INTERSECTIONALITY IN UNIVERSITY MENTAL HEALTH: THE EFFECTS OF LATINX IDENTITY AND GENERATIONAL STATUS ON COUNSELING BARRIERS AND INTENTIONS OF COLLEGE STUDENTS

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ABSTRACT

INTERSECTIONALITY IN UNIVERSITY MENTAL HEALTH:

THE EFFECTS OF LATINX IDENTITY AND GENERATIONAL STATUS ON

COUNSELING BARRIERS AND INTENTIONS OF COLLEGE STUDENTS

KIANA HELGREN

Past research has shown that college students are exposed to a variety of stressors, which in turn affect their mental health. Over the last decade, symptoms of psychological distress and illness have grown among college students, curtailing academic success and decreasing motivation to finish their degree requirements. Additionally, rates for help-seeking remain low, while symptoms remain high, indicating that college students are not getting the mental health help that they need. While this itself represents a substantial issue, research also shows that poor mental health and help-seeking behaviors differ across specific groups. For two underrepresented minority groups, Latinx and first-generation college students, mental health problems and reasons for not seeking help are more unique and complex. This study included these groups specifically, investigating what barriers exist to seeking mental health services for Latinx first-generation students in contrast to White continuing-generation students. It additionally examined how these barriers are related to one's intention to seek mental health help. The sample included 105 college students at Northern Arizona University. A hierarchical multiple regression was performed with three models, which tested whether SES (low vs. high), ethnic identity (Latinx vs. White), biracial identity (Latinx vs. White), student generation status (first vs. continuing), and six barriers to counseling (negative perceived value, ingroup stigma, discomfort with emotions, lack of knowledge, lack of access, and cultural barriers) affected one's intention to seek mental health help. SES had a significant effect in model 1; however, it became non-

significant once Latinx ethnic identity, biracial identity, and student generation status were entered. In the final model two of the six barriers, negative perceived value and discomfort with emotions, had significant effects on intention to seek help, while the other four were not significant. The results suggested that negative perceived value and discomfort with emotions are the largest reasoning behind the lack of intentions, attempts, and plans to seek help in college students.

Keywords: counseling barriers, help-seeking, college students, Latinx identity, first-generation

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Intersectionality in University Mental Health: The Effects of Latinx Identity and Generational Status on Counseling Barriers and Intentions of College Students

Mental health problems and their effects are growing concerns among college students. In fact, within the last decade, mental health symptoms among college students have almost doubled (Blanco et al., 2008; Lipson et al., 2022). Additionally, such symptoms have been found to predict lower academic success, and depression specifically, has been found to double a student's risk of dropping out of college without finishing (Lipson et al., 2022). While this is concerning, the situation is only worsened by the disproportionate rates of those with depressive symptoms versus those getting treated for depression. Alarmingly, only 24% of students diagnosed with depression receive treatment annually (Hunt & Eisenberg, 2010). Across the U.S., research shows that more investigation is required to better understand college students' mental health (American College Health Association, 2022). However, even when research is conducted, the samples used are often not representative of student populations. The majority of psychological studies examining the topic of mental health and the college experience include samples of mainly White participants, which limits the understanding of both racial/ethnic minorities and their education experiences (Thalmayer et al., 2021). Mental health problems exist across all groups of people; therefore, they must be addressed as such.

This study aimed to determine the barriers that exist to seeking mental health services for Latinx and White students, and first-generation and continuing-generation students, and how these barriers are related to one's intention to seek mental health help. The purpose of this paper was to understand help-seeking limitations in these groups and how they can be removed in the future. The layout of this introduction will begin by establishing disparities in mental health across college students nationally, and then across racial/ethnic minority and first-generation

students. This will be followed by a description of low treatment rates, including a discussion of the unique attitudes and barriers that exist for Latinx and first-generation students. Next, the methods, proposed analysis, and current analysis are introduced. Finally, the results and discussion will be presented.

The Mental Health of College Students

Disparities

The stages of adolescence and young adulthood represent turning points for mental illness. Half of all lifetime mental illness cases begin at age 14 and 75% begin by age 24 (Hefner & Eisenberg, 2009; Hunt & Eisenberg, 2010). For college students, mental health problems are highly prevalent due to school workload, competitive careers, developmental challenges, and social factors such as family and societal pressure (Hunt & Eisenberg, 2010). Data from the National College Health Assessment in the Spring of 2022, which surveyed 69,131 students, revealed that 51.7% of students reported experiencing moderate psychological distress, and 23.3% reported experiencing serious psychological distress. Across chronic conditions, 44.2% of students reported ever being diagnosed with at least one of the mental disorders or conditions listed (e.g., ADD, Bipolar, OCD), and 23% reported having been diagnosed with both depression and anxiety (American College Health Association, 2022). Additionally, research completed in 2009 with 70 colleges and universities found that 6% of undergraduates and 4% of graduate students reported having seriously considered suicide in the preceding 12 months (Hunt & Eisenberg, 2010). Thus, psychological problems pose a serious threat to college students' mental health and their lives as a whole.

Furthermore, the national mental health crisis has been continuing to grow over the past decade. For example, the Healthy Minds Study (HMS) surveyed 373 U.S. campuses between

2013 and 2021, which included 359,777 college students. Importantly, data showed that symptoms of depression increased by 134.6% from 2013 to 2021 across several races and ethnicities (Healthy Minds Study, 2022). In addition, symptoms of anxiety increased by 109.5%, eating disorders by 95.6%, non-suicidal self-injury (NSSI) by 45.5%, suicidal ideation by 64%, and the prevalence of one or more mental health problems by 49.7%. Despite such large percentages for a variety of mental health symptoms, reports for treatment within this same timeframe (2013 to 2021) only increased by 23.5%, and similarly, past-year therapy only increased by 25.6% (Lipson et al., 2022). It is important to investigate why students are not getting treated for their mental health problems. While the results give us a general picture of college student mental health at the national level, it is necessary to note that the sample was composed of 66.1% White and 62.1% continuing-generation participants (Lipson et al., 2022). We must closely examine diverse groups such as those belonging to racial/ethnic minorities and/or those identifying as first-generation college students in order to better understand disparities in mental health and help-seeking among college students (Kearney et al., 2005).

Racial/Ethnic Minority College Students

Mental health problems for non-White racial and ethnic groups are just as pervasive and sometimes more pervasive than for persons in White racial and ethnic groups. Within each ethnic group, the prevalence of mental illness experienced by U.S. adults is highest for Non-Hispanic mixed/multiracial (35.8%), followed by lower but still substantial rates for other non-White racial groups (e.g., 18.7% Non-Hispanic American Indian or Alaska Native, 18.4% Hispanic or Latino, 17.3% Non-Hispanic Black or African-American, 16.6% Non-Hispanic Native Hawaiian or Other Pacific Islander, and 13.9% Non-Hispanic Asian) (Substance Abuse and Mental Health Services Administration, 2021). These differences are more pronounced in college students

(O'Neal et al., 2016). According to the 2013 Healthy Minds Study, the prevalence of any mental health problem (i.e., depression, anxiety, any depression or anxiety, suicidal thoughts/behavior, and non-suicidal self-injury (NSSI)) experienced within the past year for each racial/ethnic student group was 41.4% Multiracial, 36.6% Other, 35.3% Hispanic, 33.3% Asian, and 33.2% Black, which were all higher than that of White students (30.2%) (Eisenberg et al., 2013). In addition, percentages for reports of such problems affecting academic performance for six or more days a week were higher for non-White students (e.g., 15.0% Multiracial, 13.3% Other, 12.7% Black, 11.3% Hispanic, 9.6% Asian), than for White students (9.5%) (Eisenberg et al., 2013). Regarding the Hispanic/Latinx population specifically, rates of receiving mental health treatment are extremely low, even when compared with other ethnic groups. Additionally, the prevalence of mental illness in this population is similar to that of other racial and ethnic groups, indicating that Hispanic/Latinx individuals are of unique high risk and deserve special attention (Alegría et al., 2002; Shattell et al., 2008; Villatoro et al., 2014).

First-Generation College Students

Along with racial and ethnic minorities, first-generation students represent another overlooked demographic within mental health research on college students. While continuing-generation college students face several challenges on their own, first-generation students must face these challenges, as well as some unique to their first-generation college student status (Lightweis, 2014; O'Neal et al., 2016). In part, this is because this group often includes minorities, children of immigrants, and persons who come from low socioeconomic status backgrounds (Jenkins et al., 2013). First-generation college students are considered one of the fastest-growing student populations and make up about 34% of university freshman populations nationally. Yet, they are also regarded as an at-risk population with one of the highest rates of

dropping out among students pursuing post-secondary education (Lightweis, 2014). In a recent study with a large sample of college students (N = 1355), first-generation participants reported experiencing more mental health problems than their continuing-generation peers (House et al., 2020). Specifically, they had higher rates of depression, anxiety, social anxiety, academic distress, eating concerns, hostility, and alcohol use. In addition, they also worked more hours and experienced greater financial stress than continuing-generation students. It is important to note that the definition of a first-generation student in the House et al. (2020) study was specified as having parents or guardians who do not possess a college degree and who have earned a high school degree or less. However, the definition used in this thesis will be having parents or guardians who have not earned a bachelor's degree or higher.

Even with severe experiences (e.g. poverty, racism and discrimination, lack of support groups) and their associated effects on performance, racial/ethnic minority and first-generation students are not receiving the help they need (Kearney et al., 2005). To address high rates of poor mental health and low rates of treatment, overlooked groups and their experiences must be included in mental health research. In order to address this gap in the literature, the current study will focus on two of these groups, Latinx and first-generation students.

Theoretical Models

Two theoretical models were chosen as bases for the model in this study: The Theory of Planned Behavior and The Intrapersonal-Interpersonal-External Framework of Barriers. Aspects of each model are represented in the adapted model, which aligns with the study's six predictor variables and one outcome variable. The six predictor variables (barriers to counseling) are: negative perceived value (negative attitudes toward counseling), ingroup stigma (negative perceptions held by one's ingroup), discomfort with emotions (discomfort with feeling and

sharing one's emotions), lack of knowledge (mental health illiteracy), lack of access (not having the ability to obtain or maintain counseling), and cultural barriers (obstacles to counseling created by one's culture).

The Theory of Planned Behavior (TPB) has been widely used by psychologists and researchers to study health behaviors and intentions (e.g., Bohon et al., 2016; Chen et al., 2016; Wang et al., 2020). When applied to mental health help-seeking, this theory proposes that one's attitudes, subjective norms, and perceived behavioral control influences their behavioral intention, which in turn affects help-seeking behavior (see Figure 1) (Ajzen, 1991). In TPB, attitudes are defined as whether one views a behavior as positive or negative, subjective norms is defined as whether one believes peers approve of or disapprove of a behavior, and perceived behavioral control is defined as whether one views a behavior as easy or difficult to perform. Intention is whether one plans to act on a behavior or not, while behavior is whether action is taken or not. This theory was used as a basis for selecting both of the measures used in the study, The Barriers to Seeking Mental Health Counseling Scale (BMHC) and The Mental Help Seeking Intention Scale (MHSIS). In the current study, the constructs of attitudes, subjective norms, and perceived behavioral control in the TPB model will be represented by four of the six barrier subscales from the BMHC scale (*negative perceived value, ingroup stigma, lack of knowledge, and lack of access*), while intention will be assessed using the three items of the MHSIS scale. Since the actual behavior to help-seek is not being measured in this study, the behavior outcome in the TPB model will not be included in the adapted model.

The Intrapersonal-Interpersonal-External Framework of Barriers (I-I-EFB), adapted from the barriers identified in work by Leong and Lau (2001), will also be used to inform this research. This framework posits that barriers to mental health services can be categorized as

attitudinal or cognitive, affective or emotion-related, interpersonal, structural/logistical, or cultural (see Figure 2) (Shea et al., 2019). In I-I-EFB, attitudinal or cognitive behaviors are defined as negative attitudes toward counseling, affective or emotion-related barriers are defined as discomfort with disclosing to a mental health professional, and interpersonal barriers are defined as internalizing negative social norms surrounding counseling. Structural barriers are defined as a lack of knowledge on and/or a lack of access to mental health services, cultural barriers are defined as discrepancies in experience and cultural competence between a client and a counselor, and intention to seek mental health help is defined as whether one plans to seek counseling or not. In the current study, the barriers categories will be represented by all six of the barrier subscales from the BMHC scale, while intention to seek mental health help will be assessed using the MHSIS scale.

Adapted Model

Combining both the Theory of Planned Behavior and the Intrapersonal-Interpersonal Framework of Barriers, the result is the adapted theoretical model for the current study (see Figure 3). In the first block, it is shown that the concept of attitude from TPB overlaps with attitudinal or cognitive barriers. Regarding the measured barriers, this includes negative perceived value. In the second block, the concept of subjective norms overlaps with interpersonal barriers, which includes the measured barrier of ingroup stigma. In the third block, the concept of perceived behavioral control overlaps with structural/logistical barriers, which includes the measured barriers of lack of knowledge and lack of access. The fourth and fifth blocks, affective or emotion-related barriers and cultural barriers, do not overlap with any concepts studied within TPB and therefore represent the Intrapersonal-Interpersonal Framework of Barriers solely. Affective or emotion-related barriers include the measured barrier of discomfort with emotions,

while cultural barriers include the measure of cultural barriers. While both frameworks overlap, it is important to include the Intrapersonal-Interpersonal framework because it addresses cultural barriers, which uniquely affect this study's population.

Attitudes toward and Intentions to Seek Counseling

One's attitudes toward seeking mental health help can be complex, stemming from multiple personal and social factors, including self-reliance and public stigma (Rickwood et al., 2005; Sylwestrzak et al., 2015). These are often measured using the Attitudes Toward Seeking Professional Psychological Help scale (ATSPPH; Picco et al., 2016). Research shows that the most common factors responsible for the underutilization of help-seeking are stigma, anticipated costs, and reluctance to disclose one's diagnosis. Additionally, negative attitudes toward seeking help and a lack of intention to seek help have been linked to both a lack of knowledge about mental health services and beliefs that such services are ineffective (Czyz et al., 2013; Picco et al., 2016).

To examine attitudes toward counseling among racial/ethnic minority students, a recent study explored the effects of psychocultural variables and psychological distress on personal and self-stigma for seeking mental health help (Cheng et al., 2013). The sample included 609 racial/ethnic minority college students, 183 of which identified as Latinx. Data showed that both depression and anxiety had significant and positive correlations with perceived stigmatization by others and self-stigma was negatively associated with seeking psychological help. Regarding Latinx students specifically, having a weaker ethnic identity was associated with higher self-stigma, and higher self-stigma was associated with a lower likelihood of seeking mental health help. The researchers suggested that self-stigma in relation to mental health help-seeking in Latinx students may be caused by the participants' inclination to create close relationships with

people from other ethnic groups, as well as their perception of how those peers stigmatize help-seeking themselves (Cheng et al., 2013). The study concluded that ethnic identity, self-stigma, and perceived stigmatization by family members, friends, and professors/academic departments all contributed to explaining mental health help-seeking for Latinx students.

To examine attitudes among first-generation students, Chang et al. (2019) investigated how cultural norms affected coping and help-seeking among first-generation college students. The sample consisted of 71 students who were surveyed online and then either interviewed individually (N = 11) or in a group (N = 60). The questions concerned cultural mismatch between their university and home settings and coping behavior for psychological distress. In the individual interviews, most participants stated a preference for solving issues on their own or ignoring them entirely rather than seeking help (Chang et al., 2019). Since psychological distress was also reported by most, the researchers suggested that unmet psychological needs among this population may in part be caused by the self-reliance that is fostered in working-class families. In the group interviews, finances were a common source of mental distress and were seen as an obstacle to seeking help. Financial stress also included the guilt of knowing their parents were struggling to pay for their schooling, the guilt of failing at school because their parents were struggling financially, and a lack of experience with navigating financial aid. In the online survey, the most frequently reported coping strategies were self-distraction, planning, and active coping. Additionally, while the students reported being aware of campus resources and peer support, they still leaned heavily toward self-reliance (Chang et al., 2019). Results from this study and others suggest that certain attitudes and stigmas are important determinants of willingness to seek counseling (Chang et al., 2019; Phinney & Haas., 2003; Stebleton et al., 2014).

Due to this determination, this study measures similar concepts. Two of the barriers measured in the current study are *negative perceived value* of mental health treatment and *ingroup stigma*. Negative perceived value will represent attitudes toward counseling in the theoretical model as it is similar and more specific, the term often being defined as negative attitudes toward a specific service (Shea et al., 2019; Vanheusden et al., 2008). If one believes that a service would not be beneficial or useful to them, they should then perceive that the service does not hold value for them. In the case of this study, negative perceived value is holding negative attitudes toward mental health help and its value. Ingroup stigma, a more specific type of public stigma, is defined as negative perceptions and stereotypes that one's ingroup (an exclusive group that shares common interests) holds against a particular behavior (Shea et al., 2019). In this study, the ingroup can include one's family, significant other, cultural group, and friends. The stigma in this case refers to the disapproval and negative perceptions held by one's ingroup toward mental health help.

Barriers

While the previously discussed negative attitudes and stigmas about counseling help to explain the low rates of mental health help-seeking each year by Latinx and/or first-generation students, many more barriers keep them from receiving counseling (Gulliver et al., 2010). Past research shows that among college students, the most common are discomfort with emotions, lack of knowledge about counseling resources, autonomy (independence), and perceiving counseling as unnecessary (Cramer, 2017; Eisenberg et al., 2007; Komiya et al., 2000; Wilson & Deane, 2012.) In a systematic literature review from 2002, Velasco and colleagues reviewed 90 studies across five databases to identify common barriers, facilitators, and interventions for mental health help-seeking in adolescents and young adults (Velasco et al., 2002). In U.S.

college students ages 18-24, the most common barriers were lack of time, self-management as means of support, perceived stigma, self-stigma or embarrassment, the perception that treatment is unnecessary/not useful, concerns about confidentiality, low mental health literacy, and distrust in mental health professionals. Two of the barriers reported in the Velasco et al (2002) systematic literature review, embarrassment and mental health literacy, will be measured in the current study. Importantly, the systematic literature review suggested the literature reviewed was of low to medium quality and indicated great heterogeneity in the measurement of help-seeking behavior, which limited the generalizability of findings within this body of literature.

Another important barrier to mental health help-seeking is *discomfort with emotions*. This is described as feelings of discomfort with both experiencing and expressing one's feelings (Kim et al., 2016; Shea et al., 2019). In this study, discomfort with emotions is defined by reports of feeling embarrassed, nervous, uncomfortable, awkward, and/or afraid. A *lack of knowledge,* described as an absence of expertise one has on a certain topic or action, is also associated with mental health help-seeking (Shea et al., 2019). In this study, it will be defined as the lack of knowledge, or mental health literacy, that one possesses in regard to mental health services. Specifically, how mental health counseling works, where to seek counseling, and what types of counseling services are available.

Several studies have investigated barriers to seeking mental health help in the Latinx community and have determined the most common barriers include language, accessibility, cultural stigma, and cultural miscommunication (Aguilar-Gaxiola et al., 2002; Biever et al., 2002; Kouyoumdjian et al., 2003; Rastogi et al., 2012). In 2020, Menendez and colleagues led a study to unveil some of these predictors for engaging in mental health services, both hypothetically and actually (Menendez, 2020). The sample included 145 self-identified Latinx

students, 44 of which also self-identified as first-generation immigrants. Additionally, 73.8% of the participants had never sought mental health counseling. The students were asked to imagine a hypothetical traumatic event and determine to what degree a set of six barriers would constrain them from seeking mental health services. The most common barrier across all students was cultural beliefs around mental health, followed by health insurance, socioeconomic factors, language, transportation, and accessibility (Menendez, 2020).

Two of these barriers, cultural beliefs and accessibility, will be measured in the current study. Cultural barriers are referred to as the perception that in some way one's culture is an obstacle to carrying out an action (Leong & Lau, 2001; Shea et al., 2019). In this case, the belief that culture holds one back from seeking and receiving mental health help. The specific *cultural barriers* measured in the current study are beliefs that the counselor will not be culturally sensitive or understanding, will not have proper training on one's cultural identity and related issues, and that the counselor and the client will have significant cultural differences. *Lack of access* is described as the absence of an ability to obtain a service or resource (Leong & Lau, 2001; Shea et al., 2019). In this study, it is the lack of access to receiving mental health counseling. Specifically, the lack of time or financial means to attend, as well as having too many prior responsibilities or obligations.

Current Study

The purpose of this study is to investigate the effects of Latinx identity and college generational status on the relationship between six barriers to mental health help-seeking and the intention to seek mental health help, after accounting for age, gender, and SES. The independent variables are negative perceived value, ingroup stigma, discomfort with emotions, lack of knowledge, lack of access, and cultural barriers. The dependent variable is an intention to seek

mental health help. The two grouping variables are ethnic identity (Latinx or White) and generation status (first-generation or continuing-generation). Lastly, the three covariate variables are gender, age, and socioeconomic status (SES).

Positionality

Before I present the method and findings of this study, it is important that I acknowledge my position as an Asian American woman. While I do not identify as Latinx, I have had the opportunity to learn about and observe the experiences and beliefs regarding mental health within the Latinx community. I believe that mental health help should be accessible to everyone and that studying barriers and intentions for counseling in marginalized groups helps to highlight inequities and how they can be fixed. Additionally, I attended Northern Arizona University (NAU) for my undergraduate studies, and per their definition, I am a first-generation student. While that has created a few obstacles for me as a student and as someone who has utilized campus counseling, I recognize that not everyone shares the same experiences. Latinx and first-generation students encounter unique barriers when seeking mental health help. It is important to call attention to them when discussing mental health and to also recognize barriers that exist when those identities overlap.

Method

Mental Health Context

While Arizona is ranked slightly below the middle of the 50 states in terms of the prevalence of mental illness overall (32nd) and in adults alone (35th), it is ranked 46th in access to mental health care. The state's overall ranking for the prevalence of mental health problems and access to mental health services in 2022 is 49th, which is 9 ranks lower than in 2021 (Reinert & Nguyen, 2021). Due to NAU's new HSI status and the recognition that to better serve NAU's

growing Latinx and first-generation student populations we need to better understand their experiences at the university, NAU undergraduate college students were chosen as the study's sample.

In addition to the limited resources in Arizona, counseling resources offered to students within this sample are not always accessible. As a graduate teaching student at the university, I have heard multiple negative comments made by students about campus counseling. The most common criticisms have concerned counseling plans, costs, racial and ethnic barriers, and limited accessibility. Due to the high demand for counseling and the small number of counselors on staff, each student is only guaranteed eight counseling sessions per academic year. This is severely limiting for students that require more consistent and frequent care. Consultations cost $10 or $20 each, while brief assessments and individual counseling sessions cost $25 or $40. Students who do not pay the university's health and wellness fee, which is currently $250, are not eligible for the lower costs and must pay $20 or $40. While having health insurance can lower the costs paid, not all students possess insurance and the university only accepts specific providers. Additionally, the counseling staff is primarily white (18 providers), while only three providers are Black, Indigenous, or people of color. Yet, 45% of the university's students are Black, Indigenous, or people of color. The lack of racial and ethnic diversity in counselors may exacerbate feelings of reluctance and discomfort when students consider counseling because it creates a mismatch between student and provider backgrounds in terms of cultural, racial, ethnic, and religious experiences (Bryan et al., 2004). In counselor-client relationships, students should feel secure, understood, and validated, which cannot happen without offering diverse counselors to choose from.

Sampling Procedures

Participants were recruited online through a research participation system (SONA) and consisted mainly of undergraduate first-year students enrolled in an introductory psychology course. The students were able to access the study through the SONA website, which redirected them to the study's questionnaire on Qualtrics. They were presented with an informed consent page, followed by the study, and then by the debriefing form. The entire survey took approximately 15 minutes to complete. Students who completed the study were eligible to receive research credit from their enrolled class. If a student did not agree to the informed consent, they were redirected to the debriefing form, followed by their session ending. Only data from students who agreed to the informed consent and completed the study in its entirety were included in the analysis. Importantly, students were assigned participant numbers through SONA and received credit through the SONA platform directly. All data were anonymous as names and identifying information were not collected. The research study was approved by NAU's Institutional Review Board.

Measures

The study questionnaire consisted of 30 questions across three scales that assess demographics, barriers, and mental health help-seeking intention (see Appendices B, C, and D).

Demographic Questions

Participants responded to demographic questions regarding gender, age, SES, race, ethnicity, and student generation status. Descriptive statistics for these variables are presented in Table 1. For gender, participants were asked what option best describes their gender. The options were Female, Male, Transgender Female, Transgender Male, Nonbinary, and "Prefer not to say." Age was asked of the participants and answered using a fill-in-the-blank option.

For SES, participants were asked what their total family income was for the past year. The options were “Less than $9,999,” $10,000 - $19,999, $20,000 - $49,999, $50,000 - $99,999, $100,000 - $149,999, “More than $150,000,” and “Prefer not to say.” From these categories, the SES variable used in the regression analyses was constructed to compare students with low-income (responses of “Less than $9,999” - $49,999) to students reflective of the rest of the income responses ($50,000 to “More than $150,000” and “Prefer not to say”). Low-income was chosen as the comparison group in order to make a meaningful comparison due to the low sample size. Additionally, previous literature suggests that low-income students experience greater barriers to counseling than other SES categories and should therefore be highlighted. With the higher-income responses including the “Prefer not to say” responses, there were 24 (23.1%) low-income and 80 (76.9%) high-income students.

When asked about race, participants chose from the following: Black or African American, American Indian or Alaska Native, Asian or Asian American, Middle Eastern or Northern African, Native Hawaiian or Other Pacific Islander, White, and “Prefer not to say.” When asked about ethnicity, participants marked either “Yes” or “No” to identifying with being “Hispanic, Latino, Latina, Latin*e*, or Latinx.” Those marking “Yes” were put into the Latinx group, while those marking “No” and selecting White on the previous section were put into the White group. An additional racial/ethnic category, biracial, was added after the data was collected to represent students who selected both Latinx and White. Those who selected any other race except White and marked “No” on the ethnicity question were excluded from data analysis. Most participants self-identified as White (67.62%), almost one-third identified as Hispanic, Latino, Latina, Latin*e*, or Latinx (28.57%), and a smaller number were categorized as Biracial (16.19%). Racial/ethnic data were missing or could not be coded for four students.

For student generation status, participants marked either "Yes" or "No" to being a "first-generation student." Additionally, participants were provided with the definition for a "first-generation college student" being used in the current study: having parents or guardians who neither have earned a bachelor's degree or higher. Most students were continuing-generation students (63.5%).

Barriers to Mental Health Seeking

The Barriers to Seeking Mental Health Counseling Scale Questionnaire (BMHC; Shea et al., 2019) consists of 27 items distributed across 6 subscales which measure negative perceived value, ingroup stigma, discomfort with emotions, lack of knowledge, lack of access, and cultural barriers. Example questions for each subscale are as follows: *"I don't think talking with a mental health counselor would be useful."* (negative perceived value); *"My family or significant other would judge me poorly if I disclose my problems to a mental health counselor."* (ingroup stigma); *"I would feel embarrassed about sharing my feelings with a mental health counselor."* (discomfort with emotions); *"I don't know how mental health counseling works."* (lack of knowledge); *"I don't have the time to seek or stay in counseling."* (lack of access); *"I don't think that most mental health counselors would understand my cultural values."* (cultural barriers). The items on the BMHC scale are scored on a 6-point Likert scale, which ranges from 1 (*strongly disagree*) to 6 (*strongly agree*). It is scored in total by averaging the scores across all items. A higher average score for each subscale signifies a stronger extent of that construct, while a lower score signifies a weaker extent.

Criterion validity for the scale has been demonstrated through correlations between the BMHC and the Emotion Control of Conformity to Masculine Norms Inventory (CMNI; Yeung et al., 2015), the Self-Stigma of Seeking Help Scale (SSOSH; Vogel et al., 2006), and all 4

components of the Theory of Planned Behavior model: attitude, subjective norms, perceived behavioral control, and mental health help-seeking intention (TPB; Ajzen., 1991). Discriminant validity was demonstrated through nonsignificant or small correlations with two measures of the Balanced Inventory of Desirable Responding-16 (BIDR-16; Hart et al., 2015). Incremental reliability was computed and achieved for all BMHC subscales as follows: Negative Perceived Value (α = .74), Discomfort with Emotions (α = .88), In-group Stigma (α = .86), Lack of Knowledge (α = .88), Lack of Access (α = .82), and Cultural Barriers (α = .83) (Shea et al., 2019). For this study the following values were obtained (α for *N* = 101 is reported first, and followed by α for N = 204): Negative Perceived Value (α = .79, α = .80), Discomfort with Emotions (α = .51, α = .56), In-group Stigma (α = .59, α = .60), Lack of Knowledge (α = .88, α = .87), Lack of Access (α = .80, α = .85), and Cultural Barriers (α = .53, α = .57).

Mental Help-Seeking Intention Scale

The scale used to measure intentions is the Mental Help Seeking Intention Scale (MHSIS; Hammer & Spiker., 2018), which consists of three items. An example question for the scale is "If I had a mental health concern, I would intend to seek help from a mental health professional." For its purpose, the phrase "mental health professionals" includes psychologists, psychiatrists, clinical social workers, and counselors. The items on the MHSIS scale are scored on a 7-point Likert scale, ranging from 1 (extremely unlikely, definitely false, or strongly disagree) to 7 (extremely likely, definitely true, or strongly agree). It is scored by producing a mean from the three items. A higher total mean indicates that the participant has a stronger intention to seek mental health help or is more likely to, while a lower total mean indicates that they have a weaker intention or are less likely. The scale has strong internal validity (α = .94; 95% CI [.929, .949]), and convergent validity for the MHSIS has been demonstrated through

significant positive associations between intention and both the attitude and subjective norms sections of the Theory of Planned Behavior model (TPB; Ajzen., 1991). Internal validity for this study was high, $N = 101$ ($\alpha = .98$), and $N = 204$ ($\alpha = .97$).

Analyses

Original Analysis

The original proposed analysis included a hierarchical multiple regression analysis containing four models. The first model contained the covariate variables age, gender, and SES. The second model included the ethnicity comparison (Latinx vs White) and student generation status variables. The third model included an interaction variable (ethnicity x student generation status), and the fourth and final model included the six barrier variables.

Modified Analysis

The original analysis required modification due to a small sample size. An a priori power analysis was performed using G*Power3 (Faul et al., 2009) to test the difference between six tested predictors (nine total predictors) using a medium effect size ($f^2 = 0.15$) and an alpha of .05. Output showed that a sample size of 98 participants for each hierarchical multiple regression was required to achieve a power of .80. The sample obtained for this study consisted of 105 students, four of which were removed from analysis for having incomplete data or identifying as any race other than White and not Latinx. This left 101 students for analysis, which was inadequate to test four separate hierarchical multiple regression models.

Analysis modifications included removing the age and gender covariate variables in model one and removing the interaction variable from model three. Additionally, a third variable was added to model two to account for the large number of participants who identified as both White and Latinx (Biracial variable). The modified hierarchical multiple regression analysis

included three models. In the first model, only the SES variable was entered. The SES variable was constructed to compare low SES with all other SES statuses. The second model entered the Latinx and Biracial racial/ethnic identity variables and the student generation status variable. The Latinx variable was constructed to compare Latinx with White students and the Biracial variable compared Biracial with White students. The third model entered the six barriers to counseling variables. The outcome variable, intention to seek mental health help, was retained.

Results

Sample

The sample included approximately 101 college students, including 38 first-generation and 66 continuing-generation. Most participants self-identified as White (see Table 1). The mean age for participants was 19.64 (*SD* = 3.21). The majority of the participants reported their total family income as being between $50,000 and $150,000 or preferred not to say (see Table 1).

Data Screening

Once all study responses were collected, data was analyzed through IBM SPSS (Version 27). Hierarchical multiple linear regression makes six key assumptions: linearity, normality, independence of errors, homoscedasticity, absence of multicollinearity and singularity, and normal distribution of errors. Before running the multiple linear regression, an initial data screening was performed. Inspection of the residuals plot indicated the assumption of linearity was met, and a good degree of homoscedasticity was achieved as evidenced by the fairly even distribution of points. Inspection of histograms and z-scores for the variables revealed no large departures from normality, and in addition, the residuals were normally distributed. However, there was one univariate outlier. While the z-score for the case was above the acceptable critical value, 3.29 ($z = 3.85$), the case was kept to maintain variability. No multivariate outliers were

detected at $p < 0.001$ (Mahalanobis distance, $\chi^2 = 27.88$). Additionally, there was no evidence of multicollinearity (Condition Index < 30, one variance proportion > .50) and the data met the assumptions of independent errors (Durbin-Watson value = 2.03). Thus, all of the assumptions of regression were met.

Hierarchical Multiple Regression

A hierarchical multiple regression was run in SPSS REGRESSION to determine the degree to which six barriers to counseling explain variance in the intention to seek mental health help above and beyond the contributions made by SES (first model), and Latinx and Biracial racial/ethnic identities and student generation status (second model).

First Model

In the first model, SES was entered and accounted for a statistically significant amount of variance ($R^2 = .041$, $R^2_{adj} = .031$) in intention to help-seek, $F(1, 99) = 4.19$, $p = .043$. SES was coded so that a value of 1 represented low income. Thus, having a low-income status was related to a lower intention to seek mental health help ($B = -.95$, $p = .043$).

Second Model

In the second block, student generation status and two racial/ethnic comparisons (Latinx vs White, Biracial vs. White) were entered. The inclusion of these three predictors accounted for an additional 5.2% ($\Delta R^2 = .052$) of the variance in intention to seek mental health help, $\Delta F(3, 96) = 1.82$, $p = .148$, but this contribution was not significant. Although about 9% of the variance in intention was explained by the four variables in the model ($R^2 = .092$, $R^2_{adj} = .054$), none of the variables entered in model 2 were statistically significant $F(4, 96) = 2.44$, $p = .052$. Additionally, the significant relationship between SES and mental health help-seeking in model 1 disappeared in the presence of the additional variables entered in model 2.

Final Model

The variables entered in model 3 accounted for a significant amount of variance in intention to seek mental health help, $\Delta F(6,90) = 16.13$, $p < .001$, with ΔR^2 indicating that 47% of the variance in intention was accounted for by the combination of the six barriers to counseling variables including negative perceived value (NPV), ingroup stigma (IS), discomfort with emotions (DWE), lack of knowledge (LofK), lack of access (LofA), and cultural barriers (CB). The final model accounted for a significant amount of variance in mental health help-seeking behavior, $F(10, 90) = 11.58$, $p < .001$. However, only negative perceived value ($B = -.50$, $p = .002$) and discomfort with emotions ($B = -.85$, $p < .001$) had significant negative relationships with mental health help-seeking. The largest contribution was made by discomfort with emotions ($\beta = -.50$), where a one standard deviation increase in this predictor resulted in a half standard deviation decrease in mental health help-seeking. The final model was useful in explaining the relationship between two of the barriers and intention. However, it did not provide a clear explanation for the relationships between help-seeking intention and the other four barriers, SES, ethnic identity, or generation status.

Post Hoc Analyses

Several exploratory analyses were run to better understand the impact of the race/ethnicity variables entered in model 2 on the significant relationship between SES and MHSIS in model 1. First, two chi-square tests of independence were run. Results indicated that SES status (low/high) was independent from Biracial vs. White racial/ethnic identity $\chi^2(1, N = 101) = .004$, $p = .95$. However, SES status (low/high) was not independent from Latinx vs. White racial/ethnic identity $\chi^2(1, N = 101) = 21.12$, $p < .001$. As shown in Figure 4, more Latinx

students reported having a low rather than a high income, whereas more White students reported having a high versus a low income.

Additionally, a partial correlation analysis revealed that when Latinx vs. White racial/ethnic identity was controlled for, the correlation between SES and MHSIS decreased in magnitude and significance. Although the zero-order correlation was small (r = -.20, p = .043), it reduced to nearly zero when Latinx vs. White racial/ethnic identity was controlled (r = -.09, p = .382), and the relationship was no longer significant. This suggests that once the variance Latinx vs. White racial/ethnic identity shares with SES and MHSIS is accounted for, SES explains a negligible amount of variance in MHSIS.

Sensitivity Analysis

After the analyses described above were ran, additional data was received, due to students completing the study in order to gain extra credit before the end of the semester. In order to determine whether an adequately powered analysis shifted pattern of results, an additional hierarchical multiple regression was (N = 204). The larger sample size also allowed the SES and ethnicity/race variables to be recoded. The second regression analysis removed participants who preferred not to respond to the SES question, as well as participants who fell into the Biracial category. Both removals created a simplified regression with SES as the covariate variable (low vs. high) in the first model, the Latinx ethnicity variable (Latinx vs. White) and the student-generation status variable (first-generation vs. continuing-generation) in the second model, and the six barriers in the third model. The results from the sensitivity analysis showed that SES no longer accounted for a statistically significant amount of variance (R^2= .013, R^2_{adj} = .008) in intention to help-seek, F(1, 199) = 2.54, p = .113. In the final model the pattern of

relationships remained consistent with the original analysis, with only NPV and DWE maintaining significant negative relationships with mental health help-seeking.

Discussion

The proposed research question was: What barriers exist to seeking mental health services for Latinx, first-generation students in contrast to White continuing-generation students, and how are these barriers related to one's intention to seek mental health help? Due to a small sample size, this question could not be addressed. Instead, this research investigated the effects of ethnic identity, student generation status, and the six barriers to counseling on the intention to seek mental health help, after controlling for SES. Due to the small sample size obtained, findings cannot be generalized and clear conclusions cannot be drawn.

The final regression model revealed that two of the six barriers to counseling contributed to understanding variability in intention to seek mental health help. This suggests that negative perceived value and discomfort with emotions are the largest reasoning behind the lack of intentions, attempts, and plans to seek help in college students, supporting previous literature in this area (Leong & Lau, 2001; Shea et al., 2019). Consistent with past research, these results suggest that negative attitudes and perceptions toward counseling and discomfort with experiencing emotions and expressing them in counseling are the largest impediments to help-seeking in college students (Chang et al., 2019; Cheng et al., 2013).

The second largest contributor to changes in intention to seek help was SES in the first model. This finding supports past research stating that socioeconomic status and related factors (e.g., lack of financial means) represents a large barrier to seeking counseling in Latinx communities (Aneshensel, 2009; Menendez et al., 2020). However, once the two ethnicity variables and student generation status were entered into the second model, that contribution

became non-significant. Despite this outcome, SES remains to be an important factor in help-seeking intentions across Latinx and first-generation students and therefore, should be included in future research.

Both ethnicity variables and generation status contributed the least to intention to seek mental health help. Contrary to previous research, this implies that ethnicity and generation status do not have a large effect on lack of intentions, attempts, and plans to seek help (Alegría et al., 2002; Cheng, Kwan, & Sevig., 2013). However, the number of students out of 105 who identified as first-generation (N = 38), Latinx (N = 30), and both (N = 17) may account for the non-significance of these variables. Therefore, all observed relationships between these variables and the outcome should be viewed cautiously.

The overall results were somewhat able to support the adapted theoretical model and each of the two original theories. The significant relationship between negative perceived value and mental health help-seeking is aligned with the premise in TPB that attitudes influence intentions (Ajzen, 1991). However, the study was not able to provide new evidence that subjective norms and perceived behavioral control are effective predictors within the TPB model. Additionally, the significance of negative perceived value and discomfort with emotions maintains that in the Intrapersonal-Interpersonal-External Framework of Barriers, attitudinal or cognitive barriers and affective or emotion-related barriers affect one's intention to seek mental health help (Shea et al., 2019). However interpersonal, structural/logistical, and cultural barriers were not able to be supported as effective predictors. Altogether, the results only supported three parts of the adapted theoretical model, including intention to seek help.

Limitations and Strengths

The main limitation of this study was the small sample size. This did not allow for the investigation of a comparison between ethnicity and student generation status, nor the use of four multiple regressions for each ethnicity x generation status group. If a sufficient sample size were to be achieved in the future, it is possible that the results would differ in a few ways. Firstly, a more proportionate sample of Latinx versus White students and first-generation versus continuing-generation students may better support previous research showing that ethnicity and student generation status have a large effect on intention to seek help (Alegría et al., 2002; Cheng et al., 2013). Secondly, if Latinx and first-generation populations were better represented, different barriers may become more or less influential on intention to seek help.

There were also a couple of issues regarding the ethnicity variable and the SES variable. Contrary to initial expectations, a considerable number of students identified as both Latinx and White. Rather than remove them, it was decided that they be put into a third category, which represented Biracial identification. For SES, there were not enough students to fill each income category. To fix this problem, SES was coded so that low-income students were compared to everyone else, including those that preferred not to state their annual income. This issue was addressed in the sensitivity analysis by removing participants who marked "Prefer not to say." However, even once the SES variable was fixed, ethnic identity (Latinx vs. White) was still not a significant variable and the outcome was not affected.

Lastly, the makeup of the study presented restricted the interpretation of results. Majority of the participants were White, female, not Latinx identifying, and continuing-generation. This composition is limited, and therefore results cannot be easily generalized to Latinx, male, first-generation students.

A strength of this study was the targeted population. While a large portion of the participants were not Latinx or first-generation, this study aimed to address the counseling barriers of groups that are heavily underrepresented in existing research on help-seeking in college students. Additionally, the results suggested that negative attitudes toward counseling and discomfort with expressing feelings to a counselor may be two of the largest barriers to counseling that college students face, which provides further insight for university mental health help-seeking strategies.

A second strength is that the sample represented a variety of majors, with only about 7% of the participants being students studying Psychology. This variation across majors increases the likelihood that responses were unbiased by major and limits the possibility that results were affected by students' existing knowledge or beliefs surrounding mental health help-seeking.

Study Implications

Significant results from this study suggest that both negative perceived value and discomfort with emotions should be considered when discussing how to improve mental health resources for students. Regarding negative perceived value, it is clear that one of NAU students' biggest barriers to help-seeking is the negative attitudes, beliefs, and perceptions that they hold toward counseling. Regarding discomfort with emotions, it is also evident that another one of NAU students' biggest barriers to help-seeking is discomfort surrounding feeling emotions and expressing them with others, specifically mental health professionals. To combat these barriers, NAU as a university and within their counseling department specifically should dedicate time to removing stigma around mental health help-seeking and educating students in a way that creates more positive attitudes. It may also be helpful to find wide-reaching strategies that normalize

mental health problems and seeking help from trusted individuals on campus. However, these actions must also be paired with an increase in available diverse counselors.

Future Directions

Future research in this area may benefit from a few different additions. Firstly, the inclusion of an ethnic identity scale may help to better explain the level of intention students have to seeking help. Students within the Biracial and Latinx categories may have different experiences and extents to which they feel connected to their ethnic identities. Therefore, an ethnic identity scale may offer further insight into ethnic identity's effect on intention to seek mental health help. Past research also shows that ethnic identity affects one's likelihood of seeking mental health help (Cheng et al., 2013). Additionally, future research may benefit from the inclusion of one or multiple qualitative methods. While quantitative methods offer partial understanding of the effects of barriers to counseling on intention to seek help, the addition of qualitative questions may help to understand the attitudes and experiences as they relate to counseling and counseling barriers for these underrepresented groups.

Conclusion

The largest contributors to the outcome of intention to seek mental health help were negative perceived value and discomfort with emotions. This supports previous research, while also implying that future university counseling should include strategies that target these barriers. While not all predictors were significant, this study provided further insight into the effects of barriers to counseling on college students' intention to help-seek.

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Tables

Table 1

Demographic Characteristics of Participants

Characteristic	n	%
Race		
Black or African American	1	0.95%
American Indian or Alaska Native	1	0.95%
Asian or Asian American	3	2.86%
Middle Eastern or Northern African	1	0.95%
Native Hawaiian or Other Pacific Islander	1	0.95%
White	90	85.71%
Prefer not to say	7	6.67%
Missing	0	0%
Ethnicity		
Hispanic, Latino, Latina, Latin*e*, or Latinx	30	28.57%
Biracial	17	16.19%
White	71	67.62%
Missing	4	3.80%
Gender		

Characteristic	n	%
Female	79	75.24%
Male	17	16.19%
Transgender Female	1	0.95%
Transgender Male	0	0.00%
Nonbinary/Gender non-conforming	5	4.76%
Other	1	0.95%
Missing	2	1.90%
SES		
Less than $9,999	4	3.81%
$10,000 - $19,999	1	0.95%
$20,000 - $49,999	18	17.14%
$50,000 - $99,999	26	24.76%
$100,000 - $149,99	15	14.29%
More than $150,000	17	16.19%
Prefer not to say	18	17.14%
Missing	1	0.95%
Student Generation Status		

Characteristic	n	%
First-generation	38	36.19%
Continuing-generation	66	62.86%
Missing	1	0.95%

Note. $N = 105$. Participants were on average 19.64 years old ($SD = 3.21$).

Table 2

Descriptive Statistics and Correlations for Study Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. NPV	2.87	.99	—						
2. IS	2.23	.98	.16	—					
3. DWE	3.72	1.15	.21*	.25*	—				
4. LofK	2.95	1.38	.13	.40**	.25*	—			
5. LofA	3.41	1.15	.38**	.52**	.40**	.59**	—		
6. CB	2.47	1.10	.19	.47**	.13	.41**	.42**	—	
7. MHSIS	4.23	1.98	-.40**	-.38**	-.63**	-.41**	-.47**	-.31**	—

Note. $N = 104$. "NPV" = Negative perceived value, "IS" = Ingroup stigma, "DWE" = Discomfort with emotions, "LofK" = Lack of knowledge, "LofA" = Lack of access, "CB" = Cultural barriers.

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

Table 3

Hierarchical Regression Results for Mental Help-Seeking Intention

Variable	*B*	95% CI for *B*		*SE B*	β	R^2	ΔR^2
		LL	*UL*				
Step 1						.04	.04
Constant	4.47***	4.03	4.91	.22			
SES	-.95*	-1.87	-.03	.47	-.20		
Step 2						.09	.05
Constant	4.57***	2.84	6.30	.87			
SES	-.53	-1.65	.59	.57	-.11		
GenStatus	-.08	-1.00	.85	.47	-.02		
ETH_LX	-1.31	-2.67	.06	.69	-.21		
ETH_BR	.49	-.57	1.51	.52	.10		
Step 3						.56	.47
Constant	10.20***	8.46	11.95	.88			
SES	-.01	-.86	-.85	.43	-.00		
GenStatus	.01	-.67	.69	.34	.00		
ETH_LX	-.20	-1.31	.91	.56	-.03		

ETH_BR	.38	-.40	1.15	.39	.07
NPV	-.50**	-.80	-.19	.15	-.25
IS	-.18	-.56	.19	.19	-.09
DWE	-.85***	-1.11	-.59	.13	-.50
LofK	-.23	-.50	.04	.14	-.16
LofA	-.03	-.40	.34	.19	-.02

Note. “SES” = Socioeconomic status, “GenStatus” = Student generation status, “ETH_LX” = Latinx vs. White, “ETH_BR” = Biracial vs. White, “NPV” = Negative perceived value, “IS” = Ingroup stigma, “DWE” = Discomfort with emotions, “LofK” = Lack of knowledge, “LofA” = Lack of access, “CB” = Cultural barriers.

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

Figures

Figure 1

Theory of Planned Behavior

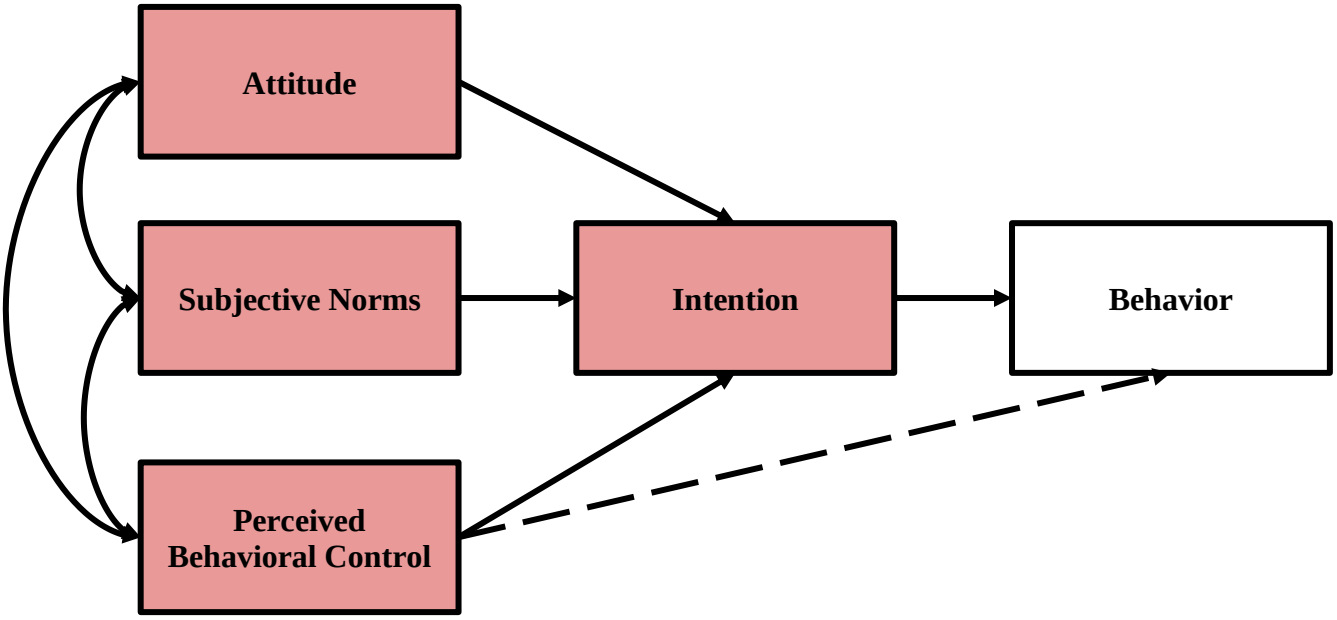


Figure 2

Intrapersonal-Interpersonal-External Framework of Barriers

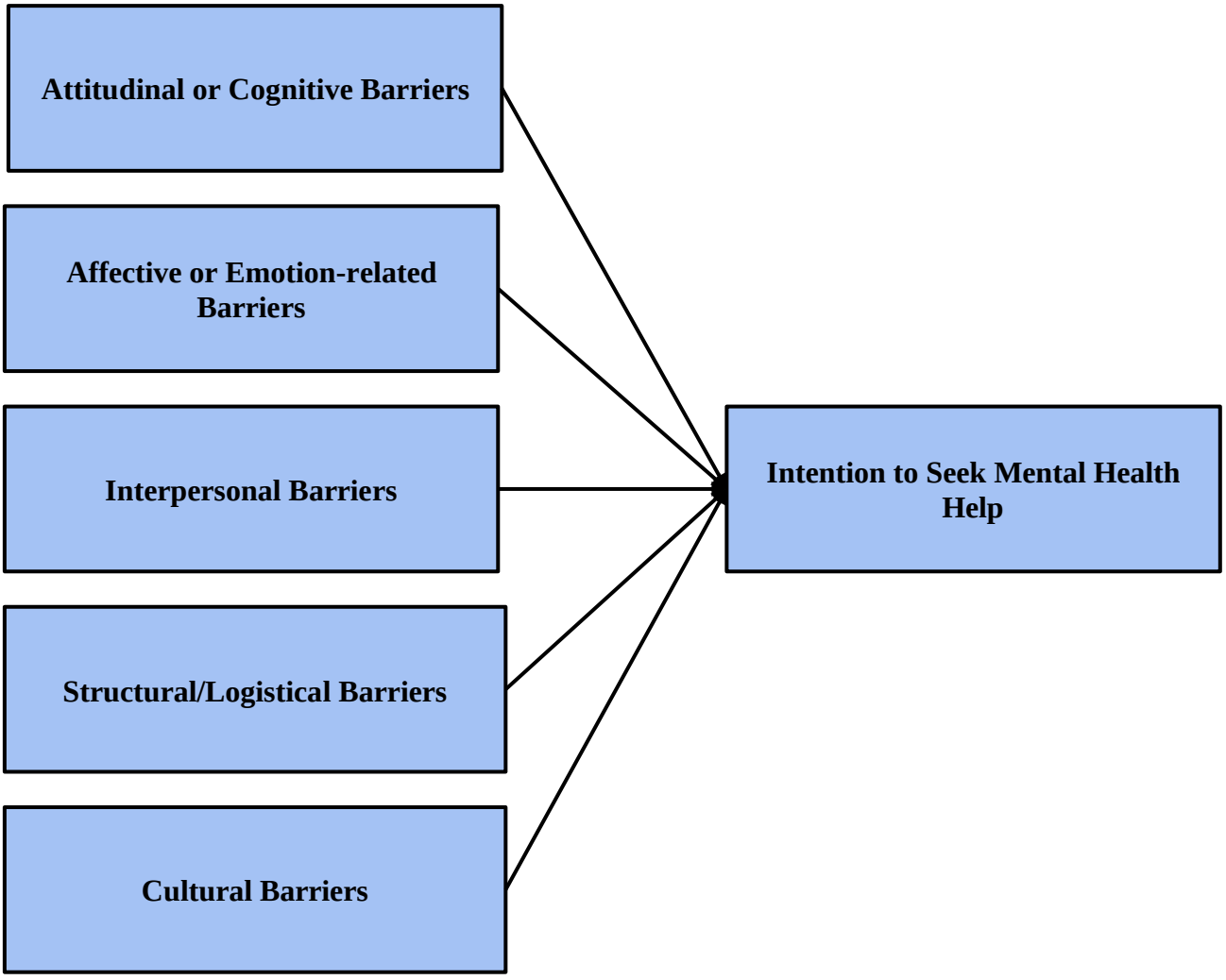


Figure 3

Adapted Theoretical Model

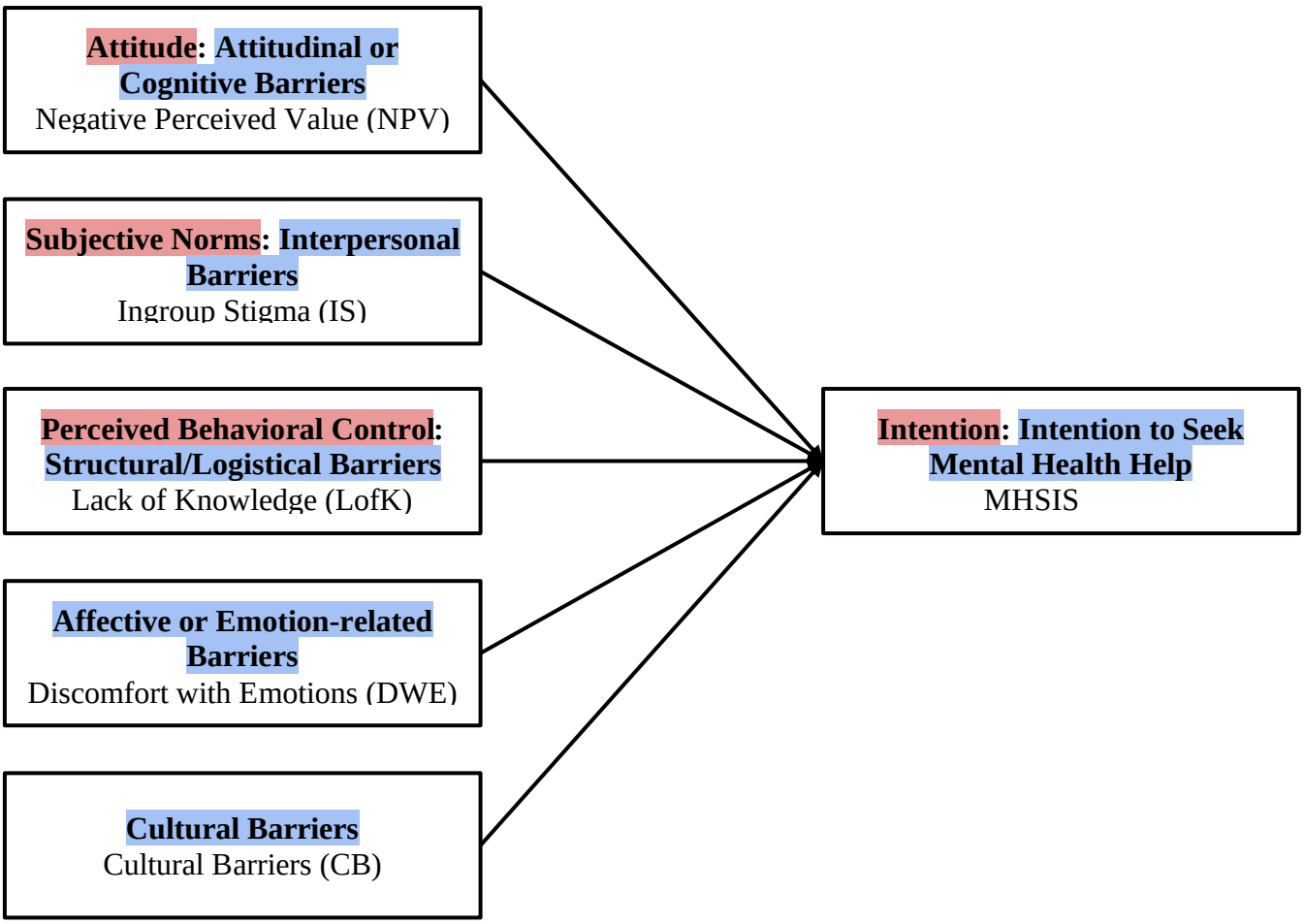
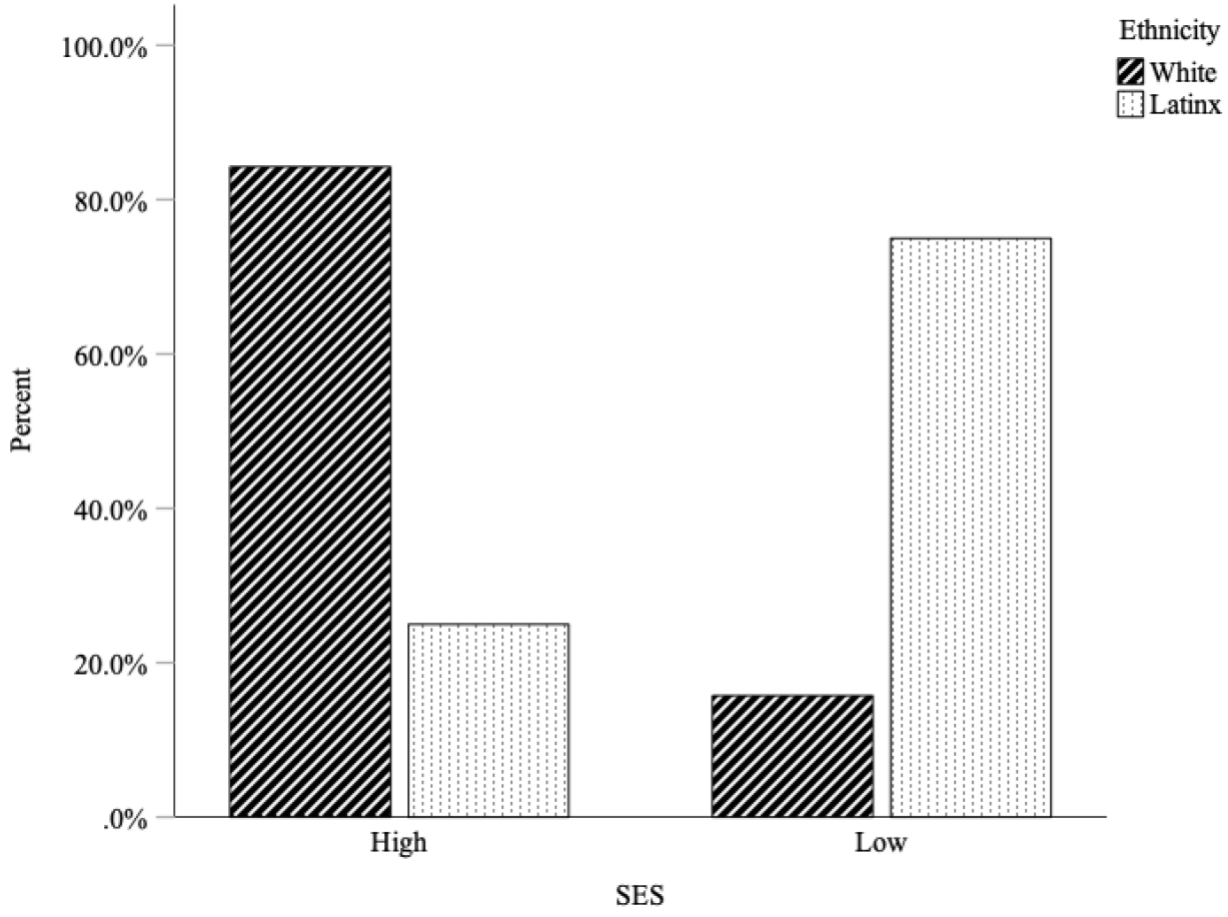


Figure 4

White vs. Latinx Students in Each SES Category



Appendix A: Informed Consent

You are being invited to participate in a research study titled Barriers to Counseling and Intention to Seek Mental Health Help in College Students. This study is being conducted by Kiana Helgren and supervised by Nora Dunbar, Ph.D. from Northern Arizona University.

The purpose of this research study is to investigate the relationship between barriers and the intention to seek mental health help among college students. If you agree to take part in this study, you will be asked to complete an online questionnaire. This survey/questionnaire will ask about demographics, and attitudes and intentions toward seeking mental health help and it will take you approximately 15 minutes to complete.

You may not directly benefit from this research; however, we hope that your participation in the study may further knowledge on barriers to counseling and intention to seek mental health help. Those participating through SONA may receive course credit or extra credit for their participation. Students that wish to not participate can request an alternate assignment from their professor. Those participating who are not enrolled in SONA, may or may not receive extra credit from their professor, depending upon whether that is an option in their class. We believe there are no known risks associated with this research study; however, as with any online related activity the risk of a breach of confidentiality is always possible. All data we collect from you will be anonymous. To the best of our ability, your answers in this study will remain confidential.

Your participation in this study is completely voluntary and you can stop at any time. You are free to skip any question that you choose. However, once you submit the survey, we cannot omit your information from the study because your answers will be anonymous. If you choose not to participate it will not affect your relationship with Northern Arizona University or result in any other penalty or loss of benefits to which you are otherwise entitled.

If you have questions about this project or if you have a research-related problem, you may contact the researcher(s), Kiana Helgren: (808)-542-6631, kthelgren@gmail.com. If you have any questions concerning your rights as a research subject, you may contact Northern Arizona University IRB Office at irb@nau.edu or (928) 523-9551.

By submitting this survey, I affirm that I am at least 18 years of age and agree that the information may be used in the research project described above.

Appendix B: Demographic Questionnaire

1. What option best describes your gender?

Female, Male, Transgender Female, Transgender Male, Non-binary/Gender non-conforming, Other (accompanied with a fill-in-the-blank), and “Prefer not to say."

2. What is your age in years?

Fill-in-the-blank option

3. What was your total family income for the past year? (Combined total income received by all immediate family members)

“Less than $9,999,” $10,000 - $19,999, $20,000 - $49,999, $50,000 - $99,999, $100,000 - $149,999, “More than $150,000,” and “Prefer not to say.”

4. Which race or races best describes you? Choose all that apply.

Black or African American, American Indian or Alaska Native, Asian or Asian American, Middle Eastern or Northern African, Native Hawaiian or Other Pacific Islander, White, and “Prefer not to say.”

5. Do you identify as Hispanic, Latino, Latina, Latin*e*, or Latinx?

“Yes” or “No”

6. Do you identify as being a first-generation student?

“Yes” or “No”

Appendix C: Barriers to Seeking Mental Health Counseling Scale (BMHC)

Negative Perceived Value

I don't think talking with a mental health counselor would be useful.

I like to count on my friends or family for support rather than reach out to a mental health counselor.

I think talking with a mental health counselor would only make me dwell on the problem without necessarily resolving the issue.

Because I have enough social support, I would not need to seek mental health counseling for my personal problems.

I don't like to rely on a mental health counselor to tell me what to do about my problems.

Ingroup Stigma

My family or significant other would judge me poorly if I disclose my problems to a mental health counselor.

Most people in my cultural group would not approve of my decision to seek mental health counseling.

My friends would think less of me if they knew I sought mental health counseling.

Seeking mental health counseling would bring shame to my family.

My family or significant other would not see me negatively if I share my problems with a mental health counselor.

Discomfort with Emotions

I would feel embarrassed about sharing my feelings with a mental health counselor.

I would feel nervous about showing the emotional side of me during the mental health counseling process.

I feel comfortable expressing my feelings to a mental health counselor.

It would be awkward for me to talk about my feelings in counseling.

I fear going to counseling because I don't like to reveal my feelings.

Lack of Knowledge

I don't know how to where to seek mental health counseling.

I don’t know what kind of mental health counseling services are available.

I don’t know how mental health counseling works.

Lack of Access

I don’t have the time to seek or stay in counseling.

I have no financial means (e.g. insurance, money) to afford mental health counseling services.

I have too many responsibilities to other people (e.g. family, friends, significant others) that would prevent me from seeking mental health counseling.

I have too many academic or work-related obligations that would deter me from talking to a mental health counselor.

Cultural Barriers

I perceive that most mental health counselors would not be sensitive to issues related to my cultural identity.

I don’t think that most mental health counselors would understand my cultural values.

I doubt that most mental health counselors have adequate training to explore issues related to my cultural identity.

I don’t think culture would be an obstacle to my seeking help from a mental health counselor.

I think that cultural differences between most mental health counselors and myself would be a barrier in counseling.

Appendix D: Mental Help Seeking Intention Scale (MHSIS)

INSTRUCTIONS: 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.

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

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

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

Scoring Key

The MHSIS contains three items which produce a single mean score. To calculate the mean score, add the scores for all three items then divide by three. The resulting mean score should range from a minimum of 1 to a maximum of 7. Do not calculate a MHSIS mean for a participant who is missing any data on the MHSIS. If you are administering the MHSIS alongside other Theory of Planned Behavior (TPB) items, it is best to intersperse these three MHSIS items among the other TPB items, in a nonsystematic order (see Ajzen, 2006). If you do so, to ensure that all participants are interpreting the terminology in the MHSIS items consistently, we recommend including the MHSIS instructions (see above) in the survey prior to participants completing the MHSIS items, whether immediately prior, or toward the start of the entire survey.

Appendix E: Syntax

```
RECODE Q17 Q20 Q33 (1=6) (2=5) (3=4) (6=1) (5=2) (4=3) INTO Q17_R Q20_R Q33_R.
EXECUTE.

COMPUTE NPV=MEAN(Q8,Q9,Q10,Q11,Q12).
EXECUTE.

COMPUTE IS=MEAN(Q13,Q14,Q15,Q16,Q17_R).
EXECUTE.

COMPUTE DWE=MEAN(Q18,Q19,Q20_R,Q21,Q22).
EXECUTE.

COMPUTE LofK=MEAN(Q23,Q24,Q25).
EXECUTE.

COMPUTE LofA=MEAN(Q26,Q27,Q28,Q29).
EXECUTE.

COMPUTE CB=MEAN(Q30,Q31,Q32,Q33_R,Q34).
EXECUTE.

COMPUTE MHSIS=MEAN(MHSIS_1_1,MHSIS_2_1,MHSIS_3_1).
EXECUTE.
```

```
RECODE SESCategory (1=1) (2 thru 4=0) INTO SES_L.
VARIABLE LABELS  SES_L 'SES_L'.
EXECUTE.

RECODE Ethnicity3 (1=1) (2 thru 3=0) INTO ETH_LX.
VARIABLE LABELS  ETH_LX 'ETH_LX'.
EXECUTE.

RECODE Ethnicity3 (3=1) (1 thru 2=0) INTO ETH_BR.
EXECUTE.

REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS CI(95) R ANOVA COLLIN TOL CHANGE
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT MHSIS
  /METHOD=ENTER SES_L
  /METHOD=ENTER GenStatus ETH_LX ETH_BR
  /METHOD=ENTER NPV IS DWE LofK LofA CB
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS DURBIN HISTOGRAM(ZRESID) NORMPROB(ZRESID)
  /CASEWISE PLOT(ZRESID) OUTLIERS(3)
  /SAVE MAHAL.
```

```
RELIABILITY
  /VARIABLES=Q8 Q9 Q10 Q11 Q12
  /SCALE('NPV') ALL
  /MODEL=ALPHA.

RELIABILITY
  /VARIABLES=Q13 Q14 Q15 Q16 Q17
  /SCALE('IS') ALL
  /MODEL=ALPHA.

RELIABILITY
  /VARIABLES=Q18 Q19 Q20 Q21 Q22
  /SCALE('DWE') ALL
  /MODEL=ALPHA.

RELIABILITY
  /VARIABLES=Q23 Q24 Q25
  /SCALE('LofK') ALL
  /MODEL=ALPHA.

RELIABILITY
  /VARIABLES=Q26 Q27 Q28 Q29
  /SCALE('LofA') ALL
  /MODEL=ALPHA.
```

```
RELIABILITY
  /VARIABLES=Q30 Q31 Q32 Q33 Q34
  /SCALE('CB') ALL
  /MODEL=ALPHA.

 RELIABILITY
  /VARIABLES=MHSIS_1_1 MHSIS_2_1 MHSIS_3_1
  /SCALE('MHSIS') ALL
  /MODEL=ALPHA.
```