylor-Rodgers & Batterham, 2014). Another study examined a humorous psychoeducational show and found it to be effective in increasing help-seeking intention (Wright et al., 2014). To form interventions to address the disparities in mental health care utilization by race, more research is needed to understand how perceived racial discrimination might be impacting the problem. The present study adds to this body of literature so that future interventions may be formed with more understanding and research support.

Psychological Distress and Help-Seeking

There is a clear link between psychological distress and help-seeking that has been consistently found in the literature. Higher levels of distress have been linked to a perceived need for help which predicts more frequent help-seeking behaviors (Shin et al., 2017). Others have found the same link that more distress predicts formal help-seeking (Hohls et al., 2020). Those with mild levels of distress may prefer or be more likely to seek informal sources of help (Walters et al., 2008). As distress increases, positive attitudes towards seeking professional help increases as well. There is some evidence that higher levels of distress can diminish the impact of stigma on help-seeking (Surapaneni et al., 2019). Meaning, if distress becomes very high and unbearable, people are more likely to have intentions to see help.

There is some evidence to suggest that this holds true across races. However, it does differ slightly between racial groups. One student compared Asian American college students to White American students and found what when using a Kessler Psychological Distress Scale (K6; Kessler et al., 2002) cut score of 5, Asian American students in significant distress were significantly less likely to seek help than White American students in similar levels of distress (Kim & Zane, 2016).

These findings apply to college students too. One study found that college students with higher levels of psychological distress were more likely to seek help (Wadman et al., 2019). Among suicidal college students, distress, perceived need, belief that treatment would be effective, and contact with other users of services were related to help-seeking behaviors (Downs & Eisenberg, 2012). Essentially, the more someone needs help, the more likely they are to seek it and to have intention to seek it.

Help-Seeking Across Race

There are disparities in the utilization of mental health care services across race. There is a clear relationship between psychological distress and help-seeking intention and research to suggest that psychological distress exists in even higher levels for BIPOC individuals. One study found that 25% of Latinx immigrants would meet the Patient Health Questionnaire 9 (PHQ-9) criteria for a diagnosis of depression but very few of them are seeking help from formal sources (Caplan & Buyske, 2015). Others compared help-seeking behaviors between race (Ayalon & Young, 2005). Black college students were significantly less likely to seek help than White college students. Another study examined the usage of mental health services with suicidality and found that even if the need is higher for other racial groups, White individuals use services more than any other group (Freedenthal, 2007), suggesting higher levels of help-seeking behaviors.

This is not new information. A study from 2003 found that BIPOC individuals are less likely to use mental health services, especially if they live in areas of high poverty (Chow et al., 2003). Studies show that there have been no improvements in the racial disparities in utilization of mental health care services from 2004 to 2012 and found that disparities have been exacerbated over time for African American and Latinx groups (Cook et al., 2017). Even with researchers focusing on interventions around mental health literacy and stigma, these disparities are not improving.

One reason for this could be that BIPOC students are more likely to seek help from parents, friends, partners, and professors compared to more formal sources (Blanchard, 2018). Some researchers found that African Americans were more willing than White and Asian American college students to use study skills and time management training resources but no

other counseling-related sources (Sheu & Sedlacek, 2017). Another reason could be that it feels more costly to seek help from someone outside of one's own group identity (Wakefield et al., 2014) and many college counselors are White. The impact of discrimination on distress is clear and research shows that many BIPOC individuals experience microaggressions and blatant racism even from mental health professionals (Sue & Sue, 2016).

Perceived Racial Discrimination and Help-Seeking

It is important to consider the impact of perceived racial discrimination from professionals. In one study, African American, Latinx, and Asian American participants believed they would have received better medical care if they were White and thought medical staff judged them unfairly or treated them with disrespect based on race and how well they spoke English (Johnson et al., 2004). In another study, researchers called mental health professionals and left voicemails inquiring about services using names that sounded more “White” (Allison) or “Black” (Lakisha; Shin et al., 2016). Clinicians were equally likely to call both groups back but left voicemails for those with white-sounding names at a 12% higher rate. Others noted higher rates of misdiagnosis among African Americans who do seek mental health services (Friedman & Paradis, 2019). BIPOC individuals are often over pathologized by medical and mental health professionals (Suite et al., 2007). Experiences of racism cause mistrust in the mental health care system (Alang, 2019). The mistreatment of BIPOC communities is happening, even by professionals in a field that promotes values of respect, diversity, and social justice. This mistreatment could be a reason why these individuals are not seeking services, even when they need them.

Some have discussed that help-seeking is interpersonal in nature for most forms of help-seeking, it is necessary to involve others into one’s problems and struggles (Nir, 2009). When

there is a hierarchy and some people hold less power, such as marginalized groups or clients seeking counseling, they are less likely to engage in help-seeking behavior. One study found that among other barriers, many young people do not seek help for mental health concerns because they do not trust the providers, have lack of access, and are fearful of judgment or racism from the provider (Gulliver et al., 2010). In a study of African American adolescents that were being released from the juvenile justice system, participants indicated that they would not seek mental health services because they did not trust providers and believed that the treatment would be ineffective (Samuel, 2015). Another study demonstrated that African American's who hold more distrust for the healthcare system than White Americans are more likely to hold negative attitudes towards help-seeking than those with higher levels of trust (Nickerson et al., 1994).

Frequent and everyday racism contributes to beliefs that there will be high barriers to help-seeking (Powell et al., 2016). BIPOC authors have named some of these barriers and distrust in the system and fear of racism in therapy (Taylor & Kuo, 2019). One seminal study demonstrated higher rates of early termination when African American clients do not trust their clinician and/or perceive discrimination happening (Terrell & Terrell, 1984). This was more common with White counselors and linked to cultural mistrust. Some cultural mistrust stems from the historical mistreatment (Watkins et al., 1989). Additionally, incidents of microaggressions, misdiagnosis, and lack of cultural humility by counselors are related to perceived racial discrimination (Taylor & Kuo, 2019). This continues to be demonstrated in the literature (Townes et al., 2009). Cultural mistrust has predicted variance in mental-health help-seeking that was not accounted for by income, generational states, loss of face, and adherence to Asian cultural values in Filipino Americans (David, 2010). In a study that included Black, Latinx, Asian American, American Indian, and Biracial individuals, participants who had direct

experiences of racism had higher levels of anxiety, guilt/shame, and hyper vigilance (Carter & Forsyth, 2010). These BIPOC individuals were more likely to seek help from family and friends than from mental health professionals. Additionally, many racial groups believe that counseling is not for them (Fripp & Carlson, 2017). BIPOC individuals often seek support for difficulties within their family, religious community, or other informal sources and do not believe in seeking professional services (Scott et al., 2015). Those that hold these beliefs are less likely to engage in help-seeking behavior (Masuda et al., 2012). These aspects of their experience relate to the attitude's component of the TPB. Racism is happening by professionals to clients. BIPOC communities are fearful of experiencing racism or believe counseling is not for them and are therefore not seeking the services and help that they need.

Research has demonstrated that even discrimination from sources outside of the health care setting are associated to lower utilization of needed health care (Burgess et al., 2008). These researchers found that everyday discrimination from non-health care sources (e.g., employers, public service providers, and authority figures), major discrimination events, and discrimination from health care providers all independently contributed to lower utilization of needed medical care even after adjusting for measures of structural discrimination. Others have found a direct link in experiences of racism from any source and negative attitudes towards help-seeking (Kim et al., 2016).

Perceived racial discrimination has been linked to higher levels of stress (Kaduvettor-Davidson & Inman, 2013). Higher levels of stress should lead to more intention to seek help. However, perhaps the perceived racial discrimination is getting in the way of this process and moderating the relationship between distress and help-seeking. Perhaps perceived racial

discrimination is the reason people that need help are not getting it. The main goal of the present study is to examine this potential relationship.

Measurement

Psychological Distress

Numerous measures exist to assess psychological distress, and many have strong psychometric properties (see Table 1). Some of these measures have been used in research around help-seeking but were developed as outcome measures to assess change over the course of psychotherapy (Clinical Outcomes in Routine Evaluation-Outcome Measure [CORE-OM], Barkham et al., 2001; Outcome Questionnaire [OQ 45.2], Lambert et al., 1996; Counseling Center Assessment of Psychological Symptoms [CCAPS-34], Locke et al., 2012). For each of these outcome measures, there are additional barriers for this specific study. There is some disagreement on how the items on the CORE-OM should load onto factors (Lyne et al., 2006). Presently, the CORE-OM assesses four subscales of problems, functioning, well-being, and risk, which, when measured together, produce a global level of distress (Barkham et al., 2001). However, some researchers suggest that separating risk and eliminating the other subscales within psychological distress would be more psychometrically sound (Lyne et al., 2006). Similarly, on the OQ 45.2, research with college students demonstrates that while there is strong support for the Symptom Distress subscale, there is less evidence to have Interpersonal Relations and Social Roles as their own subscales (Boswell et al., 2013). The CCAPS-34 has been widely researched as an effective outcome measure, but very little research has been conducted with the CCAPS as a stand-alone assessment of psychological distress. Others have called for further exploration of its utility, but it has yet to be examined in-depth (McAleavey et al., 2012).

There are also measures of psychological distress that were developed for the purposes of screening by medical providers (Patient Health Questionnaire [PHQ-9], Kroenke et al., 2001; General Health Questionnaire [GHQ-28], Goldberg, 1978). The PHQ-9 has been used widely and has even been used in research around help-seeking (Barney et al., 2006; Parent et al., 2018). However, the PHQ-9 exclusively examines symptoms of depression. While this is important information to the present study, meta-analytic research has shown that perceived racial discrimination can create psychological distress beyond symptoms of depression (Schmitt et al., 2014). A broader measure of distress is needed to gain a full understanding of the impacts. The GHQ-28 has been used widely in research and in research with college students, but there is some disagreement regarding acceptable cut-off scores (Makowska et al., 2002). Additionally, both versions of the Kessler Psychological Distress Scale (K10 and K6) were found to have better discriminatory power than the GHQ-28 in the detection of DSM-IV diagnoses of depression and anxiety (Furukawa et al., 2003).

Of the measures examined, only the K10 and K6 were designed to measure and monitor non-specific psychological distress for any population type (Kessler et al., 2002). These measures have been researched in relation to help-seeking (Hammer et al., 2018) and perceived racial discrimination (Feng & Xu, 2015). The present study utilized the K10 as it was shown to be marginally better than the K6 as a screening tool, however both are psychometrically sound measures (Furukawa et al., 2003). With all factors considered, the K10 was selected to serve as a well-rounded, yet psychometrically sound measure of general psychological distress.

Table 1

Major Measures of Psychological Distress

Measure	No. of Items/Scaling	Psychometric Data	Factors Included
* Kessler Psychological Distress Scale (K10; Kessler et al., 2002)	10-item self-report measure, 5-point Likert-type scale	Cronbach's α estimate of 0.92; construct validity with GHQ-12 and DSM-IV diagnoses of depression and anxiety	Intended to measure non-specific psychological distress; has also been used to screen for anxiety and mood disorders with the assumption that higher distress may indicate one of these common disorders
Kessler Psychological Distress Scale (K6; Kessler et al., 2002)	6-item self-report measure, 5-point Likert-type scale	Cronbach's α estimates of 0.89 - 0.92; construct validity with GHQ-12 and DSM-IV diagnoses of depression and anxiety	Intended to measure non-specific psychological distress; has also been used to screen for anxiety and mood disorders with the assumption that higher distress may indicate one of these common disorders
Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001)	9-item self-report measure, 4-point Likert-type scale	Cronbach's α estimates of 0.86-0.89; construct validity with GHQ-12 and DSM-IV diagnosis of depression	Developed for the use of medical professionals to screen for depression
General Health Questionnaire (GHQ-28; Goldberg, 1978)	28-item self-report measure, 4-point Likert-type scale	Cronbach's α estimates of 0.84 - 0.93 for subscales (LoBello, 1995); construct validity with BDI	Assesses across 4 subscales: Somatic Symptoms (7 items), Anxiety/Insomnia (7 items), Social Dysfunction (7 items), and Severe Depression (7 items); Developed to monitor psychological distress and screen for psychiatric disorders in medical settings; Has been widely used in research with a lot of disagreements of cut-score thresholds
Clinical Outcomes in Routine Evaluation-Outcome Measure (CORE-OM; Barkham et al., 2001)	34-item self-report measure, 5-point Likert-type scale	Cronbach's α estimates of 0.75 - 0.94 for the subscales; construct validity with the BDI, BAI, BSI, and IIP-32	Assesses across 4 subscales: Problems (12 items), Functioning (12 items), Well-Being (4 items), and Risk (6 items); All items together can be used to measure global levels of distress; Normed in both clinical and non-clinical populations; Has been mostly used to assess change over the course of psychotherapy
Outcome Questionnaire (OQ 45.2; Lambert et al., 1996)	45-item self-report measure, 5-point Likert-type scale	Cronbach's α estimates of 0.70 - 0.93 for the subscales; construct validity with the BDI and SCL-90-R	Assesses across 3 subscales: Symptom Distress (25 items), Interpersonal Relations (11 items), and Social Role (9 items); All items together can be used to measure global levels of distress; Normed in both clinical and non-clinical populations; Has been mostly used to assess change over the course of psychotherapy
Counseling Center Assessment of Psychological Symptoms (CCAPS-34; Locke et al., 2012)	34-item self-report measure, 5-point Likert-type scale	Cronbach's α estimates of 0.76 - 0.92 for the subscales; construct validity with the BDI, BAI, SPDQ, AUDIT, SACQ, EAT-26, STAXI-2, and MCSD	Assesses across 7 subscales: Depression (6 items), Generalized Anxiety (6 items), Social Anxiety (5 items), Academic Distress (4 items), Eating Concerns (3 items), Hostility (6 items), and Substance Use (4 items); Additionally produces a global level of distress score; Normed for use of college counseling centers; Has been mostly used to assess change over the course of psychotherapy

Note. * Denotes chosen scale for the present study

Perceived Racial Discrimination

Measures of perceived racial discrimination have been created with varying psychometric success (see Table 2). The Experience of Discrimination Scale (EOD) was only normed with Latinx and African American participants (Krieger et al., 2005). Additionally, to the writer's knowledge, the EOD has been used in research exclusively to evaluate medical healthcare related decisions (Kossler et al., 2011; Suglia et al., 2010) and there is some disagreement as to the utility of the items (Janevic et al., 2015). The Everyday Discrimination Scale (EDS) was created as a tool to see the impact that perceived racial discrimination can have on one's life (Williams et al., 1997). Though it was initially only normed with African Americans, it has since been used across different racial groups, including Native Americans (Gonzales et al., 2016). However, there is some evidence that the EDS constructs may not assess equally or meaningfully across diverse racial groups (Harnois et al., 2019; Kim et al., 2014). The Scale of Ethnic Experience (SEE) has demonstrated promising validity and reliability across subscales, including perceived racial discrimination (Malcarne et al., 2006). However, there has been limited research utilizing the scale outside of the medical healthcare system (Thomas et al., 2006; Tomfohr et al., 2012). Further research is needed to demonstrate the psychometric utility of this scale. As the present study is concerned with the interaction perceived racial discrimination may have with psychological distress and help-seeking intention, it is important to use a scale that is both psychometrically reliable across race and that has been used in research related to psychological distress and/or help-seeking intention.

While the Schedule of Racist Events (SRE) demonstrated strong evidence for validity and reliability, it measured experiences of discrimination only in African Americans (Klonoff & Landrine, 1999). Researchers adapted the SRE to the General Ethnic Discrimination Scale

(GED) to create a measure of perceived racial discrimination that would be valid and reliable across race (Landrine et al., 2006). The present study used the GED because it has strong support for use across races and has been previously used in research focused on psychological distress (Vasquez, 2009) and on help-seeking (Cheng et al., 2013).

Table 2

Major Measures of Perceived Racial Discrimination

Measure	No. of Items/Scaling	Psychometric Data	Factors Included
* General Ethnic Discrimination Scale (GED; Landrine et al., 2006)	18-item self-report measure, 6-point Likert-type scale	Cronbach's α estimates of 0.94 - 0.95 across racial groups; construct validity with the SRE	Each item can be asked on subscales of recent discrimination, lifetime discriminable, and appraisal of stress caused; developed to be used together or individually; asks about frequency of perceived racist events
Schedule of Racist Events (SRE; Klonoff & Landrine, 1999)	18-item self-report measure, 6-point Likert-type scale	Cronbach's α estimates of 0.94 - 0.95 for African Americans across subscales; concurrent validity with HSCL-58	Each item can be asked on subscales of recent discrimination, lifetime discriminable, and appraisal of stress caused; developed to be used together or individually; asks about frequency of perceived racist events
Everyday Discrimination Scale (EDS; Williams et al., 1997)	9-item self-report measure, 6-point Likert-type scale	Cronbach's α estimates of 0.88 for African Americans across subscales; convergent validity with K10	Asks about experiences of unfair treatment in daily life and asks uses to estimate the number of times things have occurred; Only normed with African Americans
Experiences of Discrimination (EOD; Krieger et al., 2005)	10-item self-report measure, 5-point Likert-type scale	Cronbach's α estimates of 0.74 - 0.86 in racial groups; construct validity with EDS	Asks about experiences of discrimination in specific situations; used in relation to medical healthcare related decisions
Scale of Ethnic Experience (SEE; Malcarne et al., 2006)	32-item self-report measure, 5-point Likert-type scale	Cronbach's α estimates of 0.76 - 0.91 in racial groups across subscales; construct validity with MEIM, AAAS-R, ARSMA, and SL-ASIA based on reported identity	Measures four factors of Ethnic Identity (12 items), Perceived Racial Discrimination (9 items), Mainstream Comfort (6 items), and Social affiliation (5 items); Normed with African Americans, Caucasian Americans, Filipino Americans, and Mexican Americans

Note. * Denotes chosen scale for the present study

Help-Seeking Intention

Fewer instruments exist to measure psychological help-seeking intention. There are a number that examine help-seeking attitudes (Attitudes Toward Seeking Professional Psychological Help-Short Form [ATSPPH-SF], Fischer & Farina, 1995; Inventory of Attitudes Toward Seeking Mental Health Services [IASMHS], Mackenzie et al., 2004; Mental Help-Seeking Attitudes Scale [MHSAS], Hammer et al., 2018), help-seeking behaviors (Actual Help-Seeking Questionnaire [AHSQ], Rickwood & Braithwaite, 1994), help-seeking stigma (Devaluation-Discrimination [D-D], Link et al., 1989; Perceptions of Stigmatization by Others for Seeking Help [PSOSH], Vogel et al., 2009; Self-Stigma of Depression Scale [SSDS], Barney et al., 2010; Self-Stigma of Seeking Help [SSOSH], Vogel et al., 2006; Stigma Scale for Receiving Psychological Help [SSRPH], Komiya et al., 2000), and help-seeking barriers (Barriers to Adolescents Seeking Help [BASH], Kuhl et al., 1997; Barriers to Help-Seeking Scale [BHSS], Mansfield et al., 2005). However, the present study is concerned with psychological help-seeking intentions. The psychometric properties of three scales were examined to determine which measure would be the best fit for this study (see Table 3).

The Intentions to Seek Counseling Inventory (ISCI; Cash et al., 1975; Cepeda-Benito & Short, 1998) is the most commonly used assessment of help-seeking intention (Hammer & Spiker, 2018). This is an assessment of intention to seek counseling based on common concerns college students experience. However, there is some debate on the factor structure of this assessment (Pheko et al., 2013) and sufficient reliability has not been consistent in previous research with some researchers demonstrating Cronbach's α estimates under 0.70 (Demyan & Anderson, 2012; Vogel et al., 2005).

To improve upon scales such as the ISCI, the General Help-Seeking Questionnaire (GHSQ) was formed (Wilson et al., 2005). While efforts were made in the development of this scale to follow the recommendations of Ajzen (2006) on writing scales utilizing the Theory of Planned Behavior, the psychometrics of the GHSQ are questionable. At the origin, developers claimed this could be used as a one factor scale of help-seeking intention. However, others have found evidence for a five or six factor structure (Wilson & Deane, 2012; Wilson et al., 2011). Authors originally found a Cronbach's α estimate of 0.85 (Wilson et al., 2005) but since alpha levels of less than 0.66 have been demonstrated (Hasking et al., 2015; McDermott et al., 2017). Authors also claimed that the GHSQ had predictive validity, but the scale only accounted for 2.9% of the variance in help-seeking behavior at follow-up (Wilson et al., 2005).

The Mental Help-Seeking Intention Scale (MHSIS; Hammer & Spiker, 2018) was developed following Ajzen's guidelines (2006). Many iterations of this scale have been developed and used (Hammer & Vogel, 2013; Hess & Tracey, 2013; Mo & Mak, 2009). Most recently, this version of the scale has been adopted into the literature (Ess, 2019; Hammer et al., 2019a; Hammer et al., 2019b). Of the scales for help-seeking intention, this is the only scale that appears to consistently have a unidimensional factor structure (Hammer & Spiker, 2018). Researchers also found that the MHSIS correctly predicted future help-seeking behavior for mental health for around 70% of participants. This scale had the strongest evidence of predictive validity when compared to the ISCI and the GHSQ. When considering the importance of psychometrics and the existing data, the MHSIS was selected for the present study.

Table 3

Major Measures of Help-Seeking Intention

Measure	No. of Items/Scaling	Psychometric Data	Factors Included
*Mental Help-Seeking Intention Scale (MHSIS; Hammer & Spiker, 2018)	3-item self-report measure, 7-point Likert-type scale	Cronbach's α estimate of 0.87; convergent validity with positive attitudes towards help-seeking	Assess intention to seek help from a mental health professional for mental health concerns; Follows recommendations from Ajzen (2006) to assess intention
Intention of Seeking Counseling Inventory (ISCI; Cash et al., 1975; Cepeda-Benito & Short, 1998)	17-item self-report measure, 5-point Likert-type scale	Cronbach's α estimates of 0.71 - 0.90; convergent validity with positive attitudes towards help-seeking and prior help-seeking behavior (Lannin et al., 2014; Vogel et al., 2006)	Assess intention to seek counseling based on issues that often bring college students to counseling; Items load onto three factor subscales of psychological and interpersonal concerns (10 items), academic concerns (4 items), and drug-use concerns (2 items); When used together, assess one global score of help-seeking intention towards counseling
General Help-Seeking Questionnaire (GHSQ; Wilson, et al., 2005)	10-item self-report measure, 6-point Likert-type scale	Cronbach's α estimates of 0.70 - 0.85; divergent validity with BASH-B	Assess intention towards seeking help from a variety of sources for personal/emotional problems and suicidal thoughts; Follows recommendations from Ajzen (2006) to assess intention

Note. * Denotes chosen scale for the present study

Summary

When taken together, the literature review suggests that psychological distress is rising in college students, higher levels of distress are linked to higher intention to seek help, perceived racial discrimination increases distress, and perceived racial discrimination happens more frequently for BIPOC individuals. However, BIPOC communities are less likely to utilize mental health care services. Yet to be explored in the literature is what role perceived racial discrimination may be playing between the clear link of psychological distress and intentions towards help-seeking. The Theory of Planned Behavior suggests that intention to seek help is the greatest predictor of help-seeking behavior. By measuring help-seeking intention in relation to perceived racial discrimination, psychological, and race, the present study can potentially aid in our understanding of the disparities that exist in mental health care.

In this chapter, theoretical and empirical overviews were presented for the constructs examined in the present study. Findings from relevant literature were synthesized and organized to introduce the Theory of Planned Behavior, psychological distress, help-seeking intention, and perceived racial discrimination. The interactions of these constructs were explored. Specifically, the cultural differences and impacts of race on these aspects were described. Lastly, the existing measures of the constructs were explored for fit and psychometric soundness. Though it is impossible to ever conduct a completed literature review because of limitations and constraints (literature search methods, search terms, and human error), this review was conducted with the intention of fully examining and explaining existing literature. The following chapter will describe the methodology for the study. This will include information on recruitment, participants, instrumentation, and statistical analyses.

CHAPTER III

METHODOLOGY

The current study used a non-experimental, cross-sectional, correlational research design to examine relationships between help-seeking intention, psychological distress, perceived racial discrimination, and race among college undergraduate students. Diverse students were recruited through a first-year seminar course to complete a survey of measures using online survey software (Qualtrics, 2020). The following measures were used to operationalize the constructs and are supported by previous theoretical and empirical research (see Chapter II). Help-seeking intention was measured using the Mental Help-Seeking Intention Scale (MHSIS; Hammer & Spiker, 2018). The Kessler Psychological Distress Scale (K10; Kessler et al., 2002) measured non-specific psychological distress within the previous 28 days. The General Ethnic Discrimination Scale (GED; Landrine et al., 2006) was used to measure perceived lifetime discrimination. This chapter contains information on participants, procedures, measures, research questions and hypotheses, and data analysis procedures that were used in this study.

Participants

Convenience sampling was used to recruit participants through a first-year seminar undergraduate course at a medium size (N = 13,000), public, 4-year, Rocky Mountain region university. The target population of this study was college students. However, due to lack of access in all college students, the accessible population were students enrolled in a first-year seminar undergraduate course at one university. Data were collected during the fall semester of

2020 and approximately 325 students were enrolled in this course. This course is generally demographically representative of the university. This course is focused on success and retention in college. It is open to all undergraduate students at the university, required of certain groups (e.g., undeclared students, students on academic probation, and TRIO students – a federally funded program to assist disadvantaged students, and highly recommended for other groups (e.g., business, honors, and psychology students). Generally, 40% of the students enrolled in this course identify as BIPOC students, 50% are first generation college students, and 65% identify as women. This is representative of university enrollment for fall 2020 (37.3% BIPOC students, 43% first generation college students, and 69.3% identify as women) but is not necessarily nationally representative, creating a limitation to the generalizability of this study. Nationally, 45% of students enrolled in college identify as BIPOC students (NCES, 2020), 56% are first generation college students (RTI International, 2019), and 63% of students identify as women.

Statistical power analysis has long been agreed upon as a necessary step to determine a minimum sample size when conducting statistical analysis, including a multiple hierarchical regression analysis (Cohen, 1988). A power analysis allows researchers to increase the probability that the statistical outcomes detected are a "true" effect with practical significance (Osborne, 2015). Though this is widely discussed as best practices, very few research studies report calculating power before collecting data and few meet the acceptable criteria. For the current study, an a priori power analysis was conducted using G*Power 3.1 before data collection began (Faul et al., 2009). A power analysis was run in preparation for the regression model. For the regression, a minimum of 68 participants were the estimated required to run the appropriate statistical analyses based on the medium effect size of $f^2 = 0.15$ (Cohen, 1992), alpha of 0.05, power of 0.8, using five predictors (perceived racial discrimination, psychological

distress, and four groups for race minus one [3 dummy variables]). A minimum of 68 participants were needed to complete the statistical analysis for this study.

Overview of Sample

The initial sample included 195 individuals. However, due to not meeting inclusion criteria or not completing the required items (race demographic item and all three MHSIS items), 9 participants were removed from the analysis. Internet Protocol (IP) addresses for participants were examined to identify potential duplicate responses and no duplicates were identified. The sample used for analysis included 186 participants, above the necessary 68 participants needed based on the power analysis. With 325 total students enrolled in this course for the fall semester of 2020, the response rate was 58.46%. While this sample was representative of the university, there was an underrepresentation of BIPOC students and first-generation college students compared to national averages. Demographic characteristics of the sample are further summarized in Table 4.

Table 4

Demographic Characteristics of Participants (N = 186)

Variable	***N***	**Range**	***M* ± *SD***
Age (years)	186	18 - 21	18.28 ±.527
Variable		***n***	**%**
Racial Identity	Asian, Native Hawaiian, or Pacific Islander	4	2.2
	Black or African American	11	5.9
	Latino/a/x or Hispanic	32	17.2
	Middle Eastern or Arab	0	0.0
	Native American, American Indian, or	1	0.5
	Alaskan Native	114	61.3
	White	24	12.9
	Multiracial		
Year in School	Freshmen	176	94.6
	Sophomore	6	3.2
	Junior	1	0.5
	Senior	2	1.1
	Prefer not to answer	1	0.5
Gender Identity	Female/Woman	123	66.1
	Male/Man	53	28.5
	Trans Female/Trans Woman	0	0.0
	Trans Male/Trans Man	3	1.6
	Nonbinary	5	2.7
	Prefer not to answer	2	1.1
Sexual Orientation	Bisexual	27	14.5
	Gay	5	2.7
	Heterosexual/Straight	134	72.0
	Lesbian	4	2.2
	Queer	3	1.6
	Questioning	4	2.2
	Asexual	1	0.5
	Pansexual	4	2.2
	Prefer not to answer	4	2.2
First-Generation Student Status	Yes	75	40.3
	No	109	58.6
	Prefer not to answer	2	1.1
International Student Status	Yes	5	2.7
	No	180	96.8
	Prefer not to answer	1	0.5

Instrumentation

Demographics

The 16-item demographic questionnaire first asked participants to disclose age with a direct entry question, year in school with a checkbox (e.g., freshmen, sophomore), and full-time student status with a yes or no checkbox. These questions were asked first as they are the inclusion criteria for the study. Those that did not meet the inclusion criteria of being over 18, under the age of 24 (traditional aged college students), undergraduate college students, and full-time students were directed to a debriefing screen. Others were asked additional demographic questions around gender identity with checkbox options, sexual orientation with checkbox options, race with checkbox options, international student status with yes or no options, nationality with checkbox options, stressfulness of current and childhood financial situations with checkbox options, if they have ever received mental health care services, and assesses their beliefs about mental health care services with yes or no options (see Appendix A). All demographic questions included a "prefer not to answer" option, in line with the best practices to be inclusive and multiculturally sensitive (Fernandez et al., 2016; Hughes et al., 2016; Treiman et al., 2012). Checkboxes were used to allow for multiple identity selections so that participants could select all that apply, and a blank option was available to fill in for most questions. Participants were asked about gender instead of sex with options for trans male/man, trans female/women, and nonbinary. Race was used as an independent variable in the present study. Other demographic data that was collected was used to explain the demographics of the sample and to explore other potential relationships and generate possible future research ideas. The demographics questionnaire was presented first, and the remaining measures were presented in randomized order. Further exploration of this method is discussed in the procedures below.

Help-Seeking Intention

Help-seeking intention was measured using the Mental Help-Seeking Intention Scale (MHSIS; Hammer & Spiker, 2018). The MHSIS is a 3-item, self-report measure that utilizes a 7-point Likert-type scale which differs by question. All items are intended to measure a single factor of help-seeking intention. Scores are calculated by finding the mean of responses. Scores from all three items are added together and then divided by three. Scores can range from 1 to 7, with higher scores indicating more intention to seek help for mental health concerns. The first item stated, "If I had a mental health concern, I would intend to seek help from a mental health professional." Possible answers ranged from 1 (*extremely unlikely*) to 7 (*extremely likely*) (see Appendix B). The second item stated, "If I had a mental health concern, I would try to seek help from a mental health professional." Possible answers ranged from 1 (*definitely false*) to 7 (*definitely true*). The final item stated, "If I had a mental health concern, I would plan to seek help from a mental health professional." Possible answers ranged from 1 (*strongly disagree*) to 7 (*strongly agree*). Hammer and Spiker (2018) have demonstrated excellent internal consistency reliability with Cronbach's α of 0.94 in a large sample of community-based adults. Additionally, authors found evidence of predictive validity with around 70% accuracy of predicting future help-seeking behaviors.

As this is a relatively new measure, less evidence exists to support reliability for a similar sample. However, other studies have utilized this measure and demonstrated support for internal consistency (Cronbach's α of 0.95 - 0.97) in multiple samples (Hammer et al., 2019a, 2019b; Spiker et al., 2020; Stanfield, 2019). Additionally, there is some additional evidence demonstrating internal consistency (Cronbach's α of 0.093) in a college-based sample (Digal & Gagnon, 2020) and the MHSIS has even been used alongside the K10 with college students

(Digal & Gagnon, 2020). There is little evidence to support the use of this measure in diverse samples. This is one way the present study added to the existing body of research. For this sample, the average MHSIS score was 4.47 with a standard deviation of 1.44. Scores ranged from 1 to 7 and Cronbach's α for this sample was excellent with 0.94.

Psychological Distress

The Kessler Psychological Distress Scale (K10; Kessler et al., 2002) measured non-specific psychological distress to screen for anxiety and mood disorder symptoms within the previous 28 days. The scale contains 10 self-report items, which were designed to measure global psychological distress (see Appendix C). This self-report measure has participants respond to questions on a 5-point Likert-type scale ranging from 1 (*none of the time*) to 5 (*all of the time*). Scores can range from 10 to 50 with higher scores indicating more psychological distress. An example of a question is, "In the past 4 weeks, about how often did you feel so depressed that nothing could cheer you up?" (see Appendix C). Authors (Kessler et al., 2002) have demonstrated excellent internal consistency reliability with Cronbach's α of 0.92 in a college-based sample.

Overall, the K10 has demonstrated good internal consistency estimates (Cronbach's α estimates of 0.83 - 0.92) in multiple samples (Andersen et al., 2011; Bostean et al., 2019; Jakobsen et al., 2017; Syed & Juan, 2012). Good internal consistency was shown in a large sample of college undergraduates (N = 6,479; Cronbach's α = 0.89; Stallman, 2011). Evidence of construct-related validity was demonstrated by scores on the K10 reflecting accuracy of DSM-IV diagnoses of depression and anxiety (Fassaert et al., 2009). The K10 has been widely used in Western and non-Western countries as a screening and outcome measures in mental health

settings. Research has demonstrated valid cross-cultural usage and K10 scores have been evaluated to be consistent across race (Stolk et al., 2014).

Research has demonstrated good internal consistency estimates in samples that were Latinx identified (Cronbach's α = 0.92; Bostean et al., 2019), African American identified (Cronbach's α = 0.86; Schwing et al., 2013), and Asian American identified (Cronbach's α = 0.91; Kim, 2017). The K10 has even been shown to be positive related to perceived racial discrimination in samples of Asian Americans (Syed & Juan, 2012; Yip et al., 2008), providing further support for its use in this study. For this sample, the average K10 score was 26.31 with a standard deviation of 8.96. Scores ranged from 10 to 47 and Cronbach's α for this sample was excellent with 0.93.

Perceived Racial Discrimination

The General Ethnic Discrimination Scale (GED; Landrine et al., 2006) was used to measure perceived lifetime discrimination (see Appendix D). The GED is an 18-item, self-report measure that utilizes a 6-point Likert-type scale. In full form, each item examines the frequency of perceived racist events in participants past year, frequency in entire life, and appraised level of stress caused by these events. These range from 1 (*never)* to 6 (*almost all the time*). Scores can range from 18 to 108 with higher scores indicating more experiences of perceived racial discrimination. An example is, "How often have people misunderstood your intentions and motives because of your race/ethnic group?" When each item is asked in all three ways, they then load onto three subscales of recent discrimination, lifetime discrimination, and appraisal of stress caused. However, because the present study is concerned with the lifetime impact of perceived racial discrimination, each question was only asked in relation to lifetime frequency. The GED was developed to support the use of each subscale individually or to use them together

(Landrine et al., 2006) and others have used the GED lifetime frequency subscale as a standalone measure (Cheng et al., 2013).

The GED was developed as an extension of the Schedule of Racist Events (Klonoff & Landrine, 1999) to measure perceived racial discrimination across different races and capture different sources of discrimination. The GED is an extension as it was adapted to be applicable to all races, not just African Americans. While scores from the Schedule of Racist Events have demonstrated strong validity and reliability evidence when used with community-based samples, it has only been used to measure these experiences of discrimination in African Americans. Excellent internal consistency reliability has been shown for the GED with samples of diverse college students (Cronbach's α of 0.94; Cheng et al., 2013), Asian American identified (Cronbach's α of 0.94; Kaduvettoor-Davidson & Inman, 2013), and Latinx identified (Cronbach's α of 0.90; Vasquez, 2009). The Schedule of Racist Events appears to be often used in African American identified samples rather than the GED (DeBlaere & Moradi, 2008; Lewis et al., 2019) as it was developed for use with African American participants. However, authors (Landrine et al., 2006) did demonstrate excellent internal consistency reliability with African Americans when developing the GED (Cronbach's α of 0.93; Landrine et al., 2006). Evidence of construct validity has been demonstrated with the GED as a strong predictor for psychiatric symptoms alongside the Hopkins Symptom Checklist-58 (Cronbach's α of 0.94; HSCL-58; Landrine et al., 2006). For this sample, the average GED score was 25.85 with a standard deviation of 9.91. Scores ranged from 18 to 67 and Cronbach's α for this sample was excellent with 0.93.

Procedures

Before beginning recruitment and data collection, approval from the host university's Internal Review Board (IRB) was obtained (see Appendix F). Following IRB approval, the researcher contacted the director of the first-year seminar program at the university and asked for permission to send an electronic Qualtrics (2020) survey to their students. Instructors of each section were provided with the survey link to share with their classes for data collection. These links were shared via the classes online learning platform with a recruitment statement (see Appendix I). Participants were voluntary and did not receive any course credit for participating in this study. However, some instructors offered extra credit to those that completed the survey as one of many extra credit opportunities offered in the course. As an incentive for participation, participants were informed that upon full completion of the study, they could choose to be entered to receive one of three $25 Amazon gift cards.

On the Qualtrics (2020) survey, each participant was first shown an informed consent form (see Appendix G) that outlined the general purpose of the study, potential risks and benefits of participation, confidentiality procedures, and information that they could terminate participation at any time without penalty. Participants were also provided contact information for the researcher, research advisor, and university IRB board. Participants then agreed to the consent form by selecting the statement, "By clicking here, I affirm that I am at least 18 years of age and voluntarily agree to participate." Participants were then directed to select a "continue" button to begin the survey. By not having participants sign an informed consent document, participant anonymity was preserved.

The study was created and distributed using Qualtrics (2020). After participants completed the informed consent process, they were presented with the study survey. Measures

for the study (Appendices B, C, and D) were adapted to web-based format by typing in the information and creating Likert-type response options. Participants selected their responses by indicating a choose one button that corresponded to the Likert-type scales. The measures were presented in their entirety and in a random order for each participant. For example, one participant initially received the K10 (Kessler et al., 2002), while another participant initially received the MHSIS (Hammer & Spiker, 2018). This approach was used to lessen the potential of response order effects. However, the exception to this randomization was that the demographics questionnaire was placed at the beginning of the survey. Previous researchers have found that placing demographic questions at the start of a survey increases response rate by 10% without impacting response rate for non-demographic items in surveys (Teclaw et al., 2012). This decision was made to increase response rates to demographic questions, especially considering that the demographic responses were central to some of the research questions. Additionally, the only exclusion criteria for this study are to be enrolled full-time as an undergraduate college student and to be 24 years old or younger (following guideline aspects for defining traditional versus nontraditional college students; NCES, 2020). By asking for demographic questions first, participants over the age of 24 and not enrolled in full time undergraduate credits can be screened from the study before taking time to complete the measures.

Data collection for all participants occurred during the Fall academic semester of 2020. Responses to the survey that consisted of the measures discussed below were stored on Qualtrics' (2020) secure servers before being downloaded to the researcher's password-protected computer and imported into SPSS software (25.0). After completing the survey measures, which was estimated to take between 15-20 minutes, participants were shown a debriefing form (see

Appendix H). Debriefing information thanked the participants for their time, restated the purpose of this study, included information on how to access counseling services on and off campus, and included a link to enter a drawing to win one of three $25 Amazon gift cards. Drawing information only required the students email address and was collected using Qualtrics' anonymized raffle survey layout. This information was collected in a separate survey to protect participant confidentiality.

Research Questions and Hypotheses

The following research questions were created to examine how perceived racial discrimination might impact the relationship between psychological distress and help-seeking intention and how help-seeking intention might differ across race. The first question was asked to establish that the foundation of existing literature was applicable to this sample:

Q1 What is the relationship between psychological distress and help-seeking intentions in college students?

H1 Higher levels of psychological distress are associated with higher levels of help-seeking intention.

Q2 Are there significant differences in help-seeking intention scores between racial groups?

H2 Racial minority groups show significantly lower scores of help-seeking intentions.

Q3 Do psychological distress and race predict help-seeking intention?

H3 Psychological distress and race do predict help-seeking intention.

Q4 Does perceived racial discrimination moderate the relationship between psychological distress and help-seeking intention?

H4 Perceived racial discrimination does moderate the relationship between psychological distress and help-seeking intention.

Data Analysis

After online data collection were completed, data were downloaded and imported into SPSS software (25.0) where data were cleaned to ensure the most accurate statistical data were

utilized. During the demographic form portion of the survey, participants that were 24 years old or older and participants that were not enrolled full-time as undergraduate students were excluded from the study. Internet Protocol (IP) addresses were inspected to eliminate possible duplicate responses. Additionally, missing data is common, particularly in web-based surveys (Manfreda et al., 2008). When missing data occurs in very small amounts that appear to be random, deletion of the case is often not warranted (Tabachnick & Fidell, 2013). Participants missing responses to 10% or more of items from any one measure were omitted from the analyses. If missing data occurred at less than 10% of a measure, the participant was still included. The only exceptions were the demographic question about race and if any responses were missing from the MHSIS. Those who did not answer the question about race will be omitted from analyses as this is a central component of the study. Those who did not respond to all three items of the MHSIS were also omitted based on the guidance of the measure developers to not score this measure with missing data as it only has three items (Hammer & Spiker, 2018).

Pearson and Spearman correlations was computed to answer the first research question, n independent-samples t-test was run to address the second research questions, and multiple hierarchical regression analyses were conducted to address the third and fourth research questions. Before conducting further statistical procedures, descriptive analyses were conducted. Descriptive analyses were used to determine the reliability for the measures used for this specific sample, produce descriptive information (e.g., means, standard deviations, correlation matrices), and examine the demographic makeup for the sample. Dummy coded variables were utilized for categorical demographic variables (e.g., race, gender identity).

Research Question

Q1 What is the relationship between psychological distress and help-seeking intentions in college students?

H1 Higher levels of psychological distress are associated with higher levels of help-seeking intention.

Following descriptive statistics, A Pearson correlation was computed to answer and determine the relationship between psychological distress and help-seeking intention. The assumptions of linearity and normality were violated so an additional Spearman's correlation was conducted. Based on prior research discussed in Chapter 2, higher levels of psychological distress should have been correlated to higher levels of help-seeking intention. As will be shown in Chapter 4, this hypothesis was not supported. This would have provided foundation in the Theory of Planned Behavior to conduct the remaining analyses (Ajzen, 1985).

Research Question 2

Q2 Are there significant differences in help-seeking intention scores between racial groups?

H2 Racial minority groups show significantly lower scores of help-seeking intentions.

It was planned to conduct a one-way ANOVA. Initially, participants were classified into six groups: Asian, Native Hawaiian, or Pacific Islander (n = 4), Black or African American (n = 11), Latino/a/x or Hispanic (n = 32), Native American, American Indian, or Alaskan Native (n = 1), White (n = 114), and Multiracial (n = 24). Due to the low number of participants in some racial groups, the decision was made to condense participants into two groups, White participants (n = 114, 61.3%), and BIPOC participants (n = 72, 38.7%). While this is not an ideal representation of each racial group, it was necessary statistically in this study. Due to this shift in participant grouping, the statistically analysis used was changed to an independent-samples t-test to compare the means of the two different groups rather than utilizing an ANOVA to compare across six groups.

Prior to conducting the independent-samples t-test, assumptions were tested to meet criteria (Wilcox, 2012). The assumptions of an the independent-samples t-test are as follows:

independence of observations, no significant outliers, normality, and homogeneity of variances. The assumption of independence of observations was partially addressed prior to the start of the study with each participant only being instructed to participate one time and is not likely to be violated in this type of research design. The assumption of outliers was addressed by visually examining boxplots. The assumption of normality was tested using a Shapiro-Wilk test. The assumption of homogeneity of variances was addressed using Levene's test. As will be shown in Chapter 4 the assumptions of outliers, homogeneity of variances, and normality were violated.

Once assumption testing was completed, the mean help-seeking intention scores for each of the two groups were compared to assess for significant group differences. Following the t-test, post hoc analyses were run. This was an important foundation for the primary analysis of multiple hierarchical regression for it would provide support that differences are occurring between groups, however, this hypothesis was not supported (Chapter 4).

Research Questions 3 and 4

Q3 Do psychological distress and race predict help-seeking intention?

H3 Psychological distress and race do predict help-seeking intention.

Q4 Does perceived racial discrimination moderate the relationship between psychological distress and help-seeking intention?

H4 Perceived racial discrimination does moderate the relationship between psychological distress and help-seeking intention.

Prior to the primary analysis of regression, assumptions for multiple hierarchical regression were tested to meet criteria (Tabachnick & Fidell, 2013). The assumptions of multiple hierarchical regression are as follows: independence of observations, linearity, no multicollinearity, normal distribution of error, homoscedasticity, and the absence of measurement error. The assumption of independence of observations was partially addressed prior to the start of the study with each participant only being instructed to participate one time

and is not likely to be violated in this type of research design. To test for linearity, residual scatter plots were visually examined to establish if a linear relationship existed between any of the variables collectively. The assumption of linearity was violated. To test for multicollinearity, a variance of inflation factor (VIF) was run, and no values were higher than 10, therefore there was no evidence of extreme multicollinearity. To test for normality, the Shapiro-Wilks test was used. Additionally, a normal Q-Q plot of the residuals was visually inspected. The Shapiro-Wilks test violated the assumption of normality, but the Q-Q plot of residuals showed normal distribution. Lastly, to test for homoscedasticity, a scatterplot between residuals versus predicted values was visually inspected. There was no clear pattern, therefore the assumption was met. To further ensure this, a Durban-Watson test was conducted and demonstrated homoscedasticity. Further information on these assumptions will be discussed in Chapter 4.

The multiple hierarchical regressions were run. A multiple hierarchical regression allows for examination of variance that multiple predictor variables can explain for one dependent variable (Tabachnick & Fidell, 2013). Steps should be based on theoretical foundations and previous research. The change in variances between steps in a sequential method allows researchers to explain differences that may be occurring beyond what has been previously researched. The present study added perceived racial discrimination to the existing understanding from the Theory of Planned Behavior and prior research (see Chapter 2) that higher levels of psychological distress should predict higher levels of help-seeking intention. Beyond just examining the additional variance explained, it was hypothesized that perceived racial discrimination may be moderating the relationship between these variables. Meaning, that between psychological distress and help-seeking intention, perceived racial discrimination is

impacting the relationship. This would explain some of the existing disparity in mental health care usage.

To assess for moderation in a multiple hierarchical regression, two models must be conducted and then compared for significant change (Tabachnick & Fidell, 2013). The first model included the dependent variable of help-seeking intention and the two independent variables of race and psychological distress. The dependent variable of help-seeking was first entered. Then, the two independent or predictor variables of race and psychological distress were entered. This model addressed the third research question and assessed if psychological distress and race predicted help-seeking intention by examining the change in R^2.

Following the first model, a second model was run to be compared to the first. To conduct this analysis, a new variable named, "interaction" was added to the data set within SPSS to represent the interaction between perceived racial discrimination and psychological distress. This interaction variable was created from the multiplication of these two variables. The new interaction variable and psychological distress first needed to be centered to address multicollinearity. Centering is the act of subtracting the constant mean from the variable to redefine zero (Tabachnick & Fidell, 2013). By centering and redefining zero, the value of the new variable will begin from zero. Perceived racial discrimination and psychological distress held different zero points because of the different Likert type scales used to measure them. Centering creates a unique value that is not impacted by these different scales. Additionally, this is important in this regression model because the new variable that was created includes psychological distress and psychological distress is being entered on its own as well. This would create a problem of multicollinearity if centering was not conducted as the values would have overlapped.

After creating the interaction variable and centering, the regression models could be run. The second model added the new interaction variable that was created in addition to the first model. The three independent or predictor variables of race, psychological distress, and interaction were entered after the dependent variable of help-seeking intention was entered. This was done to address the fourth research question and examine if this interaction influences help-seeking intention given a R^2. The R^2's of these two models were compared to see if there was a significant increase. An increase would suggest moderation was occurring because it would mean the relationship that perceived racial discrimination has with psychological distress significantly impacts help-seeking intention. Chapter 4 will further explore finding but no significant differences were found when comparing models.

CHAPTER IV

RESULTS

This chapter presents the data analysis procedures and results exploring the potential relationships between help-seeking intention, psychological distress, perceived racial discrimination, and race. First, the scores of each measure will be explored. Then, a correlation is explored to answer research question 1. Next, the results of both independent-samples t-test and multiple hierarchical regression assumptions and analyses are presented to address questions 2, 3, and 4. Finally, post-hoc analyses are described.

Results of Measures Used

For this sample, the average MHSIS score (Hammer & Spiker, 2018) was 4.47 with a standard deviation of 1.44 and scores ranged from 1 to 7. As this is a relatively new measure, there is less existing research to compare these scores against. However, other researchers have found similar average scores (5.02) on the MHSIS with college students (Digal & Gagnon, 2020), suggesting the help-seeking intentions of this sample are like other samples of college students. In this sample, average MHSIS scores did not differ significantly across race (more than one standard deviation) except for the average score for Native Americans, American Indians, or Alaskan Natives. However, there was only one participant that identified as Native American, American Indian, or Alaskan Native so it is difficult to draw any conclusions about this difference. When participants were combined into two groups (White and BIPOC), as will

be necessary for statistical procedures, there were no significant differences between the two groups in MHSIS scores (Table 5).

The average K10 score (Kessler et al., 2002) was 26.31 with a standard deviation of 8.96 and scores ranged from 10 to 47. Though the K10 is often used as a continuous measure of psychological distress, scores greater than 20 are generally indicative of high distress. Only around 13% of the general adult population will score higher than a 20 (Andrews & Slade, 2001). The average score of this sample was 26.31 and 65.05% of participants scored over a 20. This average and frequency suggest higher levels of distress in this sample than in the general population. Like the MHSIS, average K10 scores did not differ significantly across race (more than one standard deviation) except for the average score for Native Americans, American Indians, or Alaskan Natives. When combined into two groups, there were no significant differences between the groups in K10 scores (Table 5).

The average GED score (Landrine et al., 2006) was 25.85 with a standard deviation of 9.91 and scores ranged from 18 to 67. The average overall GED score in prior research is 31.79 (Landrine et al., 2006). This average score is slightly lower for White individuals (26.48) and high for BIPOC individuals (all having averages over 30). In this sample, the average score of Black or African American participants (38.09) and Native Americans, American Indians, or Alaskan Natives (47) was more than one standard deviation greater than the average (25.85) and one or more standard deviations above the average score for White participants (21.37). This demonstrates more experience of perceived racial discrimination in some BIPOC individuals than in White individuals. When combined into two groups, there were no significant differences between the groups in GED scores. However, the large number of White participants in this study likely impacted these results and did influence the average GED score (Table 5).

Table 5

Average Measure Scores by Racial Group (N = 186)

Race	Average MHSIS	Average K10	Average GED
Asian, Native Hawaiian, or Pacific Islander	5.25	21.25	30.25
Black or African American	4.79	26.18	38.09
Latino/a/x or Hispanic	3.71	27.59	33.59
Native American, American Indian, or Alaskan Native	6.00	43.00	47.00
White	4.63	26.18	21.37
Multiracial	4.44	25.46	29.58
BIPOC	4.24	26.53	31.94
Total	4.47	26.31	25.85

In addition to the demographic information explored in Chapter 3, a few questions were asked in the demographics items to gain a broader sense of the demographic sample and to aid in post-hoc analyses. Table 6 provides a breakdown of the participants' self-reported current financial situation. This was assessed by the question, “How would you describe your financial situation right now (please select one)?”

Table 6

Current Financial Situation (N = 186)

Options	***n***	**%**
Always Stressful	20	10.8
Often Stressful	63	33.9
Sometimes Stressful	62	33.3
Rarely Stressful	29	15.6
Never Stressful	10	5.4
Prefer not to answer	2	1.1

Table 7 provides a breakdown of the participants' self-reported financial situation while growing up. This was assessed by the question, “How would you describe your financial situation growing up (please select one)?”

Table 7

Financial Situation Growing Up (N = 186)

Options	***n***	**%**
Always Stressful	15	8.1
Often Stressful	39	21.0
Sometimes Stressful	63	33.9
Rarely Stressful	38	20.4
Never Stressful	28	15.1
Prefer not to answer	3	1.6

Table 8 shows participant answers to several additional questions. Such as if participants had ever accessed mental health care services before. This was assessed by the question, “Have

you ever received mental health care services (e.g., counseling, therapy, psychiatry, etc.)?" Participants were then asked if they were currently utilizing mental health care services with the question, "Are you currently receiving mental health care services (e.g., counseling, therapy, psychiatry, etc.)?" Those who had received services before were asked about their perceived positive experiences with services received with the question, "If you have received mental health care services, would you consider the experiences to be positive?" All were asked about their perceived hesitancy to disclose mental health care services, "If you were receiving mental health care services, would you be hesitant to tell others you were attending those services?" Lastly, participants' perceived belief that mental health care services are helpful was examined by asking, "Do you believe mental health care services are helpful to people experiencing distress?"

Table 8

Additional Post-Hoc Analysis Questions (N = 186)

Question	Total *n*	Yes	% - Yes	No	% - Yes	Prefer Not to Answer	% Prefer Not to Answer
Ever Received Mental Health Care Services	186	89	47.8	96	51.6	1	0.5
Currently Receiving Mental Health Care Services	186	43	23.1	142	76.5	1	0.5
Perceived Positive Experiences of Services	89	77	86.5	11	12.4	1	1.1
Perceived Hesitancy to Disclose Services	186	64	34.4	114	61.3	8	4.3
Perceived Belief that Services are Helpful	186	174	93.5	6	3.2	6	3.2

Statistical Treatment

Research Question 1

Q1 What is the relationship between psychological distress and help-seeking intentions in college students?

H1 Higher levels of psychological distress are associated with higher levels of help-seeking intention.

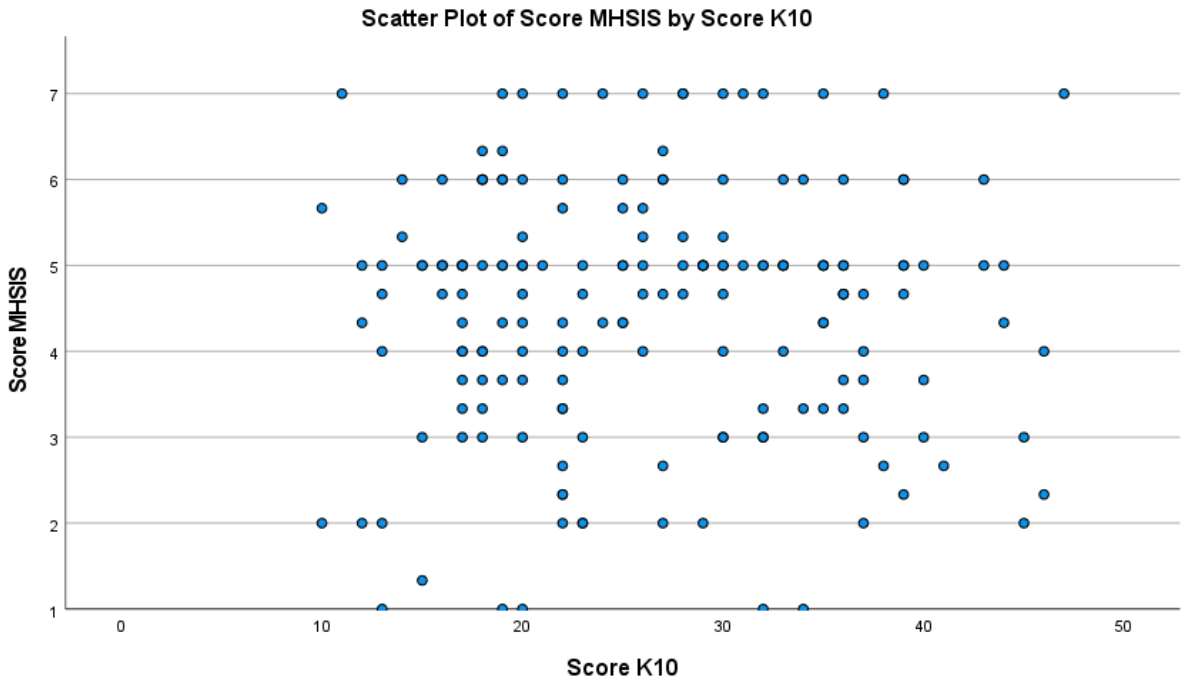
To address the first research question, a Pearson correlation was computed to determine the potential relationship between psychological distress and help-seeking intention. Preliminary analyses showed the relationship was not linear, neither variable was normally distributed (as

assessed by Shapiro-Wilk's test $p > 0.05$), and there were no outliers. Based on a scatterplot of these variables, data points were scattered and there was no evidence of a relationship between them (see Figure 3). As these core assumptions to a correlation were violated, the data were transformed several ways (e.g., log, square root, and inverse). In each of these transformations, the assumptions were still violated, and results were not significant. Pearson's correlation is a robust test so the decision was made to complete the procedure with the caveat that assumptions were violated (Havlicek & Peterson, 1976). The relationship between psychological distress and help-seeking intention in college students was not statistically significant, $r(184) = -0.009$, $p = 0.902$.

Because assumptions were violated, a Spearman's correlation was additionally run as a nonparametric alternative. However, there was no statistically significant correlation between help-seeking intention and psychological distress using a Spearman's correlation with or without transformations. Without transformations, the Spearman's correlation was $r_s(184) = -0.029$, $p = 0.699$. One potential explanation for the lack of relationship between help-seeking intention and psychological distress could be the relatively high psychological distress scores in this specific sample.

Figure 3

Scatterplot of Help-Seeking Intention and Psychological Distress



Research Question 2

Q2 Are there significant differences in help-seeking intention scores between racial groups?

H2 Racial minority groups show significantly lower scores of help-seeking intentions.

To answer the second research question, it was planned to conduct a one-way ANOVA. Initially, participants were classified into six groups: Asian, Native Hawaiian, or Pacific Islander (n = 4), Black or African American (n = 11), Latino/a/x or Hispanic (n = 32), Native American, American Indian, or Alaskan Native (n = 1), White (n = 114), and Multiracial (n = 24). Due to the low number of participants in some racial groups, the decision was made to condense participants into two groups, White participants (n = 114, 61.3%), and BIPOC participants (n = 72, 38.7%). While this is not an ideal representation of each racial group, it was necessary statistically in this study. Due to this shift in the number of groups, the statistical procedures

were changed to conduct an independent-samples t-test to compare the means of the two different groups rather than utilizing an ANOVA to compare across six groups.

Prior to conducting this analysis, assumptions of an independent-samples t-test were tested. Outliers were examined using boxplots and 11 outliers were present, all in the group of White participants, violating this assumption. While it is not ethical to remove participants purely because they do not fit the model (Draper & Smith, 1998), in attempt to understand the number of assumption violations though, analyses were run without the outliers and removing the outliers did not impact the assumption violations or results, so they were retained for subsequent analyses. Additionally, the assumption of normality was also violated as indicated by a Shapiro-Wilk test. The data were not normally distributed for the White racial group (r = 0.001). There was no evidence of homogeneity of variances, as assessed by Levene's test for equality of variances (p = 0.001). As so many assumptions were violated, the data were transformed several ways (e.g., log, square root, and inverse). In each of these transformations, the assumptions were still violated, and results were not significant. While three of the assumptions were violated (outliers, normality, and homogeneity), the decision was made to still conduct the independent-samples t-test with caution in interpreting results.

An independent-samples t-test was conducted to determine if mean help-seeking intention (MHSIS scores) were significantly different between White participants and BIPOC participants. There were outliers, as assessed by boxplot; data were not normally distributed for the White group, as assessed by Shapiro-Wilk test ($p < 0.05$); and there was not homogeneity of variances, as assessed by Levene's test of homogeneity of variances (p = 0.001). Efforts were made to transform the data without success. There were 72 BIPOC participants and 114 White participants. Average help-seeking intention scores were higher among White participants (4.63

± 1.27) than BIPOC participants (4.24 ± 1.65) with White participants scoring an average of 0.390 (95% CI, 0.03 to 0.82) higher. There was not a statistically significant difference, $t(184) = -1.813$, $p = 0.071$ in help-seeking intention scores between White participants and BIPOC participants (Table 9). As three assumptions were violated, caution will be taken in interpreting the results further in Chapter V.

Table 9

Independent-Samples t-Test Scores of Help-Seeking Intention Scores by Racial Groups

MHSIS Score	Racial Group	*n*	Mean	Std. Deviation	Std. Error Mean
	BIPOC	72	4.24	1.649	0.194
	White	114	4.63	1.269	0.119

Note. *Significant at the $p < 0.05$ level

Research Question 3

Q3 Do psychological distress and race predict help-seeking intention?

H3 Psychological distress and race do predict help-seeking intention.

To answer the third research question, a multiple hierarchical regression was run. Prior to conducting this analysis, assumptions were tested. Residual scatter plots were visually examined to see if a linear relationship existed between the variables. No linearity was present, suggesting these variables do not have a linear relationship and violating this assumption. Multicollinearity was assessed using a variance of inflation factor (VIF). There was no evidence of multicollinearity, meeting this assumption. A Shapiro-Wilks test was used to address normality. There was a lack of normality at a 0.05 level, violating this assumption, however, a Q-Q plot of residuals was also visually inspected and showed a normal distribution. This left conflicting results on if this assumption was violated. Lastly homoscedasticity of residuals was found as assessed by visual inspection of a plot of studentized residuals versus unstandardized predicted

values. To further ensure this, a Durban-Watson test was conducted (2.138), and this assumption was met. The assumption of linearity was violated, the assumption of multicollinearity was met, normality had conflicting results, and the assumption of homoscedasticity was met. Similar to prior analysis, the data were transformed several ways (e.g., log, square root, and inverse). After each of these transformations, the assumptions were still violated, and results were not significant. The decision was made to conduct the regression knowing that because linearity was not present, results would likely not be significant and would need to be interpreted with caution.

The first model included the dependent variable of help-seeking intention and the two independent variables of race and psychological distress. The dependent variable of help-seeking intention was first entered. The second step entered the two predictor variables. The first model of psychological distress, race, and help-seeking intention did not yield any significant results, $R^2 = 0.018$, $F(2,183) = 1.638$, $p = 0.197$; adjusted $R^2 = -0.018$ (Table 10).

Table 10

Multiple Hierarchical Regression - Model 1

Predictor	***Unstandardized B***	***Unstandardized SE***	***β***	***p***	***R^2***	***Adjusted R^2***	***F***
Race	0.389	0.216	0.132	0.073			
Psychological Distress	-0.001	0.012	-0.007	0.929			
Model 1				0.197	0.018	0.007	1.638

Note. *Significant at the $p < 0.05$ level

A multiple hierarchical regression was run to determine if psychological distress and race predict help-seeking intention. Linearity was not present, and this assumption was violated, based on residual scatter plots; the assumption of no multicollinearity was met, as assessed by VIF; normality was violated by the Shapiro-Wilks test but normally distributed in the Q-Q plot of residuals; and homoscedasticity was met from plots and the Durban-Watson test. The first model of psychological distress, race, and help-seeking intention did not yield any significant results, $R^2 = 0.018$, $F(2,183) = 1.638$, $p = 0.197$; adjusted $R^2 = -0.018$. As assumptions were violated, caution will be taken in interpreting the results further in Chapter V.

Research Question 4

Q4 Does perceived racial discrimination moderate the relationship between psychological distress and help-seeking intention?

H4 Perceived racial discrimination does moderate the relationship between psychological distress and help-seeking intention.

To answer the final research question, a second multiple hierarchical regression model was run. As above, these results will be interpreted with caution due to assumptions being violated. Before conducting this model, an interaction variable between perceived racial discrimination and psychological distress was created. Because the two scales used to measure

these variables had different zero points, this new interaction variable was centered. The second model added the new interaction variable that was created in addition to the first model. The dependent variable of help-seeking was first entered. Then, the three independent or predictor variables of race, psychological distress, and interaction were entered. The second model of psychological distress, race, interaction, and help-seeking intention did not yield any significant relationships, $R^2 = 0.133$, $F(3,182) = 1.089$, $p = 0.355$; adjusted $R^2 = 0.018$. (Table 11).

Table 11

Multiple Hierarchical Regression - Model 2

Predictor	***Unstandardized B***	***Unstandardized SE***	***β***	***p***	***R^2***	***Adjusted R^2***	***F***
Race	0.402	0.253	0.137	0.115			
Psychological Distress	-0.002	0.017	-0.014	0.897			
Interaction	3.806	0.000	0.011	0.925			
Model 2				0.355	0.133	0.018	1.089

Note. *Significant at the $p < 0.05$ level

Both R^2's were the same, indicating no significant change between models (Table 12). These results will be further interpreted in Chapter V with caution as assumptions were violated.

Table 12

Multiple Hierarchical Regression - Both Models

Predictor	***R^2***	***Adjusted R^2***	***F***
Model 1	0.018	0.007	1.638
Model 2	0.018	0.001	1.089

Note. *Significant at the $p < 0.05$ level

Post Hoc Analyses

To better understand participants' experiences and access to services, post hoc analyses were conducted using participant responses to measures and to their additional demographic questions. Additional Pearson correlations were run between the MHSIS and the GED and the K10 and GED. Independent-samples t-tests were run to examine if measure scores varied across racial groups beyond the independent-samples t-test completed for research question 2.

Kessler Psychological Distress (K10) and General Ethnic Discrimination Scale (GED) Correlation

An additional correlation between scores on the K10 and the GED was completed. The assumption of linearity was met, the data were not normally distributed, and there were outliers. The relationship between psychological distress and perceived racial discrimination in college students was statistically significant, $r(184) = 0.155$, $p = 0.034$. This suggests a weak/small correlation where psychological distress increases as perceived racial discrimination increases. No causation can be inferred from this result, but this does align with existing research suggesting a similar relationship in other samples.

Mental Help-Seeking Intention Scale (MHSIS) and General Ethnic Discrimination Scale (GED) Correlation

An additional correlation between scores on the MHSIS and the GED was completed. The assumption of linearity was violated as overall scores on the GED were negatively skewed, the data were not normally distributed, and there were outliers. The relationship between help-seeking intention and perceived racial discrimination in college students were not significantly correlated, $r(184) = -0.078$, $p = 0.293$.

Kessler Psychological Distress (K10) Scores

An independent-samples t-test was conducted to determine if psychological distress (K10 scores) varied by racial groups. There were no outliers, as assessed by boxplot; data were not normally distributed for the white group, as assessed by Shapiro-Wilk test ($p = 0.055$); and there was homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = 0.329$). There were 72 BIPOC participants and 114 White participants. Average psychological distress scores were higher among BIPOC participants (26.53 ± 9.73) than White participants (26.18 ± 8.48) with BIPOC participants scoring an average of 0.352 (95% CI, -2.32 to 3.02) higher. There was not a statistically significant difference, $t(184) = 0.260$, $p = 0.795$ in psychological distress scores between White participants and BIPOC participants. As one assumption was violated, these results will be further explored with caution in Chapter V.

General Ethnic Discrimination Scale (GED) Scores

An independent-samples t-test was conducted to determine if perceived racial discrimination (GED score) varied by racial groups. There were outliers, as assessed by boxplot; data were not normally distributed for either group, as assessed by Shapiro-Wilk test ($p < 0.05$); and there was no homogeneity of variances, as assessed by Levene's test of homogeneity of variances ($p = 0.0001$). Average perceived racial discrimination scores were significantly higher among BIPOC participants (32.94 ± 11.61) than White participants (21.37 ± 4.87) with BIPOC participants scoring an average of 11.58 (95% CI, 9.15 to 13.99) higher. There was a statistically significant difference, $t(184) = 9.429$, $p = 0.000$ in psychological distress scores between White participants and BIPOC participants. As three assumptions were violated, caution will be taken in interpreting the results further in Chapter V.

ANCOVA's were run to examine if these aspects differed across racial groups. In all the ANCOVA's, assumptions were tested, linearity was violated, and there was homogeneity of regression slopes. However, none of the ANCOVA's were statistically significant (Table 13). These will be discussed further in Chapter V.

Table 13

Post Hoc Analysis of Covariance (ANCOVA) Results

Added Variable	***F***	***p***
Current Financial Stress	3.223	0.074
Financial Stress Growing Up	3.591	0.060
Ever Receiving Mental Health Care Services	1.787	0.138
Currently Receiving Mental Health Care Services	2.315	0.130
Rating Prior Mental Health Care as Positive	1.436	0.234
Hesitancy to Tell Others	2.570	0.111
Believing Mental Health Care Services are Helpful	2.551	0.112

Note. *Significant at the $p < 0.05$ level

Summary

This chapter presented data analysis procedures and results exploring the relationships between race, help-seeking intention, psychological distress, and perceived racial discrimination. Descriptive statistics and the statistical treatment for each of the four primary research questions were presented utilizing correlation, t-test, and multiple hierarchical regression procedures. In addition, post hoc analyses were conducted. The next chapter will include a discussion of these statistical results as well as some of the study limitations. Lastly, ideas for future research, theoretical, and clinical implications will be explored.

CHAPTER V

DISCUSSION AND CONCLUSIONS

This chapter concludes the present study by providing discussion of data results, implications, limitations, and future directions. First, study rationale and purpose are reviewed. Secondly, the historical importance and social justice needs of this topic are addressed. Then, results are explored in the context of previous literature. Next, theoretical and practical implications are discussed. Finally, limitations of the study and possible directions for future research are described.

Study Rationale and Purpose

Prior research suggests that psychological distress (Oswalt et al., 2020) and the utilization of college counseling center services are rising among college students (Lipson et al., 2019). Even with utilization rates increasing, only 10% of college students with significant psychological distress seek services (Marsh & Wilcoxon, 2015). This disparity is even more significant for Black, Indigenous, and People of Color (BIPOC) students (Lipson et al., 2018). BIPOC students are significantly more likely to experience perceived racial discrimination than their peers (Vasquez, 2009) and perceived racial discrimination has been linked to higher rates of psychological distress (Schmitt et al., 2014). Higher levels of distress have been linked to more frequent help-seeking behaviors (Shin et al., 2017). BIPOC students should, theoretically, be in higher need of psychological help due to perceived racial discrimination increasing psychological distress. However, we continue to see racial disparities in the use of mental health

services, even in college counseling centers with free or low-cost services (Cook et al., 2017). Very few studies have examined the role of perceived racial discrimination with help-seeking (Carter & Forsyth, 2010; Cheng et al., 2013; Tummala-Narra et al., 2018) and to the writer's knowledge, none have examined the potential moderating role between psychological distress and attitudes towards help-seeking.

The purpose of this study was to analyze the relationship between race, psychological distress, and perceived racial discrimination as predictors of help-seeking intention, specifically, with the hopes of understanding the potential moderating role perceived racial discrimination plays between psychological distress and help-seeking intention and how that role might differ across racial groups. By potentially understanding the role perceived racial discrimination may have between psychological distress and help-seeking intention, this study can add to the body of literature examining the disparity in the utilization of mental health care services.

Research Question Findings

To address the gap in existing literature, four research questions were developed. Data were collected and analyzed to address the questions. Results are discussed below.

This first question was asked to establish that the foundation of existing literature was applicable to this sample. However, the correlation between these two variables was not statistically significant. The results were so scattered that there was no evidence of any relationship between these two variables. This presents some challenges for the present study. Prior research suggests that higher levels of distress have been linked to more frequent help-seeking behaviors (Rosenthal & Wilson, 2008; Shin et al., 2017; Wadman et al., 2019). Even though this assumption has been widely demonstrated, it does not appear to be the case for this sample. With psychological distress and help-seeking intention not being correlated, the

remaining research questions will likely not be significant and bring into question if the TPB applies to this sample.

One possible explanation could be the highly elevated levels of psychological distress measured in this sample. These high levels could be a result of history effects with the data being collected during the fall semester of 2020, amid the COVID-19 global pandemic, Black Lives Matter movement, and national election. It is not surprising to see elevated levels of distress during this challenging time. These higher-than-average levels may suggest an inability to differentiate between levels of psychological distress and help-seeking intention. It is possible that the global levels of heightened distress clouded this study by masking any racial group differences that might otherwise occur. Research outside of the context of COVID-19 is needed. Additionally, these high levels of psychological distress could interfere with daily life to the extent of preventing help-seeking, additional research is needed. While there is some question around if the TPB is applicable, it is more likely that this data set is skewed than that a theory with such substantial research backing would be incorrect. Additionally, since not all the variables of the TPB were measured, no definitive conclusions can be drawn.

Despite the violations of statistical assumptions, the decision was made to complete all planned analysis in this study, however caution would be taken in interpreting results. There were no statistically significant differences in average help-seeking intention scores between the different racial groups. However, 61.3% of participants in this study identified as White. Even after combining participants into two groups (White and BIPOC), this discrepancy in sample size across groups may impact the robustness and statistical power of the t-test (Wilcox, 2012).

Similarly, beyond the first research question not being significant, the multiple hierarchical regression assumption of linearity was violated and there were conflicting results

around the assumption of normality. Therefore, results are interpreted cautiously. Neither the first or second model of regression yielded significant findings and the results were very similar between them. This suggests that the variables were not significantly predicting help-seeking intention and perceived racial discrimination was not moderating the relationship between psychological distress and help-seeking intention. Because there was not a significant correlation between psychological distress and help-seeking intention, this result was expected.

Post Hoc Analyses

Post Hoc Analyses were completed to further explore and understand the sample and data collected. In additional correlational research, a weak relationship between psychological distress and perceived discrimination was discovered. This aligns with existing literature.

Additional t-test's were run using the K10 and GED to examine potential racial differences with the variables of psychological distress and perceived racial discrimination. Though these were not primary research questions, additional analyses such as these can aid in understanding limitations in the data and guiding future research. With this sample, there were no significant differences across racial groups on the K10, suggesting no significant differences in psychological distress. However, there were significant differences using the GED, perceived racial discrimination, with BIPOC participants seeming to experience more perceived racial discrimination than White participants.

During data collection, participants were asked questions around their current financial situation, financial situation growing up, previous mental health care services, current mental health care services, perceived positive experience with services, perceived hesitancy to disclose services, and perceived belief that services are helpful. The responses to these questions were used in post hoc analyses to better understand the experiences of participants. Multiple

ANCOVA analyses were run to examine if these aspects differed across racial groups. These were not significant, suggesting that the aspects of the questions were not significant factors in help-seeking intention. However, most participants believed that mental health services are helpful (93.5%). Perhaps this specific group of participants hold the belief that services will be helpful and effective. If that is the case, this belief may have impacted their association between distress and help-seeking intention. Emerging research suggests that younger individuals, such as college students, are more likely to seek help for mental health concerns (American Psychological Association [APA], 2021b). This aligns with data showing an increase in the overall utilization of college counseling services (Lipson et al., 2019). It could be that this generation holds less stigma around mental health treatment and overall, more favorable attitudes. This might help explain the results of this study.

Additionally, 78% of participants (n = 145) reported that their current financial situation was always, often, or sometimes stressful. In the context of heightened psychological distress during fall of 2020, this additional layer of financial stress could have compounded the higher levels of distress reported in this sample.

Theoretical Implications

The data from this study do not align with the foundation of the Theory of Planned Behavior (TPB). The first research question was designed to establish that the assumptions of the TPB taken from prior research were applicable to this research sample. Specifically, a strong correlation between psychological distress and help-seeking intentions would have provided further support for the idea that increased distress leads to high intentions to seek help, aligning with the TPB. That is not the case for this sample. These findings suggest that this data sample may have been flawed or compromised somehow, especially when considering the number of

statistical assumptions that were violated. Because not all the elements were measured, another explanation could be that the TPB may only partially apply to this sample. While only help-seeking intention was measured, it is possible that either attitudes toward the behavior, subjective normative beliefs, or perceived behavioral control may specifically differ with this sample.

No one study can provide sufficient evidence for or against any theory, particularly one with such a large body of prior research. Additionally, all the components of the TPB were not measured in this study so no conclusions can be drawn about the theory from this sample. It is much more likely that this data set was flawed than that the TPB is somehow incorrect. Further research examining the questions of this study is needed to form any theoretical implications.

Practical Implications

Though the results of this study did not produce any significant findings, there are still many practical implications that can be drawn. In the post-hoc analysis, the concepts of finances, receiving mental health services, rating those services as positive, hesitancy to tell others, and belief that services are helpful were not found to differ across racial groups. Each of these was measured with a single question and not with full measures of the variables. Future research is needed to understand the role these variables may play in help-seeking. However, as mental health professionals it is crucial that we consider the role of stigma and help-seeking intention. This includes our time in the therapy room with clients and our work outside of the room. During sessions, it is important to be culturally sensitive and break down stigma around mental health care services. In this sample, BIPOC participants did experience more perceived discrimination and had lower levels of help-seeking intention. This aligns with existing research (Blanchard, 2018; Kim et al., 2016) and only further amplifies the need for social justice work in the field.

Additionally, future social justice work around racial discrimination in the field of psychology is still important in both research and practical directions. Psychology as a field is interwoven into every other field. Psychologists and our research are used in advertising (Bondrea & Stefanescu-mihaila, 2014), in business culture to improve productivity (Pagliaro, 2020), in schools to evaluate where students should be placed (Klapproth & Fischer, 2020), and the list goes on. If the field of psychology could join to push for social justice and global change, it could happen. We could begin to challenge injustice beyond the counseling session and infuse awareness and social justice into all the place's psychologists' work as well as our own greater communities. The Advocacy Coordinating Committee of the American Psychological Association (APA) is beginning to join this push for social justice work and each year, is prioritizing advocacy goals for the field to allow us to be more united in making systemic changes (APA, 2021a). Two of the goals and focuses for 2021 are to address the disparity in access to services and the widespread discrimination in our society. Studies like this one need to be prioritized in future research to further our social justice efforts as a field.

Limitations and Directions for Future Research

There were several limitations within the present study. The first limitation stems from sampling methods. All participants in this study were members of one medium sized, Western university. This could skew results and additional replication studies are needed to generalize the results (Heppner et al., 2016). Additionally, by sampling through a university, participants already have some privilege and results may not be generalizable to those that do not pursue a higher educational degree. The results of the current study cannot be assumed true for others without further research.

Though efforts were made to recruit and include a diverse sample, most of the participants in this study identified as White (61.3%). As a focus of this study was comparing across racial groups, this could potentially have skewed the results and outcomes of this research. Particularly when participants were grouped into “White” and “BIPOC” to complete the statistical analysis procedures. Additional research with a more racial diverse sample is necessary to understand the potential relationships. Future studies could make efforts to sample from multiple sources rather than one university (e.g., multiple universities, Listservs, public recruitment efforts like Amazon’s Mechanical Turk, etc.). Even within a single university, additional studies sampling from cultural centers and student organizations of racial diverse students could assist in diversifying the sample.

All measures used in the current study were self-report measures. This can influence results because the responses may be answered with an emotional response to questions and cannot be externally validated (Northrup, 1997). Participants may have responded in a perceived socially desirable manner due to the type of questions being asked. Having the survey responses anonymous and confidential controls for this to an extent. Future studies utilizing other research methods are needed to corroborate the findings of this study. This could include studies that track help-seeking behaviors rather than measuring intention, qualitative studies on the experiences of perceived racial discrimination as it relates to help-seeking, and for college students, factoring in aspects such as grade point average and retention.

Measurement was another limitation of this study. Each construct was measured with a single scale. This could potentially lead to measurement error and bias in capturing an understanding of the constructs. Measurement frequently presents an ethical dilemma in research as we want to be respectful of participants' time and gather sufficient evidence.

One of the biggest limitations of this study is that psychological distress and help-seeking intentions were not correlated. Additional research with a new sample of participants is required to draw conclusions as there is a vast amount of research corroborating the Theory of Planned Behavior. This one study alone cannot discredit that body of literature. However, this lack of correlation could explain why significant results were not found. To fully understand and assess the research questions of this study within the Theory of Planned Behavior more fully, a larger scale study utilizing structural equation modeling may be helpful.

Another limitation is drawn from post hoc analysis. Most participants (93.5%) in this study believe that mental health care services are helpful to those in distress. Existing research suggests that the current generation of college students overall seem to be more willing to seek mental health care services (APA, 2021b). Perhaps, the Gen Z belief in services is impacting their help-seeking intention. Research examining across age and cohort groups around help-seeking intention could provide valuable information to the field and to the Theory of Planned Behavior. Additionally, the first-year seminar course that recruitment was completed through includes curriculum around wellness and encourages students to seek mental health services. In this sample, 23.1% endorsed currently receiving mental health care services. Extra credit is even provided through some mental health care service opportunities in this course. Recruitment from a broader sample is necessary to see if this may have impacted the results of this study.

As discussed in the review of literature, many college students have access to free or low-cost mental health care services on their college campuses. Access to care is often a barrier to help-seeking (Gulliver et al., 2010). While the hope was that in the present study, having equal access would allow for better examination across racial groups, future research could include a comparison of ease of access. Though things like stigma and belief in services were not included

in the present study due to barriers around participants time in collecting data, including measures of these variables in similar future studies could provide insight into the gap between existing literature and insignificant findings of this study.

Lastly, it is important to consider the history effects and global climate that data collection for this study took place in. Data were collected during the Fall semester of 2020, during the COVID-19 global pandemic, the Black Lives Matter movement, and the presidential election in the United States of America. Emerging research suggests that each of these factors heightened distress of the population in America (APA, 2021a). There is a vast amount of research being conducted on the individual and cumulative impacts, but those factors were not examined in the present study. Future research could be improved by including a broader awareness and assessment of the impact of current events and replicating this study in a time without a global pandemic as this may impact the levels of distress experienced.

Conclusions

With the increase in psychological distress in college students (Oswalt et al., 2020), the utilization of college counseling center services rising (Lipson et al., 2019), and a disparity in BIPOC students not accessing those services (Lipson et al., 2018), the present study sought to examine a potential cause for BIPOC students seeking services at a lower rate than their White peers. BIPOC students are significantly more likely to experience perceived racial discrimination than their peers (Vasquez, 2009) and perceived racial discrimination has been linked to higher rates of psychological distress (Schmitt et al., 2014). Higher levels of distress have been linked to more frequent help-seeking behaviors (Shin et al., 2017). BIPOC students should, theoretically, be in higher need of psychological help due to perceived racial discrimination increasing psychological distress. However, this study did not yield significant findings to explain the

disparity. Future research is needed to examine if these findings were an outlier due to the limitations discussed or if there are other factors that are more important, such as stigma.

REFERENCES

Agency for Healthcare Research and Quality. (2018). *2018 national healthcare quality and disparities report.* Rockville, MD: Agency for Healthcare Research and Quality.

Ajzen, I. (1982). On behaving in accordance with one's attitudes. In Zanna, M. P., Higgins, E. T., & Herman, C. P. (Eds.), *Consistency in social behavior: The Ontario symposium.* (pp. 3-15). Hillsdale, NJ: Erlbaum.

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In Kuhl, J., & Beckman, J. (Eds.), *Action-control: From cognition to behavior*. (pp. 11-39). Heidelberg, Germany: Springer.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes, 50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I. (2006). *Constructing a theory of planned behavior questionnaire.* University of Massachusetts Amherst, Office of Information Technologies. Retrieved from: http://people.umass.edu/aizen/pdf/tpb.measurement.pdf

Ajzen, I. (2011). The theory of planned behaviour: Reactions and reflections. *Psychology & Health, 26*(9), 1113-1127. https://doi.org/10.1080/08870446.2011.613995

Ajzen, I. (2012). The theory of planned behavior. In Van Lange, P. A. M., Kruglanski, A. W., & Higgins, T. (Eds.), *Handbook of theories of social psychology: Volume 1*. (pp. 438-459). London, England: Sage.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior.* Englewood-Cliffs, NJ: Prentice-Hall.

Alang, S. M. (2019). Mental health care among Blacks in America: Confronting racism and constructing solutions. *Health Services Research, 54*(2), 346-355. https://doi.org/10.1111/1475-6773.13115

Alim, T. N., Charney, D. S., Mellman, T. A., & Carrington, C. H. (2006). An overview of posttraumatic stress disorder in African Americans. *Journal of Clinical Psychology, 62*(7), 801-813. https://doi.org/10.1002/jclp.20280

Amarasuriya, S. D., Jorm, A. F., & Reavley, N. J. (2015). Quantifying and predicting depression literacy of undergraduates: A cross sectional study in Sri Lanka. *BMC Psychiatry, 15*(1), 269-282. https://doi.org/10.1186/s12888-015-0658-8

American College Health Association. (2019). *American College Health Association - national college health assessment II: Reference group executive summary spring 2019.* Silver Spring, MD: American College Health Association.

American Psychological Association. (2021a). *Advocacy 2021 Priorities.* Advocacy Impact.

American Psychological Association. (2021b). *Stress in America: Stress and Current Events.* Stress in America Survey.

Amuneke-Nze, C. G., Bamgbade, B. A., & Barner, J. C. (2019). An investigation of health management perceptions and wellness behaviors in African American males in central Texas. *American Journal of Men's Health, 13*(1), 1557988318813490. https://doi.org/10.1177/1557988318813490

Andersen, L. S., Grimsrud, A., Myer, L., Williams, D. R., Stein, D. J., & Seedat, S. (2011). The psychometric properties of the K10 and K6 scales in screening for mood and anxiety disorders in South African stress and health study. *International Journal of Methods in Psychiatric Research, 20*(4), 215-223. https://doi.org/10.1002/mpr.351

Anderson, K., Balderrama, S., Davidson, J., De Maria, P., Eells, G., Greenleaf, C., Himmel, J., Levine, H., Readdean, K., Vincent, D., & Wyatt, J. (2010). Considerations for integration of counseling and health services on college and university campuses. *Journal of American College Health, 58*(6), 583-596. https://doi.org/10.1080/07448481.2010.482436

Andrews, G., & Slade, T. (2001). Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health, 25*(6), 494-497. https://doi.org/10.1111/j.1467-842X.2001.tb00310.x

Association for University and College Counseling Center Directors. (2007). *Annual survey - public version 2007.* Indianapolis, IN: Association for University and College Counseling Center Directors.

Association for University and College Counseling Center Directors. (2018). *Annual survey - public version 2018.* Indianapolis, IN: Association for University and College Counseling Center Directors.

Ayalon, L., & Young, M. A. (2005). Racial group differences in help-seeking behaviors. *The Journal of Social Psychology, 145*(4), 391-404. https://doi.org/10.3200/SOCP.145.4.391-404

Bamberg, S., Ajzen, I., & Schmidt, P. (2003). Choice of travel mode in the theory of planned behavior: The roles of past behavior, habit, and reasoned action. *Basic and Applied Social Psychology, 25*(3), 175-187. https://doi.org/10.1207/S15324834BASP2503_01

Barkham, M., Margison, F., Leach, C., Lucock, M., Mellor-Clark, J., Evans, C., Benson, L., Connell, J., Audin, K., & McGrath, G. (2001). Service profiling and outcomes benchmarking using the CORE-OM: Toward practice-based evidence in the psychological therapies. *Journal of Consulting and Clinical Psychology, 69*(2), 184-196. https://doi.org/10.1037/0022-006X.69.2.184

Barksdale, C. L., & Molock, S. D. (2009). Perceived norms and mental health help seeking among African American college students. *The Journal of Behavioral Health Services & Research, 36*(3), 285-299. https://doi.org/10.1007/s11414-008-9138-y

Barney, L. J., Griffiths, K. M., Christensen, A., & Jorm, H. (2010). The Self-Stigma of Depression Scale (SSDS): Development and psychometric evaluation of a new instrument. *International Journal of Methods in Psychiatric Research, 19*(4), 243-254. https://doi.org/10.1002/mpr.325

Barney, L. J., Griffiths, K. M., Jorm, A. F., & Christensen, H. (2006). Stigma about depression and its impact on help-seeking intentions. *Australian and New Zealand Journal of Psychiatry, 40*(1), 51-54. https://doi.org/10.1111/j.1440-1614.2006.01741.x

Blais, R. K., & Renshaw, K. D. (2013). Stigma and demographic correlates of help-seeking intentions in returning service members. *Journal of Traumatic Stress, 26*(1), 77-85. https://doi.org/10.1002/jts.21772

Blanchard, S. J. (2018). *Black graduate students' experiences of stress and coping.* (Doctoral Dissertation). Available from ProQuest Dissertations and Theses Database. (UMI No. 13877026).

Bondrea, A. A., & Stefanescu-mihaila, R. O. (2014). Advertising psychology versus lifelong learning. *Contemporary Readings in Law and Social Justice, 6*(1), 340.

Bostean, G., Andrade, F. C. D., & Viruell-Fuentes, E. A. (2019). Neighborhood stressors and psychological distress among U.S. Latinos: Measuring the protective effects of social support from family and friends. *Stress and Health, 35*(2), 115-126. https://doi.org/10.1002/smi.2843

Boswell, D. L., White, J. K., Sims, W. D., Harrist, R. S., & Romans, J. S. C. (2013). Reliability and validity of the Outcome Questionnaire - 45.2. *Psychological Reports, 112*(3), 689-693. https://doi.org/10.2466/02.08.PR0.112.3.689-693

Boyle, S. C., LaBrie, J. W., Froidevaux, N. M., & Witkovic, Y. D. (2016). Different digital paths to the keg? How exposure to peers' alcohol-related social media content influences drinking among male and female first-year college students. *Addictive Behaviors, 57,* 21-29. https://doi.org/10.1016/j.addbeh.2016.01.011

Broaddus, M., Owczarzak, J., Pacella, M., Pinkerton, S., & Wright, C. (2016). Partnership-level analysis of African American women's risky sexual behavior in main and non-main partnerships. *AIDS and Behavior, 20*(12), 2893-2903. https://doi.org/10.1007/s10461-016-1351-8

Bureau of Justice Statistics. (2014). *Rape and sexual assault among college-age females, 1995-2013.* Washington, DC: Bureau of Justice Statistics.

Burgess, D. J., Ding, Y., Hargreaves, M., Ryn, M. V., & Phelan, S. (2008). The association between perceived discrimination and underutilization of needed medical and mental health care in a multi-ethnic community sample. *Journal of Health Care for the Poor and Underserved, 19*(3), 894-911. https://doi.org/10.1353/hpu.0.0063

Burkett, C. A. (2017). Obstructed use: Reconceptualizing the mental health (help-seeking) experiences of Black Americans. *Journal of Black Psychology, 43*(8), 813-835. https://doi.org/10.1177/0095798417691381

Caplan, S., & Buyske, S. (2015). Depression, help-seeking and self-recognition of depression among Dominican, Ecuadorian, and Colombian immigrant primary care patients in the northeastern United States. *International Journal of Environmental Research and Public Health, 12*(9), 10450-10474. https://doi.org/10.3390/ijerph120910450

Carter, R. T., & Forsyth, J. (2010). Reactions to racial discrimination: Emotional stress and help-seeking behaviors. *Psychological Trauma: Theory, Research, Practice, and Policy, 2*(3), 183-191. https://doi.org/10.1037/a0020102

Cash, T. E., Begley, P. J., McCown, D. A., & Weise, B. C. (1975). When counselors are heard but not seen: Initial impact of physical attractiveness. *Journal of Counseling Psychology, 22*(4), 273-279. https://doi.org/10.1037/h0076730

Center for Collegiate Mental Health. (2015). *2015 Annual Report.* University Park, PA: Center for Collegiate Mental Health.

Centers for Disease Control and Prevention. (2020). CDC WISQARS: Leading causes of death reports, 1999-2018. Retrieved from: https://webappa.cdc.gov/sasweb/ncipc/leadcause.html

Cepeda-Benito, A., & Short, P. (1998). Self-concealment, avoidance of psychological services, and perceived likelihood of seeking professional help. *Journal of Counseling Psychology, 45*(1), 58-64. https://doi.org/10.1037/0022-0167.45.1.58

Chen, J. A., Stevens, C., Wong, S. H. M., & Liu, C. H. (2019). Psychiatric symptoms and diagnoses among U.S. college students: A comparison by race and ethnicity. *Psychiatric Services, 70*(6), 442-449. https://doi.org/10.1176/appi.ps.201800388

Cheng, H., Kwan, K. K., & Sevig, T. (2013). Racial and ethnic minority college students' stigma associated with seeking psychological help: Examining psychocultural correlates. *Journal of Counseling Psychology, 60*(1), 98-111. https://doi.org/10.1037/a0031169

Cheng, H., McDermott, R. C., Wong, Y. J., & McCullough, K. M. (2019). Perceived discrimination and academic distress among Latinx college students: A cross-lagged longitudinal investigation. *Journal of Counseling Psychology, 67*(3), 401-408. https://doi.org/10.1037/cou0000397

Chow, J. C., Jaffee, K., & Snowden, L. (2003). Racial/Ethnic disparities in the use of mental health services in poverty areas. *American Journal of Public Health, 93*(5), 792-797. https://doi.org/10.2105/AJPH.93.5.792

Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., Morgan, C., Rüsch, N., Brown, J. S. L., & Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological Medicine, 45*(1), 11-27. https://doi.org/10.1017/S0033291714000129

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112,* 155-159. https://doi.org/10.1037/0033-2909.112.1.155

Cook, B. L., Trinh, N., Li, Z., Hou, S. S., & Progovac, A. M. (2017). Trends in racial-ethnic disparities in access to mental health care, 2004-2012. *Psychiatric Services, 68*(1), 9-16. https://doi.org/10.1176/appi.ps.201500453

Copeland, V. (2006). Disparities in mental health service utilization among low- income African American adolescents: Closing the gap by enhancing practitioner's competence. *Child and Adolescent Social Work Journal, 23*(4), 407-431. https://doi.org/10.1007/s10560-006-0061-x

David, E. J. R. (2010). Cultural mistrust and mental health help-seeking attitudes among Filipino Americans. *Asian American Journal of Psychology, 1*(1), 57-66. https://doi.org/10.1037/a0018814

DeBate, R. D., Gatto, A., & Rafal, G. (2018). The effects of stigma on determinants of mental health help-seeking behaviors among male college students: An application of the information-motivation-behavioral skills model. *American Journal of Men's Health, 12*(5), 1286-1296. https://doi.org/10.1177/1557988318773656

DeBlaere, C., & Moradi, B. (2008). Structures of the schedules of racist and sexist events: Confirmatory factor analyses of African American women's responses. *Psychology of Women Quarterly, 32*(1), 83-94. https://doi.org/10.1111/j.1471-6402.2007.00409.x

DeFreitas, S. C., Crone, T., DeLeon, M., & Ajayi, A. (2018). Perceived and personal mental health stigma in Latino and African American college students. *Frontiers in Public Health, 6,* 49. https://doi.org/10.3389/fpubh.2018.00049

De Luca, S. M., Blosnich, J. R., Hentschel, E. A. W., King, E., & Amen, S. (2016). Mental health care utilization: How race, ethnicity and veteran status are associated with seeking help. *Community Mental Health Journal, 52*(2), 174-179. https://doi.org/10.1007/s10597-015-9964-3

DeMaria, A. L., Sundstrom, B., Faria, A. A., Moxley Saxon, G., & Ramos-Ortiz, J. (2019). Using the theory of planned behavior and self-identity to explore women's decision-making and intention to switch from combined oral contraceptive pill (COC) to long-acting reversible contraceptive (LARC). *BMC Women's Health, 19*(1), 82-10. https://doi.org/10.1186/s12905-019-0772-8

Demyan, A. L., & Anderson, T. (2012). Effects of a brief media intervention on expectations, attitudes, and intentions of mental health help seeking. *Journal of Counseling Psychology, 59*(2), 222-229. https://doi.org/10.1037/a0026541

Di Blasia, M., Tostoa, C., Marfiaa, A., Cavania, P., & Giordanoa, C. (2016). Transition to adulthood and recession: A qualitative study. *Journal of Youth Studies, 19*(8), 1043-1060. https://doi.org/10.1080/13676261.2015.1136055

Digal, J. J., & Gagnon, M. M. (2020). Parental influences on university students' mental help-seeking intentions. *Journal of Counseling & Development, 98*(2), 136-146. https://doi.org/10.1002/jcad.12308

Downs, M. F., & Eisenberg, D. (2012). Help seeking and treatment use among suicidal college students. *Journal of American College Health, 60*(2), 104-114. https://doi.org/10.1080/07448481.2011.619611

Drapeau, A., Marchand, A., & Beaulieu-Prévost, D. (2012). Epidemiology of psychological distress. In L'Abate, L. (Ed.), *Mental illnesses - understanding, prediction, and control* (pp. 105-134). Rijeka, Croatia: InTech.

Draper, N. R., & Smith, H. (1998). *Applied regression analysis* (3rd ed.). Hoboken, NJ: John Wiley & Sons.

Dschaak, Z. A., Spiker, D. A., Berney, E. C., Miller, M. E., & Hammer, J. H. (2019). Collegian help-seeking: The role of self-compassion and self-coldness. *Journal of Mental Health*. https://doi.org/10.1080/09638237.2019.1677873

Eisenberg, D., & Lipson, S. (2014). *Data from the healthy minds network: The economic case for student health services.* Ann Arbor, MI: University of Michigan.

Eskin, M., Sun, J. M., Abuidhail, J., Yoshimasu, K., Kujan, O., Janghorbani, M., Flood, C., Carta, M. G., Tran, U. S., Mechri, A., Hamdan, M., Poyrazli, S., Aidoudi, K., Bakhshi, S., Harlak, H., Moro, M. F., Nawafleh, H., Phillips, L., Shaheen, A., . . .Voracek, M. (2016). Suicidal behavior and psychological distress in university students: A 12-nation study. *Archives of Suicide Research, 20*(3), 369-388. https://doi.org/10.1080/13811118.2015.1054055

Ess, M. A. (2019). *Influence of authority and message framing on compliance with mental health treatment recommendations.* (Master's Thesis). Available from ProQuest Dissertations and Theses Database. (UMI No. 13896916).

Fassaert, T., De Wit, W. C., Tuinebreijer, H., Wouters, H., Verhoeff, A. P., & Beekman, J. D. (2009). Psychometric properties of an interviewer-administered version of the Kessler Psychological Distress Scale (K10) among Dutch, Moroccan, and Turkish respondents. *International Journal of Methods in Psychiatric Research, 18*(3), 159-168. https://doi.org/10.1002/mpr.288

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods 41*(4), 1149-1160. https://doi.org/10.3758/BRM.41.4.1149

Feng, D., & Xu, L. (2015). The relationship between perceived discrimination and psychological distress among Chinese pulmonary tuberculosis patients: The moderating role of self-esteem. *Psychology, Health & Medicine, 20*(2), 177-185. https://doi.org/10.1080/13548506.2014.958505

Fernandez, T., Godwin, A., Doyle, J., Verdin, D., Boone, H., Kirn, A., Benson, L., & Potvin, G. (2016). *More comprehensive and inclusive approaches to demographic data collection.* West Lafayette, IN: Purdue University.

Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development, 36*(4), 368-373.

Fishbein, M., & Ajzen, I. (1975) *Belief, attitude, intention, and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley.

Freedenthal, S. (2007). Racial disparities in mental health service use by adolescents who thought about or attempted suicide. *Suicide and Life-Threatening Behavior, 37*(1), 22-34. https://doi.org/10.1521/suli.2007.37.1.22

Friedman, S., & Paradis, C. (2019). A commentary on Black American psychological help-seeking intention. *Journal of Psychotherapy Integration, 29*(4), 338-344. https://doi.org/10.1037/int0000145

Fripp, J. A., & Carlson, R. G. (2017). Exploring the influence of attitude and stigma on participation of African American and Latino populations in mental health services. *Journal of Multicultural Counseling and Development, 45*(2), 80-94. https://doi.org/10.1002/jmcd.12066

Furukawa, T. A., Kessler, R. C., Slade, T., & Andrews, G. (2003). The performance of the K6 and K10 screening scales for psychological distress in the Australian national survey of mental health and well-being. *Psychological Medicine, 33*(2), 357-362. https://doi.org/10.1017/S0033291702006700

Gagnon, M. M., Gelinas, B. L., & Friesen, L. N. (2017). Mental health literacy in emerging adults in a university setting: Distinctions between symptom awareness and appraisal. *Journal of Adolescent Research, 32*(5), 642-664. https://doi.org/10.1177/0743558415605383

Garcini, L. M., Chirinos, D. A., Murdock, K. W., Seiler, A., LeRoy, A. S., Peek, K., Cutchin, M. P., & Fagundes, C. (2018). Pathways linking racial/ethnic discrimination and sleep among U.S.-born and foreign-born Latinxs. *Journal of Behavioral Medicine, 41*(3), 364-373. https://doi.org/10.1007/s10865-017-9907-2

Gee, G. C., Ro, A., Shariff-Marco, S., & Chae, D. (2009). Racial discrimination and health among Asian Americans: Evidence, assessment, and directions for future research. *Epidemiologic Reviews, 31*(1), 130-151. https://doi.org/10.1093/epirev/mxp009

Goldberg, D. P. (1978). *Manual of the General Health Questionnaire.* Windsor, England: NFER.

Gonzales, K., Noonan, C., Goins, R., Henderson, W., Beals, J., Manson, S., Acton, L., & Roubideaux, Y. (2016). Assessing the everyday discrimination scale among American Indians and Alaska Natives. *Psychological Assessment, 28*(1), 51-58. https://doi.org/10.1037/a0039337

Goodwin, J., Behan, L., Kelly, P., McCarthy, K., & Horgan, A. (2016). Help-seeking behaviors and mental well-being of first year undergraduate university students. *Psychiatry Research, 246*, 129-135. https://doi.org/10.1016/j.psychres.2016.09.015

Goosby, B. J., Malone, S., Richardson, E. A., Cheadle, J. E., & Williams, D. T. (2015). Perceived discrimination and markers of cardiovascular risk among low-income African American youth: Perceived discrimination and markers of cardiovascular risk. *American Journal of Human Biology, 27*(4), 546-552. https://doi.org/10.1002/ajhb.22683

Grupp, F., Moro, M. R., Nater, U. M., Skandrani, S., & Mewes, R. (2019). 'Only god can promise healing.': Help-seeking intentions and lay beliefs about cures for post-traumatic stress disorder among sub-Saharan African asylum seekers in Germany. *European Journal of Psychotraumatology, 10*(1), 1684225. https://doi.org/10.1080/20008198.2019.1684225

Guerin, R. J., Toland, M. D., Okun, A. H., Rojas-Guyler, L., & Bernard, A. L. (2018). Using a modified theory of planned behavior to examine adolescents' workplace safety and health knowledge, perceptions, and behavioral intention: A structural equation modeling approach. *Journal of Youth and Adolescence, 47*(8), 1595-1610. https://doi.org/10.1007/s10964-018-0847-0

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry, 10*(1), 113-113. https://doi.org/10.1186/1471-244X-10-113

Hammer, J., Parent, M., & Spiker, D. (2018). Mental Help Seeking Attitudes Scale (MHSAS): Development, reliability, validity, and comparison with the ATSPPH-SF and IASMHS-PO. *Journal of Counseling Psychology, 65*(1), 74-85. https://doi.org/10.1037/cou0000248

Hammer, J. H., Perrin, P. B., & Spiker, D. A. (2019a). Impact of integrated care and co-location of care on mental help-seeking perceptions. *Journal of Mental Health,* 1-6. https://doi.org/10.1080/09638237.2019.1581334

Hammer, J. H., & Spiker, D. A. (2018). Dimensionality, reliability, and predictive evidence of validity for three help-seeking intention instruments: ISCI, GHSQ, and MHSIS. *Journal of Counseling Psychology, 65*(3), 394-401. https://doi.org/10.1037/cou0000256

Hammer, J. H., Spiker, D. A., & Perrin, P. B. (2019b). Physician referral to a psychologist: Testing alternative behavioral healthcare seeking models. *Journal of Clinical Psychology, 75*(4), 726-741. https://doi.org/10.1002/jclp.22729

Hammer, J. H., & Vogel, D. L. (2013). Assessing the utility of the willingness/prototype model in predicting help-seeking decisions. *Journal of Counseling Psychology, 60*(1), 83-97. https://doi.org/10.1037/a0030449

Harnois, C. E., Bastos, J. L., Campbell, M. E., & Keith, V. M. (2019). Measuring perceived mistreatment across diverse social groups: An evaluation of the Everyday Discrimination Scale. *Social Science & Medicine, 232,* 298-306. https://doi.org/10.1016/j.socscimed.2019.05.011

Hasan, S. A., Muzumdar, J. M., Nayak, R., & Wu, W. K. (2019). Using the theory of planned behavior to understand factors influencing south Asian consumers' intention to seek pharmacist-provided medication therapy management services. *Pharmacy, 7*(3), 88. https://doi.org/10.3390/pharmacy7030088

Hasking, P., Rees, C. S., Martin, G., & Quigley, J. (2015). What happens when you tell someone you self-injure? The effects of disclosing NSSI to adults and peers. *BMC Public Health, 15*(1), 1039. https://doi.org/10.1186/s12889-015-2383-0

Havlicek, L. L., & Peterson, N. L. (1976). Robustness of the Pearson correlation against violations of assumptions. *Perceptual and Motor Skills, 43*(3_suppl), 1319-1334. https://doi.org/10.2466/pms.1976.43.3f.1319

Heads, A. M., Castillo, L. G., Glover, A., & Schmitz, J. (2017). Emotion regulation moderates the relationship between perceived discrimination and risk behaviors in African American college students. *Drug and Alcohol Dependence, 171,* e86-e86. https://doi.org/10.1016/j.drugalcdep.2016.08.243

Heppner, P. P., Wampold, B. E., Owen, J., Thompson, M. N., & Wang, K. T. (2016). *Research design in counseling* (4th ed.). Boston, MA: Cengage Learning

Hess, T. R., & Tracey, T. J. G. (2013). Psychological help-seeking intention among college students across three problem areas. *Journal of Counseling & Development, 91*(3), 321-330. https://doi.org/10.1002/j.1556-6676.2013.00100.x

Hoggard, L. S., & Hill, L. K. (2018). Examining how racial discrimination impacts sleep quality in African Americans: Is perseveration the answer? *Behavioral Sleep Medicine, 16*(5), 471-481. https://doi.org/10.1080/15402002.2016.1228648

Hohls, J. K., König, H., Eisele, M., Mallon, T., Mamone, S., Wiese, B., Weyerer, S., Fuchs, A., Pentzek, M., Roehr, S., Welzel, F., Mösch, E., Weeh, D., Heser, K., Wagner, M., Scherer, M., Maier, W., Riedel-Heller, S. G., & Hajek, A. (2020). Help-seeking for psychological distress and its association with anxiety in the oldest old - results from the AgeQualiDe cohort study. *Aging & Mental Health, 24,* 1-7. https://doi.org/10.1080/13607863.2020.1725737

Holden, K. B., & Xanthos, C. (2009). Disadvantages in mental health care among *African Americans. Journal of Health Care for Poor and Underserved, 20*(2A), 17-23. https://doi.org/10.1353/hpu.0.0155

Horgan, A., Sweeney, J., Behan, L., & McCarthy, G. (2016). Depressive symptoms, college adjustment and peer support among undergraduate nursing and midwifery students. *Journal of Advanced Nursing, 72*(12), 3081-3092. https://doi.org/10.1111/jan.13074

Hughes, J. L., Camden, A. A., & Yangchen, T. (2016). Rethinking and updating demographic questions: Guidance to improve descriptions of research samples. *Psi Chi Journal of Psychological Research, 21*(3), 138-151. https://doi.org/10.24839/2164-8204.JN21.3.138

Ibrahim, N., Amit, N., Shahar, S., Wee, L., Ismail, R., Khairuddin, R., Siau, C. S., & Safien, A. (2019). Do depression literacy, mental illness beliefs and stigma influence mental health help-seeking attitude? A cross-sectional study of secondary school and university students from B40 households in Malaysia. *BMC Public Health, 19*(Suppl 4), 544-8. https://doi.org/10.1186/s12889-019-6862-6

Jakobsen, I. S., Larsen, K. J., & Horwood, J. L. (2017). Suicide risk assessment in adolescents - C-SSRS, K10, and READ. *Crisis, 38*(4), 247-254. https://doi.org/10.1027/0227-5910/a000450

Janevic, T., Gundersen, D., Stojanovski, K., Jankovic, J., Nikolic, Z., & Kasapinov, B. (2015). Discrimination and Romani health: A validation study of discrimination scales among Romani women in Macedonia and Serbia. *International Journal of Public Health, 60*(6), 669-677. https://doi.org/10.1007/s00038-015-0712-9

Jang, Y., Yoon, H., Chiriboga, D. A., Molinari, V., & Powers, D. A. (2015). Bridging the gap between common mental disorders and service use: The role of self-rated mental health among African Americans. *American Journal of Geriatric Psychiatry, 23*(7), 658-665.

Johnson, R. L., Saha, S., Arbelaez, J. J., Beach, M. C., & Cooper, L. A. (2004). Racial and ethnic differences in patient perceptions of bias and cultural competence in health care. *Journal of General Internal Medicine, 19*(2), 101-110. https://doi.org/10.1111/j.1525-1497.2004.30262.x

Kaduvettoor-Davidson, A., & Inman, A. (2013). South Asian Americans: Perceived discrimination, stress, and well-being. *Asian American Journal of Psychology, 4*(3), 155-165. https://doi.org/10.1037/a0030634

Kessler, R., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L. T., Walters, E. E., & Zaslavskey, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine, 32*(6), 959-976. https://doi.org/10.1017/S0033291702006074

Kiang, L., Witkow, M. R., & Thompson, T. L. (2016). Model minority stereotyping, perceived discrimination, and adjustment among adolescents from Asian American backgrounds. *Journal of Youth and Adolescence, 45*(7), 1366-1379. https://doi.org/10.1007/s10964-015-0336-7

Kim, S. (2017). *The relationships between experiences of racism, internalized racism, and the mental health of east Asians in the U.S.* (Doctoral Dissertation). Available from ProQuest Dissertations and Theses Database. (UMI No. 13819465).

Kim, P., Kendall, D., & Chang, E. (2016). Emotional self-control, interpersonal shame, and racism as predictors of help-seeking attitudes among Asian Americans: An application of the intrapersonal-interpersonal-sociocultural framework. *Asian American Journal of Psychology, 7*(1), 15-24. https://doi.org/10.1037/aap0000032

Kim, G., Sellbom, M., & Ford, K. (2014). Race/Ethnicity and measurement equivalence of the Everyday Discrimination Scale. *Psychological Assessment, 26*(3), 892-900. https://doi.org/10.1037/a0036431

Kim, J. E., & Zane, N. (2016). Help-seeking intentions among Asian American and White American students in psychological distress: Application of the health belief model. *Cultural Diversity & Ethnic Minority Psychology, 22*(3), 311-321. https://doi.org/10.1037/cdp0000056

Klapproth, F., & Fischer, B. D. (2020). Achievement development is less important for school-placement recommendations when students are stereotyped. *Social Psychology of Education, 23*(6), 1483. https://doi.org/10.1007/s11218-020-09593-9

Klonoff, E. A., & Landrine, H. (1999). Cross-validation of the Schedule of Racist Events. *Journal of Black Psychology, 25*(2), 231-254. https://doi.org/10.1177/0095798499025002006

Komiya, N., Good, G. E., & Sherrod, N. B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology, 47*(1), 138-143. https://doi.org/10.1037//0022-0167.46.4.524

Kossler, K., Kuroki, L. M., Allsworth, J. E., Secura, G. M., Roehl, K. A., & Peipert, J. F. (2011). Perceived racial, socioeconomic and gender discrimination and its impact on contraceptive choice. *Contraception, 84*(3), 273-279. https://doi.org/10.1016/j.contraception.2011.01.004

Krieger, N., Smith, K., Naishadham, D., Hartman, C., & Barbeau, E. M. (2005). Experiences of discrimination: Validity and reliability of a self-report measure for population health research on racism and health. *Social Science & Medicine, 61*(7), 1576-1596. https://doi.org/10.1016/j.socscimed.2005.03.006

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606-613. https://doi.org/10.1046/j.1525-1497.2001.016009606.x

Kroshus, E., Garnett, B. R., Baugh, C. M., & Calzo, J. P. (2016). Engaging teammates in the promotion of concussion help-seeking. *Health Education & Behavior, 43*(4), 442-451. https://doi.org/10.1177/1090198115602676

Kuhl, J., Jarkon-Horlick, L., & Morrissey, R. F. (1997). Measuring barriers to help-seeking behavior in adolescents. *Journal of Youth and Adolescence, 26*(6), 637-650. https://doi.org/10.1023/A:1022367807715

Lambert, M. J., Burlingame, G. L., Umphress, V. J., Hansen, N. B., Vermeersch, D., Clouse, G., & Yanchar, S. (1996). The reliability and validity of the Outcome Questionnaire. *Clinical Psychology & Psychotherapy, 3*(4), 249-258. https://doi.org/10.1002/(SICI)1099-0879(199612)3:4<249::AID-CPP106>3.0.CO;2-S

Landrine, H., Klonoff, E. A., Corral, I., Fernandez, S., & Roesch, S. (2006). Conceptualizing and measuring ethnic discrimination in health research. *Journal of Behavioral Medicine, 29*(1), 79-94. https://doi.org/10.1007/s10865-005-9029-0

Lannin, D. G., Vogel, D. L., Brenner, R. E., & Tucker, J. R. (2014). Predicting self-esteem and intentions to seek counseling: The internalized stigma model. *Counseling Psychologist, 43*(1), 64-93. https://doi.org/10.1177/0011000014541550

Lewis, T., Lampert, R., Charles, D., & Katz, S. (2019). Expectations of racism and carotid intima-media thickness in African American women. *Psychosomatic Medicine, 81*(8), 759-768. https://doi.org/10.1097/PSY.0000000000000684

Link, B. G., Cullen, F., Struening, E., Shrout, P., & Dohrenwend, B. (1989). A modified labeling theory approach to mental disorders: An empirical assessment. *American Sociological Review, 54*(3), 400-423. https://doi.org/10.2307/2095613

Lipson, S. K., Kern, A., Eisenberg, D., & Breland-Noble, A. M. (2018). Mental health disparities among college students of color. *Journal of Adolescent Health, 63*(3), 348-356. https://doi.org/10.1016/j.jadohealth.2018.04.014

Lipson, S. K., Lattie, E. G., & Eisenberg, D. (2019). Increased rates of mental health service utilization by U.S. college students: 10-year population-level trends (2007-2017). *Psychiatric Services, 70*(1), 60-63. https://doi.org/10.1176/appi.ps.201800332

LoBello, S. G. (1995). [Test review of General Health Questionnaire]. In Conoley, J. C., & Impara, J. W. (Eds.). *The twelfth mental measurement yearbook* (pp. 406-410). Lincoln, NE: Buros Center for Testing.

Locke, B. D., McAleavey, A. A., Zhao, Y., Lei, P., Hayes, J. A., Castonguay, L. G., Li, H., Robin, T., & Lin, Y. (2012). Development and initial validation of the Counseling Center Assessment of Psychological Symptoms-34. *Measurement and Evaluation in Counseling and Development, 45*(3), 151-169. https://doi.org/10.1177/0748175611432642

Lyne, K. J., Barrett, P., Evans, C., & Barkham, M. (2006). Dimensions and variation on the CORE-OM. *British Journal of Clinical Psychology, 45*(2), 185-203. https://doi.org/10.1348/014466505X39106

Mackenzie, C. S., Knox, V. J., Gekoski, W. L., & Macaulay, H. L. (2004). An adaptation and extension of the Attitudes Toward Seeking Professional Psychological Help Scale. *Journal of Applied Social Psychology, 34*(11), 2410-2433. https://doi.org/10.1111/j.1559-1816.2004.tb01984.x

Makowska, Z., Merecz, D., Mościcka, A., & Kolasa, W. (2002). The validity of general health questionnaires, GHQ-12 and GHQ-28, in mental health studies of working people. *International Journal of Occupational Medicine and Environmental Health, 15*(4), 353-362.

Malcarne, V. L., Chavira, D. A., Fernandez, S., & Liu, P. (2006). The Scale of Ethnic Experience: Development and psychometric properties. *Journal of Personality Assessment, 86*(2), 150-161. https://doi.org/10.1207/s15327752jpa8602_04

Manfreda, K., Bosnjak, M., Berzelak, J., Haas, I., & Vehovar, V. (2008). Web surveys versus other survey modes: A meta-analysis comparing response rates. *International Journal of Market Research, 50*(1), 79-104. https://doi.org/10.1177/147078530805000107

Mansfield, A. K., Addis, M. E., & Courtenay, W. (2005). Measurement of men's help seeking: Development and evaluation of the barriers to help seeking scale. *Psychology of Men & Masculinity, 6*(2), 95-108. https://doi.org/10.1037/1524-9220.6.2.95

Marsh, C. N., & Wilcoxon, S. A. (2015). Underutilization of mental health services among college students: An examination of system-related barriers. J*ournal of College Student Psychotherapy, 29*(3), 227-243. https://doi.org/10.1080/87568225.2015.1045783

Maslow, A. H. (1954). *Motivation and personality.* New York, NY: Harper.

Masuda, A., Anderson, P. L., & Edmonds, J. (2012). Help-seeking attitudes, mental health stigma, and self-concealment among African American college students. *Journal of Black Studies, 43*(7), 773-786. https://doi.org/10.1177/0021934712445806

McAleavey, A. A., Nordberg, S. S., Hayes, J. A., Castonguay, L. G., Locke, B. D., & Lockard, A. J. (2012). Clinical validity of the Counseling Center Assessment of Psychological Symptoms-62 (CCAPS-62): Further evaluation and clinical applications. *Journal of Counseling Psychology, 59*(4), 575-590. https://doi.org/10.1037/a0029855

McClain, S., Beasley, S. T., Jones, B., Awosogba, O., Jackson, S., & Cokley, K. (2016). An examination of the impact of racial and ethnic identity, impostor feelings, and minority status stress on the mental health of Black college students. *Journal of Multicultural Counseling and Development, 44*(2), 101-117. https://doi.org/10.1002/jmcd.12040

McDermott, R. C., Cheng, H., Wong, J., Booth, N., Jones, Z., & Sevig, T. (2017). Hope for help-seeking: A positive psychology perspective of psychological help-seeking intentions. *Counseling Psychologist, 45*(2), 237–265. https://doi.org/10.1177/0011000017693398

McLeod, D. O., II. (2017). *Help me?: An intervention to enhance mental health help seeking.* (Doctoral Dissertation). Available from ProQuest Dissertations and Theses Database. (UMI No. 10902825).

McNeal, M. A. (2015). An evaluation of the attitudes, beliefs, and mental health literacy of young African American college graduates. (Doctoral Dissertation). Available from ProQuest Dissertations and Theses Database. (UMI No. 3689781).

Mo, P. K., & Mak, W. W. (2009). Help-seeking for mental health problems among Chinese. *Social Psychiatry and Psychiatric Epidemiology, 44*(8), 675-684. https://doi.org/10.1007/s00127-008-0484-0

Molina, K. M., Estrella, M. L., Durazo-Arvizu, R., Malcarne, V. L., Llabre, M. M., Isasi, C. R., Ornelas, I. J., Perreira, K. M., Penedo, F. J., Brondolo, E., Gallo, L., & Daviglus, M. L. (2019). Perceived discrimination and physical health-related quality of life: The Hispanic community health study/study of Latinos (HCHS/SOL) sociocultural ancillary study. *Social Science & Medicine, 222,* 91-100. https://doi.org/10.1016/j.socscimed.2018.12.038

Nagai, S. (2015). Predictors of help-seeking behavior: Distinction between help-seeking intentions and help-seeking behavior. *Japanese Psychological Research, 57*(4), 313-322. https://doi.org/10.1111/jpr.12091

National Center for Education Statistics. *Nontraditional Undergraduates.* Institute of Education Sciences, U.S. Department of Education. (p. 2) Accessed 6 Mar. 2020.

National Survey of Student Engagement. (2020). *Engagement insights, survey findings on the quality of undergraduate education-annual results 2019.* Bloomington, IN: Indiana University Center for Postsecondary Research.

Nickerson, K. J., Helms, J. E., & Terrell, F. (1994). Cultural mistrust, opinions about mental illness, and Black students' attitudes toward seeking psychological help from white counselors. *Journal of Counseling Psychology, 41*(3), 378-385. https://doi.org/10.1037/0022-0167.41.3.378

Nir, A. E. (2009). To seek or not to seek professional help? school leaders' dilemma. *Journal of Educational Administration, 47*(2), 176-190. https://doi.org/10.1108/09578230910941039

Northrup, D. A. (1997). The problem of the self-report in survey research. *Institute for Social Research Newsletter, 12.*

O'Connor, P. J., Martin, B., Weeks, C. S., & Ong, L. (2014). Factors that influence young people's mental health help-seeking behaviour: A study based on the health belief model. *Journal of Advanced Nursing, 70*(11), 2577-2587. https://doi.org/10.1111/jan.12423

Odgers, C. L., & Russell, M. A. (2017). Violence exposure is associated with adolescents' same and next-day mental health symptoms. J*ournal of Child Psychology and Psychiatry, 58*(12), 1310-1318. https://doi.org/10.1111/jcpp.12763

Osborne, J. W. (2015). *Best practices in logistic regression.* Los Angeles: SAGE.

Oswalt, S. B., Oswalt, S. B., Lederer, A. M., Lederer, A. M., Chestnut-Steich, K., Day, C., Halbritter, A., & Ortiz, D. (2020). Trends in college students' mental health diagnoses and utilization of services, 2009-2015. *Journal of American College Health, 68*(1), 41-51. https://doi.org/10.1080/07448481.2018.1515748

Pagliaro, M. (2020). Enhancing the use of e-mail in scientific research and in the academy. *Heliyon, 6*(1), e03087-e03087. https://doi.org/10.1016/j.heliyon.2019.e03087

Parent, M., Hammer, J., Bradstreet, T., Schwartz, E., & Jobe, T. (2018). Men's mental health help-seeking behaviors: An intersectional analysis. *American Journal of Men's Health, 12*(1), 64-73. https://doi.org/10.1177/1557988315625776

Pheko, M. M., Chilisa, R., Balogun, S. K., & Kgathi, C. (2013). Predicting intentions to seek psychological help among Botswana university students: The role of stigma and help-seeking attitudes. *Sage Open, 3*(3), 1-11. https://doi.org/10.1177/2158244013494655

Powell, W., Adams, L. B., Cole-Lewis, Y., Agyemang, A., & Upton, R. D. (2016). Masculinity and race-related factors as barriers to health help-seeking among African American men. Behavioral Medicine: *Health of Boys and Men, 42*(3), 150-163. https://doi.org/10.1080/08964289.2016.1165174

Qualtrics. (2020). *Qualtrics, Version: January, 2020.* Available from http://www.qualtrics.com

Radke, S., Güths, F., André, J. A., Müller, B. W., & de Bruijn, E. R. A. (2014). In action or inaction? social approach–avoidance tendencies in major depression. *Psychiatry Research, 219*(3), 513-517. https://doi.org/10.1016/j.psychres.2014.07.011

Rickes, P. C. (2016). Generations in flux: How gen Z will continue to transform higher education space. *Planning for Higher Education, 44*(4), 21-45.

Ricks, J. S. (2018). Desperately seeking students: Analyzing the effect of mental health literacy on help-seeking attitudes and intentions. (Doctoral Dissertation). Available from ProQuest Dissertations and Theses Database. (UMI No. 13423529).

Rickwood, D., & Braithwaite, V.A. (1994). Social-psychological factors affecting help seeking for emotional-problems. *Social Science Medicine 39*(4), 563–572. https://doi.org/10.1016/0277-9536(94)90099-X.

Roberts, A. L., Gilman, S. E., Breslau, J., Breslau, N., & Koenen, K. C. (2011). Race/ethnic differences in exposure to traumatic events, development of post-traumatic stress disorder, and treatment-seeking for post-traumatic stress disorder in the United States. *Psychological Medicine, 41*(1), 71-83. https://doi.org/10.1017/S0033291710000401

Rosenthal, B., & Wilson, W. C. (2008). Mental health services: Use and disparity among diverse college students. *Journal of American College Health, 57*(1), 61-68. https://doi.org/10.3200/JACH.57.1.61-68

RTI International. (2019). *First-generation college students: Demographic characteristics and postsecondary enrollment.* Washington, DC: NASPA. Retrieved from https://firstgen.naspa.org/files/dmfile/FactSheet-01.pdf

Sagar-Ouriaghli, I., Godfrey, E., Bridge, L., Meade, L., & Brown, J. S. L. (2019). Improving mental health service utilization among men: A systematic review and synthesis of behavior change techniques within interventions targeting help-seeking. *American Journal of Men's Health, 13*(3), 155798831985700. https://doi.org/10.1177/1557988319857009

Samuel, I. A. (2015). Utilization of mental health services among African American male adolescents released from juvenile detention: Examining reasons for within-group disparities in help-seeking behaviors. *Child and Adolescent Social Work Journal, 32*(1), 33-43. https://doi.org/10.1007/s10560-014-0357-1

Sanchez, K., Ybarra, R., Chapa, T., & Martinez, O. (2016). Eliminating behavioral health disparities and improving outcomes for racial and ethnic minority populations. *Psychiatric Services, 67*(1), 13-15. https://doi.org/10.1176/appi.ps.201400581

Schmitt, M. T., & Branscombe, N. R. (2002). The meaning and consequences of perceived discrimination in disadvantaged and privileged social groups. *European Review of Social Psychology, 12*(1), 167-199. https://doi.org/10.1080/14792772143000058

Schmitt, M. T., Branscombe, N. R., Postmes, T., & Garcia, A. (2014). The consequences of perceived discrimination for psychological well-being: A meta-analytic review. *Psychological Bulletin, 140*(4), 921-948. https://doi.org/10.1037/a0035754

Schomerus, G., Stolzenburg, S., Freitag, S., Speerforck, S., Janowitz, D., Evans-Lacko, S., Muehlan, H., & Schmidt, S. (2019). Stigma as a barrier to recognizing personal mental illness and seeking help: A prospective study among untreated persons with mental illness. *European Archives of Psychiatry and Clinical Neuroscience, 269*(4), 469-479. https://doi.org/10.1007/s00406-018-0896-0

Schwing, A. E., Wong, Y. J., & Fann, M. D. (2013). Development and validation of the African American men's gendered racism stress inventory. *Psychology of Men & Masculinity, 14*(1), 16-24. https://doi.org/10.1037/a0028272

Scott, L. D., Jr., McMillen, J. C., & Snowden, L. R. (2015). Informal and formal help seeking among older Black male foster care youth and alumni. *Journal of Child and Family Studies, 24*(2), 264-277. https://doi.org/10.1007/s10826-013-9832-0

Seyfi, F., Poudel, K. C., Yasuoka, J., Otsuka, K., & Jimba, M. (2013). Intention to seek professional psychological help among college students in Turkey: Influence of help-seeking attitudes. *BMC Research Notes, 6*(1), 519-519. https://doi.org/10.1186/1756-0500-6-519

Shea, M., Wong, Y. J., Nguyen, K. K., & Baghdasarian, S. (2017). College women's subjective femininity stress, gender solidarity, and psychological help-seeking intentions. *The Counseling Psychologist, 45*(3), 438-461. https://doi.org/10.1177/0011000017701820

Sheu, H., & Sedlacek, W. H. (2017). An exploratory study of help-seeking attitudes and coping strategies among college students by race and gender. *Measurement and Evaluation in Counseling and Development, 37*(3), 130-143. https://doi.org/10.1080/07481756.2004.11909755

Shin, J. K., Poltavskiy, E., Kim, T. N., Hasan, A., & Bang, H. (2017). Help-seeking behaviors for serious psychological distress among individuals with diabetes mellitus: The California health interview survey, 2011-2012. *Primary Care Diabetes, 11*(1), 63-70. https://doi.org/10.1016/j.pcd.2016.07.007

Shin, R. Q., Smith, L. C., Welch, J. C., & Ezeofor, I. (2016). Is Allison more likely than Lakisha to receive a callback from counseling professionals? A racism audit study. *The Counseling Psychologist, 44*(8), 1187-1211. https://doi.org/10.1177/0011000016668814

Sims, M., Diez-Roux, A. V., Gebreab, S. Y., Brenner, A., Dubbert, P., Wyatt, S., Bruce, M., Hickson, D., Payne, T., & Taylor, H. (2016). Perceived discrimination is associated with health behaviours among African Americans in the Jackson Heart Study. *Journal of Epidemiology and Community Health, 70*(2), 187-194. https://doi.org/10.1136/jech-2015-206390

Spence, R., Owens-Solari, M., & Goodyer, I. (2016). Help-seeking in emerging adults with and without a history of mental health referral: A qualitative study. *BMC Research Notes, 9*(1), 415. https://doi.org/10.1186/s13104-016-2227-8

Spiker, D. A., Berney, E. C., Hammer, J. H., & Jensen, K. C. (2020). Maintaining the relationship: Relational schemas and Women's intent to seek couple therapy. *The Counseling Psychologist, 48*(6), 801-825. https://doi.org/10.1177/0011000020918400

Spiker, D. A., & Hammer, J. H. (2019). Mental health literacy as theory: Current challenges and future directions. *Journal of Mental Health, 28*(3), 238-242. https://doi.org/10.1080/09638237.2018.1437613

Stallman, H. M. (2011). Psychological distress in university students: A comparison with general population data. *Australian Psychologist, 45*(40), 249-257. https://doi.org/10.1080/00050067.2010.482109

Stanfield, M. H. (2019). Examining men's disclosures, influences, and motivations for seeking therapy. (Doctoral Dissertation). Available from ProQuest Dissertations and Theses Database. (UMI No. 2272260621).

Stevens, C., Liu, C. H., & Chen, J. A. (2018). Racial/ethnic disparities in US college students' experience: Discrimination as an impediment to academic performance. *Journal of American College Health, 66*(7), 665-673. https://doi.org/10.1080/07448481.2018.1452745

Stolk, Y., Kaplan, I., & Szwarc, J. (2014). Clinical use of the Kessler Psychological Distress scales with culturally diverse groups. *International Journal of Methods in Psychiatric Research, 23*(2), 161-183. https://doi.org/10.1002/mpr.1426

Substance Abuse and Mental Health Services Administration. (2019). *2018 national survey on drug use and health.* Rockville, MD: Substance Abuse and Mental Health Services Administration.

Sue, D. W., & Sue, D. (2016). *Counseling the culturally diverse: Theory and practice* (7th ed.).

Hoboken, NJ: John Wiley & Sons.

Suglia, S., Staudenmayer, J., Cohen, S., Enlow, M., Rich-Edwards, J., & Wright, R. (2010). Cumulative stress and cortisol disruption among Black and Hispanic pregnant women in an urban cohort. *Psychological Trauma-Theory Research Practice and Policy, 2*(4), 326-334. https://doi.org/10.1037/a0018953

Suite, D., La Bril, R., Primm, A., & Harrison-Ross, P. (2007). Beyond misdiagnosis, misunderstanding and mistrust: Relevance of the historical perspective in the medical and mental health treatment of people of color. *Journal of the National Medical Association, 99*(8), 879-885.

Suka, M., Yamauchi, T., & Sugimori, H. (2015). Relationship between individual characteristics, neighbourhood contexts and help-seeking intentions for mental illness. *BMJ Open, 5*(8), e008261. https://doi.org/10.1136/bmjopen-2015-008261

Suka, M., Yamauchi, T., & Yanagisawa, H. (2018). Comparing responses to differently framed and formatted persuasive messages to encourage help-seeking for depression in Japanese adults: A cross-sectional study with 2-month follow-up. *BMJ Open, 8*(11), e020823. https://doi.org/10.1136/bmjopen-2017-020823

Surapaneni, S., Larson, L. M., Heath, P. J., & Vogel, D. L. (2019). The interaction of stigma and distress: Predicting the help-seeking attitudes of United States students. *British Journal of Guidance & Counselling, 47*(5), 603-608. https://doi.org/10.1080/03069885.2018.1504201

Syed, M., & Juan, M. J. D. (2012). Discrimination and psychological distress: Examining the moderating role of social context in a nationally representative sample of Asian American adults. *Asian American Journal of Psychology, 3*(2), 104-120. https://doi.org/10.1037/a0025275

Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics.* Harlow: Pearson Education UK.

Taylor, R. E., & Kuo, B. C. H. (2019). Black American psychological help-seeking intention: An integrated literature review with recommendations for clinical practice. *Journal of Psychotherapy Integration, 29*(4), 325-337. https://doi.org/10.1037/int0000131

Taylor-Rodgers, E., & Batterham, P. J. (2014). Evaluation of an online psychoeducation intervention to promote mental health help seeking attitudes and intentions among young adults: Randomized controlled trial. *Journal of Affective Disorders, 168,* 65-71. https://doi.org/10.1016/j.jad.2014.06.047

Teclaw, R., Price, M. C., & Osatuke, K. (2012). Demographic question placement: Effect on item response rates and means of a veteran's health administration survey. J*ournal of Business and Psychology, 27*(3), 281-290. https://doi.org/10.1007/s10869-011-9249-y

Tedrick Parikh, S. J., & Servaty-Seib, H. L. (2013). College students' beliefs about supporting a grieving peer. *Death Studies, 37*(7), 653-669. https://doi.org/10.1080/07481187.2012.684834

Terrell, F., & Terrell, S. (1984). Race of counselor, client sex, cultural mistrust level, and premature termination from counseling among Black clients. *Journal of Counseling Psychology, 31*(3), 371-375. https://doi.org/10.1037/0022-0167.31.3.371

Tesfaye Kelemu, R., Bayray Kahsay, A., & Ahmed, K. Y. (2020). Prevalence of mental distress and associated factors among Samara university students, northeast Ethiopia. *Depression Research and Treatment, 2020,* 1-7. https://doi.org/10.1155/2020/7836296

Tessema, T. T., Gebremariam, T. A., Abebe, E. A., & Gebre, R. D. (2019). The prevalence and factors associated with mental distress among college students in southern Ethiopia: A cross-sectional study. *Ethiopian Journal of Health Sciences, 29*(3), 353-360. https://doi.org/10.4314/ejhs.v29i3.7

Thomas, K. S., Nelesen, R. A., Malcarne, V. L., Ziegler, M. G., & Dimsdale, J. E. (2006). Ethnicity, perceived discrimination, and vascular reactivity to phenylephrine. *Psychosomatic Medicine, 68*(5), 692-697. https://doi.org/10.1097/01.psy.0000238214.80871.e6

Thomée, S. (2018). Mobile phone use and mental health. A review of the research that takes a psychological perspective on exposure. *International Journal of Environmental Research and Public Health, 15*(12), 2692. https://doi.org/10.3390/ijerph15122692

Thompson, V. L. S., Bazile, A., & Akbar, M. (2004). African Americans' perceptions of psychotherapy and psychotherapists. *Professional Psychology Research and Practice, 35*(1), 19-26. https://doi.org/10.1037/0735-7028.35.1.19

Tomfohr, L., Pung, M. A., Edwards, K. M., & Dimsdale, J. E. (2012). Racial differences in sleep architecture: The role of ethnic discrimination. *Biological Psychology, 89*(1), 34-38. https://doi.org/10.1016/j.biopsycho.2011.09.002

Townes, D. L., Chavez-Korell, S., & Cunningham, N. J. (2009). Reexamining the relationships between racial identity, cultural mistrust, help-seeking attitudes, and preference for a Black counselor. *Journal of Counseling Psychology, 56*(2), 330-336. https://doi.org/10.1037/a0015449

Treiman, D. J., Lu, Y., & Qi, Y. (2012). New approaches to demographic data collection. C*hinese Sociological Review, 44*(3), 56-92. https://doi.org/10.2753/CSA2162-0555440303

Tummala-Narra, P., Li, Z., Chang, J., Yang, E. J., Jiang, J., Sagherian, M., Phan, J., Alfonso, A. (2018). Developmental and contextual correlates of mental health and help-seeking among Asian American college students. *The American Journal of Orthopsychiatry, 88*(6), 636-649. https://doi.org/10.1037/ort0000317

Turner, J. C., Leno, E. V., & Keller, A. (2013). Causes of mortality among American college students: A pilot study. *Journal of College Student Psychotherapy, 27*(1), 31-42. https://doi.org/10.1080/87568225.2013.739022

U.S. Department of Health and Human Services. (1999). *Mental health: Culture, race, and ethnicity: A supplement to mental health: A report of the Surgeon General.* Washington, D.C.: U.S. Department of Health and Human Services.

Vasquez, J. (2009). *The relationship between ethnic identity and ethnic-racial socialization in predicting perceived discrimination and subjective well-being among Latino college students in the southwest.* (Doctoral Dissertation). Available from ProQuest Dissertations and Theses Database. (UMI No. 3383037).

Vogel, D. L., Wade, N. G., & Ascheman, P. L. (2009). Measuring perceptions of stigmatization by others for seeking psychological help: Reliability and validity of a new stigma scale with college students. *Journal of Counseling Psychology, 56*(2), 301-308. https://doi.org/10.1037/a0014903

Vogel, D. L., Wade, N. G., & Haake, S. (2006). Measuring the self-stigma associated with seeking psychological help. *Journal of Counseling Psychology, 53*(3), 325-337. https://doi.org/10.1037/0022-0167.53.3.325

Vogel, D. L., Wester, S. R., Wei, M., & Boysen, G. A. (2005). The role of outcome expectations and attitudes on decisions to seek professional help. *Journal of Counseling Psychology, 52*(4), 459-470. https://doi.org/10.1037/0022-0167.52.4.459

Wadman, R., Webster, L., Mawn, L., & Stain, H. J. (2019). Adult attachment, psychological distress, and help-seeking in university students: Findings from a cross-sectional online survey in England. *Mental Health & Prevention, 13,* 7-13. https://doi.org/10.1016/j.mhp.2018.11.003

Wagner, J., & Abbott, G. (2007). Depression and depression care in diabetes: Relationship to perceived discrimination in African Americans. *Diabetes Care, 30*(2), 364-366. https://doi.org/10.2337/dc06-1756

Wakefield, J. R. H., Hopkins, N., & Greenwood, R. M. (2014). Help-seeking helps: Help-seeking and group image. *Small Group Research, 45*(1), 89-113. https://doi.org/10.1177/1046496413514454

Walters, K., Buszewicz, M., Weich, S., & King, M. (2008). Help-seeking preferences for psychological distress in primary care: Effect of current mental state. *British Journal of General Practice, 58*(555), 694-698. https://doi.org/10.3399/bjgp08X342174

Watkins, E., Terrell, F., Miller, F., & Terrell, S. (1989). Cultural mistrust and its effects on expectational variables in black client-white counselor relationships. *Journal of Counseling Psychology, 36*(4), 447-450. https://doi.org/10.1037/0022-0167.36.4.447

Whaley, A. L., & Dubose, J. (2018). Intersectionality of Ethnicity/Race and gender in the phenomenology of African American college students' presenting problems: A profile analysis using nonmetric multidimensional scaling. *International Journal for the Advancement of Counselling, 40*(3), 279-297. https://doi.org/10.1007/s10447-018-9326-2

Wilcox, R. (2012). *Modern statistics for the social and behavioral sciences: A practical introduction.* Boca Raton, FL: CRC Press.

Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health: Socioeconomic status, stress, and discrimination. *Journal of Health Psychology, 2*(3), 335-351. https://doi.org/10.1177/135910539700200305

Wilson, C. J., & Deane, F. P. (2012). Brief report: Need for autonomy and other perceived barriers relating to adolescents' intentions to seek professional mental health care. *Journal of Adolescence, 35*(1), 233-237. https://doi.org/10.1016/j.adolescence.2010.06.011

Wilson, C. J., Deane, F. P., Ciarrochi, J., & Rickwood, D. (2005). Measuring help-seeking intentions: Properties of the General Help-Seeking Questionnaire. *Canadian Journal of Counselling, 39*(1), 15-28.

Wilson, C. J., Rickwood, D. J., Bushnell, J. A., Caputi, P., & Thomas, S. J. (2011). The effects of need for autonomy and preference for seeking help from informal sources on emerging adults' intentions to access mental health services for common mental disorders and suicidal thoughts. *Advances in Mental Health, 10*(1), 29-38. https://doi.org/10.5172/jamh.2011.10.1.29

Wright, S., Twardzicki, M., Gomez, F., & Henderson, C. (2014). Evaluation of a comedy intervention to improve coping and help-seeking for mental health problems in a women's prison. *International Review of Psychiatry, 26*(4), 423-429. https://doi.org/10.3109/09540261.2014.924096

Yip, T., Gee, G. C., & Takeuchi, D. T. (2008). Racial discrimination and psychological distress: The impact of ethnic identity and age among immigrant and United States-born Asian adults. *Developmental Psychology, 44*(3), 787-800. https://doi.org/10.1037/0012-1649.44.3.787

Yu, Y., Liu, Z., Hu, M., Liu, H., Yang, J. P., Zhou, L., & Xiao, S. (2015). Mental health help-seeking intentions and preferences of rural Chinese adults. *PloS One, 10*(11), e0141889. https://doi.org/10.1371/journal.pone.0141889

Zhang, X., Gu, X., Keller, J., & Chen, Q. (2019). Understanding physical activity behavior of Chinese female college students with/without vulnerable conditions: A theory of planned behavior perspective. *Women & Health, 59*(8), 907-920. https://doi.org/10.1080/03630242.2019.1567647

Zorrilla, M. M., Modeste, N., Gleason, P. C., Sealy, D., Banta, J. E., & Trieu, S. L. (2019). Depression and help-seeking intention among young adults: The theory of planned behavior. *American Journal of Health Education, 50*(4), 236-244. https://doi.org/10.1080/19325037.2019.1616014

APPENDIX A

DEMOGRAPHIC FORM

Demographic Form

1. What is your age?
    - ☐ _____
    - ☐ Prefer not to answer
2. Please specify your year in school:
    - ☐ Freshman
    - ☐ Sophomore
    - ☐ Junior
    - ☐ Senior
    - ☐ Self-identify (please specify) _____
    - ☐ Prefer not to answer
3. Are you currently enrolled as a full-time undergraduate student (12 credit hours or more)?
    - ☐ Yes
    - ☐ No
    - ☐ Prefer not to answer
4. What is your gender?
    - ☐ Male/Man
    - ☐ Female/Woman
    - ☐ Trans male/ Trans man
    - ☐ Trans female/ Trans woman
    - ☐ Nonbinary

- ▢ A gender not listed (please specify) _____
- ▢ Prefer not to answer

5. Do you consider your sexual orientation to be:
   - ▢ Bisexual
   - ▢ Gay
   - ▢ Heterosexual/straight
   - ▢ Lesbian
   - ▢ Queer
   - ▢ Questioning
   - ▢ An orientation not listed (please specify) _____
   - ▢ Prefer not to answer
6. What is your race (select all that apply)?
   - ▢ Asian, Native Hawaiian, or Pacific Islander
   - ▢ Black or African American
   - ▢ Latino/a/x or Hispanic
   - ▢ Middle Eastern or Arab
   - ▢ Native American, American Indian, or Alaskan Native
   - ▢ White
   - ▢ A race not listed (please specify) _____
   - ▢ Prefer not to answer
7. Are you a first-generation college student?
   - ▢ Yes

- ☐ No
- ☐ Prefer not to answer

8. Are you an international student?
   - ☐ Yes
   - ☐ No
   - ☐ Prefer not to answer
9. What is your primary nationality or citizenship (e.g., American, Canadian, Ukranian, Dominican)
   - ☐ _____
   - ☐ Prefer not to answer
10. How would you describe your financial situation right now (please select one)?
    - ☐ Always stressful
    - ☐ Often stressful
    - ☐ Sometimes stressful
    - ☐ Rarely stressful
    - ☐ Never stressful
    - ☐ Prefer not to answer
11. How would you describe your financial situation growing up (please select one)?
    - ☐ Always stressful
    - ☐ Often stressful
    - ☐ Sometimes stressful
    - ☐ Rarely stressful

- ☐ Never stressful
- ☐ Prefer not to answer

12. Have you ever received mental health care services (e.g., counseling, therapy, psychiatry, etc.)?
    - ☐ Yes
    - ☐ No
    - ☐ Prefer not to answer
13. Are you currently receiving mental health care services (e.g., counseling, therapy, psychiatry, etc.)?
    - ☐ Yes
    - ☐ No
    - ☐ Prefer not to answer
14. If you have ever received or are receiving mental health care services, would you consider the experiences to be positive?
    - ☐ Yes
    - ☐ No
    - ☐ I have never received services
    - ☐ Prefer not to answer
15. If you were receiving mental health care services, would you be hesitant to tell others you were attending those services?
    - ☐ Yes
    - ☐ No
    - ☐ Prefer not to answer

16. Do you believe mental health care services are helpful to people experiencing distress?

- ☐ Yes
- ☐ No
- ☐ Prefer not to answer

APPENDIX B

HELP-SEEKING INTENTION SCALE

Help-Seeking Intention Scale

Mental Help-Seeking Intention Scale

(MHSIS; Hammer & Spiker, 2018)

Below are 3 statements about mental health concerns. For the purposes of this survey, "mental health professionals" include psychologists, psychiatrists, clinical social workers, and counselors. Likewise, "mental health concerns" include issues ranging from personal difficulties (e.g., loss of a loved one) to mental illness (e.g., anxiety, depression). Please mark the box that best represents your opinion.

1. If I had a mental health concern, I would intend to seek help from a mental health professional.

1 = Extremely Unlikely, 2, 3, 4, 5, 6, 7 = Extremely Likely

2. If I had a mental health concern, I would try to seek help from a mental health professional.

1 = Definitely False, 2, 3, 4, 5, 6, 7 = Definitely True

3. If I had a mental health concern, I would plan to seek help from a mental health professional.

1 = Strongly Disagree, 2, 3, 4, 5, 6, 7 = Strongly Agree

Note: Developed by Dr. Joseph Hammer and Douglas Spiker. Permission to use this measure was granted by Dr. Joseph Hammer using his online permission form (see Appendix E).

APPENDIX C

PSYCHOLOGICAL DISTRESS SCALE

Psychological Distress Scale

Kessler Psychological Distress Scale

(K10; Kessler et al., 2002)

Below are 10 statements about how you feel you are doing. Please respond to each statement by clicking the response number that best fits how you have generally been over the past 4 weeks. 1 = None of the Time, 2 = A Little of the Time, 3 = Some of the Time, 4 = Most of the Time, 5= All of the Time

1. In the past 4 weeks, about how often did you feel tired out for no good reason?
2. In the past 4 weeks, about how often did you feel nervous?
3. In the past 4 weeks, about how often did you feel so nervous that nothing could calm you down?
4. In the past 4 weeks, about how often did you feel hopeless?
5. In the past 4 weeks, about how often did you feel restless or fidgety?
6. In the past 4 weeks, about how often did you feel so restless you could not sit still?
7. In the past 4 weeks, about how often did you feel depressed?
8. In the past 4 weeks, about how often did you feel that everything was an effort?
9. In the past 4 weeks, about how often did you feel so depressed that nothing could cheer you up?
10. In the past 4 weeks, about how often did you feel worthless?

Note: Developed by Dr. Ronald Kessler and colleagues. Permission to use this measure was granted by Dr. Ronald Kessler (see Appendix E).

APPENDIX D

PERCEIVED RACIAL DISCRIMINATION SCALE

Perceived Racial Discrimination Scale

General Ethnic Discrimination Scale

(GED; Landrine et al., 2006)

Below are 18 statements about life experiences. Please respond to each statement by clicking the response number that best fits how often these things have happened in your entire life.

1 = Never, 2 = Once in a While, 3 = Sometimes, 4 = A Lot, 5= Most of the Time, 6 = Almost Always

1. How often have you been treated unfairly by **teachers and professors** because of your race/ethnic group?
2. How often have you been treated unfairly by your **employers, bosses, and supervisors** because of your race/ethnic group? (answer never if you have not had a job).
3. How often have you been treated unfairly by your **co-workers, fellow students, or colleagues** because of your race/ethnic group?
4. How often have you been treated unfairly by **people in service jobs (by store clerks, waiters, bartenders, bank tellers, and others)** because of your race/ethnic group?
5. How often have you been treated unfairly by **strangers** because of your race/ethnic group?
6. How often have you been treated unfairly by **people in helping jobs (by doctors, nurses, psychiatrists, case workers, dentists, school counselors, therapists, social workers, and others)** because of your race/ethnic group?
7. How often have you been treated unfairly by **neighbors** because of your race/ethnic group?

8. How often have you been treated unfairly by **institutions (schools, universities, law firms, the police, the courts, the Department of Social Services, the Unemployment Office, and others)** because of your race/ethnic group?
9. How often have you been treated unfairly by **people you thought were your friends** because of your race/ethnic group?
10. How often have you been **accused or suspected of doing something wrong (such as stealing, cheating, not doing your share of the work, or breaking the law)** because of your race/ethnic group?
11. How often have people **misunderstood your intentions and motives** because of your race/ethnic group?
12. How often did you **want to tell someone off for being racist towards you but didn't say anything?**
13. How often have you been **really angry about something racist that was done to you?**
14. How often have you been **forced to take drastic steps (such as filing a grievance, filing a lawsuit, quitting your job, moving away, and other actions)** to deal with some racist thing that was done to you?
15. How often have you **been called a racist name?**
16. How often have you **gotten into an argument or a fight about something racist that was done to you or done to another member of your race/ethnic group?**
17. How often have you been **made fun of, picked on, pushed, shoved, hit, or threatened with harm** because of your race/ethnic group?

Please answer this question using the following scale.

1 = The Same as it is Now, 2 = A Little Different, 3 = Different in a Few Ways, 4 = Different in a Lot of Ways, 5= Different in Most Ways, 6 = Totally Different

18. How *different* would your life be now if you **HAD NOT BEEN** treated in a racist or unfair way?

Note: Developed by Dr. Hope Landrine and colleagues. Dr. Hope Landrine was contact multiple times for permission to use this measure without response (see Appendix E).

APPENDIX E

AUTHOR PERMISSIONS TO USE MEASURES

Author Permission to Use Measures

MHSIS (Hammer & Spiker, 2018)

On September, 8th, 2020, the primary research completed the “Hammer Instrument Permission Form” to receive permission to use the MHSIS (Hammer & Spiker, 2018). Upon completion of the form, the following message was shown, “Once you click "Submit" below, you are automatically granted permission to use the instruments you expressed interest in. Good luck with your work!”

K10 (Kessler et al., 2002)

From: Kessler, Ronald <kessler@hcp.med.harvard.edu>

Subject: K10 Permission

Date: September 14th, 2020 at 1:38pm

To: Pickenpaugh, Emili < pick4421@bears.unco.edu>

You have my permission.

Ronald C. Kessler, Ph.D.

McNeil Family Professor

Department of Health Care Policy

Harvard Medical School

180 Longwood Avenue

Boston. MA, USA 02115-5899

617-432-3587 voice; 617-432-3588 fax

Kessler@hcp.med.harvard.edu

On Sep 14, 2020, at 3:35 PM, Pickenpaugh, Emili < pick4421@bears.unco.edu > wrote:

Dear Dr. Kessler,

I am writing to request your permission to use the Kessler Psychological Distress Scale (K10) in my dissertation. I am examining the potential moderating role of perceived racial discrimination on psychological distress and help-seeking intention. I would use your scale without any adaptations following recommendations on scoring and administration.

My research advisor is Dr. Brian Johnson (brian.johnson@unco.edu) and I intend to collect data beginning in a couple of months.

Please let me know if you have any questions and I look forward to hearing from you.

Sincerely,

Emili Pickenpaugh

GED (Landrine et al., 2006)

Dr. Landrine was contacted twice regarding permission to use the GED and a response was not received from either attempt.

From: "Pickenpaugh, Emili" < pick4421@bears.unco.edu >

Date: Monday, October 19, 2020 at 12:18 PM

To: "landrineh@ecu.edu" <landrineh@ecu.edu>

Subject: Re: Request to Use GED

Dear Dr. Landrine,

I wanted to check back in with you if I could have your permission to use the General Ethnic Discrimination Scale (GED) in my dissertation?

Additional details are below and please let me know if you have any questions.

Sincerely,

Emili Pickenpaugh

From: "Pickenpaugh, Emili" < pick4421@bears.unco.edu >

Date: Monday, September 14, 2020 at 1:38 PM

To: "landrineh@ecu.edu" <landrineh@ecu.edu>

Subject: Request to Use GED

Dear Dr. Landrine,

I am writing to request your permission to use the General Ethnic Discrimination Scale (GED) in my dissertation. I am examining the potential moderating role of perceived racial discrimination on psychological distress and help-seeking intention. I would use your scale without any adaptions following recommendations on scoring and administration.

My research advisor is Dr. Brian Johnson (brian.johnson@unco.edu) and I intend to collect data beginning in a couple of months.

Please let me know if you have any questions and I look forward to hearing from you.

Sincerely,

Emili Pickenpaugh

APPENDIX F

INSTITUTIONAL REVIEW BOARD APPROVAL

Institutional Review Board Approval

Date: 11/11/2020

Principal Investigator: Emili Pickenpaugh

Committee Action: IRB EXEMPT DETERMINATION – New Protocol

Action Date: 11/11/2020

Protocol Number: 2009010600

Protocol Title: The Role of Perceived Racial Discrimination on Help-Seeking Intention and Psychological Distress

Expiration Date: N/A – Exempt Status

The University of Northern Colorado Institutional Review Board has reviewed your protocol and determined your project to be exempt under 45 CFR 46.104(d) (702) for research involving Category 2 (2018): EDUCATIONAL TESTS, SURVEYS, INTERVIEWS, OR OBSERVATIONS OF PUBLIC BEHAVIOR. Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained,

directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).

You may begin conducting your research as outlined in your protocol. Your study does not require further review from the IRB, unless changes need to be made to your approved protocol.

As the Principal Investigator (PI), you are still responsible for contacting the UNC IRB office if and when:

• You wish to deviate from the described protocol and would like to formally submit a modification request. Prior IRB approval must be obtained before any changes can be implemented (except to eliminate an immediate hazard to research participants).

• You make changes to the research personnel working on this study (add or drop research staff on this protocol).

• At the end of the study or before you leave The University of Northern Colorado and are no longer a student or employee, to request your protocol be closed. *You cannot continue to reference UNC on any documents (including the informed consent form) or conduct the study under the auspices of UNC if you are no longer a student/employee of this university.

• You have received or have been made aware of any complaints, problems, or adverse events that are related or possibly related to participation in the research.

If you have any questions, please contact the Research Compliance Manager, Nicole Morse, at 970-351-1910 or via e-mail at nicole.morse@unco.edu. Additional information concerning the requirements for the protection of human subjects may be found at the Office of Human Research Protection website: http://hhs.gov/ohrp/ and https://www.unco.edu/research/research-integrity-and compliance/institutional-review-board/.

Sincerely,

Nicole Morse

Research Compliance Manager

University of Northern Colorado: FWA00000784

APPENDIX G

CONSENT FORM

Consent Form

Project Title: The Role of Perceived Racial Discrimination on Help-Seeking Intention and Psychological Distress

Researcher: Emili Pickenpaugh, M.A.; pick4421@bears.unco.edu

Faculty Sponsor: Brian Johnson, Ph.D.; brian.johnson@unco.edu

The primary purpose of this study is to explore the relationships between psychological distress, help-seeking intention, and perceived racial discrimination. As a participant in this research, you will be asked to complete an anonymous web-based questionnaire. The questionnaire will take approximately 15 to 20 minutes to complete.

You must be over the age of 18, under the age of 24, and currently enrolled as a full-time, undergraduate student to participate. Questionnaire responses will be submitted and stored on a program called Qualtrics. Data will then be downloaded and de-identified on the researcher's password protected computer. While confidentiality cannot be guaranteed because of the nature of electronic data collection, the researcher will take every precaution possible to protect your anonymity and confidentiality.

Potential risks in your participation are minimal. By participating, you may experience mild discomfort in responding to questions regarding your identities, help-seeking intention, psychological distress, and experiences of discrimination. Should you experience any discomfort, at the end of the survey, you will be given contact information for psychological and emergency services that you may use to seek support. Following completion, you will be given a separate link to submit your email address to be included in a drawing for one of three $25 Amazon gift cards as incentive for participation in this study. Entering this drawing is optional.

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please communicate your consent by clicking "By clicking here, I affirm that I am at least 18 years of age and voluntarily agree to participate." if you would like to participate in this research. You may keep this form for future reference. If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, IRB Administrator, in the Office of Sponsored Programs, Kepner Hall, University of Northern Colorado, Greeley, CO 80639; 970-351-1910.

APPENDIX H

DEBRIEFING FORM

Debriefing Form

Project Title: The Role of Perceived Racial Discrimination on Help-Seeking Intention and Psychological Distress

Researcher: Emili Pickenpaugh, M.A.; pick4421@bears.unco.edu

Faculty Sponsor: Brian Johnson, Ph.D.; brian.johnson@unco.edu

Thank you for participating in this study and sharing your experiences. The researcher is primarily interested in how experiences of perceived racial discrimination might impact help-seeking intention and psychological distress.

If you would like to be entered for a chance to receive one of three $25 Amazon gift cards, please click the link below. You will be taken to a separate page and asked to enter your email address. Your information will in no way be connected to your survey responses or used for any marketing purposes.

If you have any questions or concerns about this project, or if you want to know how the results turn out, please contact Emili Pickenpaugh at pick4421@bears.unco.edu.

Resources:

If after participating you feel as though you have been impacted and would like support, please contact the Counseling Center at the University of Northern Colorado in Cassidy Hall at 970-351-2496 to receive free services. You can also contact the University of Northern Colorado's Psychological Services Clinic at (970) 351-1645, where the first session is free and the cost for a semester of services is $75.

Additionally, you may utilize the following resources to receive support off campus:

• National Helpline: 1-800-662-HELP (4357)

• National Suicide Prevention Hotline: 1-800-273-TALK (8255)

- Find local mental health professionals: psychologytoday.com
- In the case of an emergency, please call 911 or the local equivalent

APPENDIX I

RECRUITMENT STATEMENT

Recruitment Statement

Dear Prospective Participant,

I am conducting on an online survey examining psychological distress, help-seeking intention, and perceived racial discrimination. This study has been approved by the Institutional Review Board (IRB) of the University of Northern Colorado (Protocol Number: 2009010600). Though we are becoming more aware of the impacts discrimination has, there is still a lot to learn. It is my hope that your experiences can assist in informing our understanding in the field of psychology. I would appreciate your help and participation.

If you are over the age of 18, under the age of 24, and currently enrolled as a full-time undergraduate college student, please use the link below. This link will direct you to an online survey that is anticipated to take approximately 15 to 20 minutes to complete. To thank you for your participation, at the end of the survey there will be an option for you to enter your email address (separately from your survey responses) in a drawing for one of three $25 Amazon gift cards. You are not required to participate and can exit the survey at any time.

Survey Link:

Thank you very much for your time and effort!

Emili Pickenpaugh

Doctoral Student in Counseling Psychology

University of Northern Colorado

pick4421@bears.unco.edu