ETHNICITY, RELIGIOUS AFFILIATION, AND COLLEGE STUDENTS' PERCEPTIONS OF PSYCHOLOGICAL TREATMENT

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By

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ABSTRACT

There are many stressors associated with attending college that must be navigated by students. Due to these commonly experienced stressors and other factors, college students often experience mental health problems. Furthermore, the typical onset of most mental illnesses frequently occurs during young adulthood, putting college students at even higher risk for mental health concerns. College students' mental health treatment utilization rates have been below the rate at which they are reporting symptoms.

Additionally, barriers have been identified which may hinder college students' likelihood to obtain mental health treatment.

Previous research has separately examined ethnicity and religion as it relates to mental health. However, to date, little research has examined ethnicity and religious affiliation within a college student sample and how this may affect views of mental health treatment. The present study investigated views of psychotherapy across religious affiliation within a sample of 389 Asian, Latinx, and White American college students. Results indicated that 1) there was a significant main effect for ethnicity on college students' mental health treatment perceptions; 2) there was not a significant main effect for religious affiliation on mental health treatment perceptions or therapist perceptions; and 3) there was a significant, although not powerful, interaction effect for ethnicity and religion on mental health treatment perceptions. The clinical implications of these results, limitations, and future directions were discussed.



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CHAPTER 1

INTRODUCTION

The current study examined the relationship between ethnicity, religious affiliation, and views of mental health treatment among college students. These areas of interest were examined using archival data consisting of responses of college students enrolled in psychology courses at California State University, Fullerton to self-report questionnaires. These data were collected prior to the current coronavirus pandemic and before the transition to virtual learning. Due to the limited research on both ethnicity and religion with regard to college students' views of mental health treatment, the purpose of this study was to explore how religion and ethnicity may relate to perceptions of mental health treatment within a sample of college students. The current study provided insight regarding factors that impact college student's willingness to seek professional counseling services at an urban university located in Southern California.

College Students' Mental Health

College can be a stressful time for many undergraduate students. Traditional students, or those who attend college immediately following graduation from high school, face numerous stressors as they adjust to college life. These include typically being young in age, around 18-years old, and possibly living outside of their family home for the first time; handling academic demands of their classes; working part-time or full-time; establishing and maintaining relationships and social support network; and coping



with financial concerns (Pedrelli et al, 2015). Furthermore, college students may have other responsibilities or obligations including taking care of family members or children, being involved in serious intimate relationships, and/or adjusting to living with roommates with significantly different backgrounds and beliefs (Arnett, 2000). College students also face academic-related stressors such as an increased course load and meeting graduation requirements within their preferred timeframe, selecting a major and preparing for a career, and finding a place of employment after graduation (Western Governors University, 2019). As a result, these universal stressors that college students face may have a significant negative impact on their mental health and overall well-being.

According to the Association for University and College Counseling Center
Directors survey (2012), 95 percent of college counseling center directors stated that the
number of students with significant psychological problems was a growing concern on
their campuses. The top three mental health concerns according to this survey were
anxiety (41.6 percent), depression (36.4 percent), and relationship problems (35.8
percent). More recently, the Center for Collegiate Mental Health (2020) reported that in
2019, college students who sought psychotherapy through their college counseling
centers were most likely to present with anxiety, depression, or stress-related concerns.
Consistent with these trends, the American College Health Association (2018) found that
85.5 percent of college respondents indicated in the past 12 months feeling extremely
stressed by their responsibilities, 62.3 percent reported "overwhelming anxiety" and 41.4
percent described coping with clinically significant depression.

In particular, anxiety and depressive disorders within the U.S. college population have surged alarmingly in recent years. Anxiety disorders more than doubled from 10 percent to 20 percent between 2008 and 2016 (Kane, 2019). Likewise, the prevalence of depression also increased from approximately 10 percent in 2000 to 20 percent in 2014 (American College Health Association, 2001, 2014). Active Minds (2019) reported that 31 percent of participants in their sample of 62,171 college students from 79 universities across the U.S. met or exceeded criteria for Generalized Anxiety Disorder and 28 percent endorsed moderate to high levels of depression. Additionally, college students of color, LGBTQIA+ students, low income students, and those from underrepresented groups are more likely than their majority counterparts to develop psychological symptoms (Lederman, 2020). For example, anxiety rates of college students between 2008 and 2016 rose 109 percent for White students compared to 150 percent for Asian and Latinx students and 180 percent for Black students (Asimov, 2019). Essentially, addressing mental health problems among diverse college students is important because this population faces unique stressors in addition to those generally associated with young adulthood. This along with other risk factors promotes the onset of mental illness.

The Onset of Mental Disorders

In addition to mental health being a growing concern, there are various mental illness that have an age of onset around the time when students are entering or have entered college. According to the American Psychiatric Association (2013), various mental health disorders listed in the most recent version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) have a peak age of onset during young adulthood. For example, the mean age of onset for the first manic, hypomanic, or major depressive



episode of Bipolar I Disorder is approximately 18 years old. A related disorder, Bipolar II, has a mean age of onset around the mid-twenties. Additionally, the peak age of onset for depressive disorders is in the twenties. Social Anxiety Disorder has a median age of onset of younger than 18 years old while Panic Disorder has a median age of onset between 20-24 years old. Additionally, the mean age of onset for Obsessive-Compulsive Disorder is 19.5 years old.

Furthermore, the peak age of onset for the first psychotic episode for Schizophrenia is in the early to mid-twenties for males and late twenties for females. Anorexia and Bulimia are both disorders where the common age of onset of symptoms is around adolescence or young adulthood. Lastly, the symptoms of Attention-Deficit Hyperactivity Disorder typically start during childhood and persist into adulthood.

Kessler et al. (2007) found that by age 25, 75% of students who will be diagnosed with a mental illness have already had their first episode. Furthermore, Zisook et al. (2007) found that over half of individuals diagnosed with depression had their first episode during childhood, adolescence, or young adulthood. Since various mental illnesses develop during the age at which students are entering or in college, in combination with the stress related to college and young adulthood in general, mental health becomes an increasingly important concern relevant to this population.

Mental Health Treatment Utilization of College Students

In previous years, college students have underutilized mental health treatment services. Eisenberg et al. (2011) conducted a survey and found that only 36% of college students with mental health problems received treatment in the previous year.

Additionally, Zivin et al. (2009) conducted a baseline online survey and two-year follow



up survey of college students with mental health problems. The researchers found that over half of the students surveyed at baseline or follow up presented with at least one mental health problem. Additionally, fewer than half of those students received treatment for these concerns.

Furthermore, Eisenberg et al. (2007) examined mental health service use and factors that affect help-seeking and access to mental health care in a sample of college students within the past year. The researchers utilized self-report measures to screen for depressive and anxiety-related disorders and examined mental health utilization rates by assessing if college students received psychotherapy or psychotropic medication. Out of all participants, 30% reported that they perceived a need for professional psychological treatment for mental health concerns and 15% reported receiving psychotherapy or psychotropic medication. Additionally, Eisenberg et al. found that for participants who screened positive for Major Depressive Disorder, 72% perceived the need for professional psychological help and 36% reported receiving psychotherapy or medication. Lastly, for participants who screened positive for an anxiety-related disorder, 63% perceived the need for professional psychological help and 52% reported receiving psychotherapy or medication.

The participants reported that barriers to receiving services were a lack of perceived need for mental health treatment, limited awareness of mental health services offered on campus, and skeptical attitudes regarding the effectiveness of treatment.

Additionally, students normalized stress in college or reported that their mental health problems would subside without any assistance, which also led to a lack of perceived need for mental health treatment. (Eisenberg et al., 2007) Furthermore, sociodemographic



predictors which hindered the use of mental health services included having low socioeconomic status and identifying as Asian American or Pacific Islander. This illustrates that participants with these sociodemographic characteristics are less likely to perceive the need for and utilize mental health services.

More recently, college students' mental health treatment utilization rates have increased. Oswalt et al. (2020) examined trends in mental health utilization rates among college students using data from an American College Health Association survey. The researchers found that from 2009 to 2015 there was an increase in the diagnosis and treatment of anxiety and depressive disorders. Furthermore, there was a 4% increase in the number of students who reported using mental health services on campus and a 7% increase in the number of students who reported that they would consider using mental health services on campus during this time.

According to the annual report from the Center for Collegiate Mental Health (2016), 48.8% of college students attended counseling for mental health concerns in 2014-2015. This was a 0.7% increase from the percentage of students who attended counseling for mental health concerns in the previous year. Additionally, 33.1% of college students used medication to manage mental health concerns. This was a 0.5% increase from the percentage of students who used medication to manage mental health concerns in the previous year. The Center for Collegiate Mental Health (2020) examined mental health trends from 2010-2019 and found a 10% increase in prior counseling use and a 3.5% increase in prior medication use for mental health concerns. In 2018, 56% of students reported previous experience with counseling and 34.8% of students reported previous experience with using psychotropic medication. Furthermore, the Center for

Collegiate Mental Health (2020) examined the presenting concerns of students who attended counseling centers from 2013-2019. The report found that most students attended counseling services for anxiety, depression, and stress. Additionally, the percentage of students who attended counseling centers for anxiety and depression increased from 2013-2019 and those who received services for stress-related concerns decreased during this time.

Along with the increase in using mental health treatment services, the reporting of mental health problems or psychological distress by college students has also increased. The Center for Collegiate Mental Health (2016) found that from 2010-2015, there was a consistent increase in self-reported symptoms of depression, generalized anxiety, and social anxiety. This parallels the most common presenting concerns of students seeking services from their respective college counseling centers. Furthermore, there has been an increase in the percentage of students who have seriously considered attempting suicide from 2010-2015. In 2010, 23.8% of college students seriously considered attempting suicide in comparison to 32.9% in 2015. The Center for Collegiate Mental Health (2020) also noted an increase in symptoms related to depression, generalized anxiety, and social anxiety from 2010-2019. This report additionally noted approximately a 7% increase in non-suicidal self-injury and approximately a 12% increase in serious suicidal ideation.

Barriers to Seeking Mental Health Services

Although college students' mental health service utilization rates have increased over time, there are still barriers that exist which may inhibit students from seeking mental health treatment. Some of the barriers to treatment include skepticism regarding treatment effectiveness and a lack of urgent need for services (Eisenberg et al., 2011).



Zivin et al. (2009) found that an important barrier which exists to deter students from seeking mental health treatment is the perceived lack of need for help. Additionally, some students may want treatment but are deterred by extensive waitlists at college counseling centers and lack of staff.

According to the Association for University and College Counseling Center
Directors survey (2012), approximately 32% of college counseling centers typically have
a waitlist during the year (Mistler et al., 2012). The onset of the coronavirus pandemic
and related changes of virtual college life have also worsened mental health service
access for students. A joint report by the American College Health Association and
Healthy Minds Network (2020) on the effects of COVID-19 on college students' wellbeing revealed that 60% of students seeking counseling reported difficulty obtaining
psychological treatment.

Another barrier which inhibits college students from seeking mental health treatment is the stigma associated with mental health problems. Eisenberg et al. (2009) examined barriers to help-seeking behaviors among college students. The researchers studied a sample of 5,555 college students from different universities and specifically examined stigma as a barrier to seeking mental health treatment. Eisenberg et al. found that stigma was negatively associated with help seeking behaviors such as the perceived need for psychotherapy, medication, and other sources of support. Furthermore, the researchers stated that stigma was exacerbated for students who identified as male, young in age, Asian American, more religious, or low income, making these individuals even less likely to receive psychological treatment for mental health concerns.



Nam et al. (2013) conducted a meta-analytic study to examine inconsistencies in psychological help seeking behaviors of college students. The researchers examined factors that influenced help-seeking attitudes by analyzing 19 studies that used the Attitudes Toward Seeking Professional Psychological Help Scale (ATP). Out of the nine psychological variables chosen for this study, self-stigma or internalized stereotypes of seeking help for psychological problems (r = -.63, p < .001), anticipated benefits of treatment (r = .52, p < .001), and self-disclosure (r = .34, p < .001) were most significantly correlated with help-seeking attitudes.

The results illustrate that participants who perceived greater self-stigma were more likely to hold negative attitudes toward psychological help-seeking. This is consistent with previous research which found that self-stigma is an important barrier to seeking mental health treatment. Additionally, Nam et al. (2013) noted that people may perceive that they will be viewed negatively by others if they seek counseling for mental health needs. This leads to increased self-stigmatization and decreased self-esteem and self-worth. Additionally, anticipated risks of therapy (r = -.26, p < .001) and public stigma or being socially ostracized or rejected (r = -.24, p < .001) were moderately correlated with psychological help-seeking attitudes.

Lederman (2020) asserted that nonwhite students are at an increased risk of experiencing psychological distress and disruption yet are less likely than their White peers to seek or report receiving professional psychological treatment. For example, students enrolled in the University of California (UC) system are predominately nonwhite in contrast to other universities nationwide. The percentage of UC students who reported



being treated for anxiety in 2016 was 15%, which was lower than the national average of 20% (Asimov, 2019).

Miranda et al. (2015) examined treatment barriers following intake at a counseling center at an urban public university. The researchers studied a sample of 122 college students who were ethnically diverse using self-report measures. The researchers found that college students of color (i.e., Asian, Latinx, and Black) endorsed more treatment barriers including financial concerns, lack of time, and concerns related to stigma in comparison to White college students. Furthermore, ethnically diverse students reported less experience with previous mental health treatment in comparison to White students.

Ethnicity and Mental Health

Previous research has examined the impact of ethnicity on mental health care utilization. Cai and Robst (2016) examined perceptions of mental health treatment among African American, Hispanic, and White adults using survey data. The researchers found that African American and Hispanic adults had less favorable perceptions of mental health treatment in comparison to their White counterparts. Furthermore, African American and Hispanic adults responded less favorably to questions regarding the cost and location of mental health services. There were also significant differences reported in the quality of care received by African American and Hispanic adults when compared to White adults.

McGuire and Miranda (2008) reported that racial and ethnic minorities have less access to mental health services than do White Americans, are less likely to receive needed care, and are more likely to delay or to fail to seek treatment. Furthermore, the



researchers reported that Black, Indigenous, and people of color (or BIPOC) populations are less likely to receive quality mental health care. McGuire et al. noted that one explanation for the disparity regarding mental health care utilization among minorities and White Americans is the potential for bias and/or discrimination by the mental health professional. The researchers explained that if a professional held less favorable attitudes and beliefs toward a racially marginalized group, the quality of care may be diminished due to these preconceived biases.

Kearney et al. (2005) examined mental health counseling utilization rates among BIPOC college students. The researchers surveyed 1,166 African American, Asian, Hispanic and White Americans using a self-report measure, the Outcome Questionnaire 45 (OQ45) at the beginning and end of their counseling treatment. As a result, mental health counseling utilization rates among White college students was significantly higher in comparison to Asian, Hispanic, and African American college students. Additionally, the researchers found that Asian American students reported greater distress at the beginning and end of counseling when compared to White, African American, and Hispanic students.

Other research has also affirmed that BIPOC college students underuse mental health services more than non-BIPOC college students and tended to have less favorable attitudes toward seeking professional psychological help (Loya et al., 2010; Masuda et al., 2009). Furthermore, in many Asian cultures, mental illness is stigmatized and may reflect poorly on one's family. Additionally, having a mental illness may impact an individual's desirability for marriage. Cultural and social biases against psychological disorders and the desire to protect one's family honor may represent barriers to



acknowledging mental illness and seeking and receiving psychological treatment (Kramer et al., 2002; Ting & Hwang, 2009).

Ting and Hwang (2009) conducted a study to examine variables that influence help-seeking attitudes for mental health services among Asian American college students. The researchers found that stigma tolerance (i.e., the ability to withstand the stigma associated with mental illness within Asian American cultures) significantly predicted help-seeking attitudes among this population. The researchers found that college students who were younger in age (i.e., students younger than 21 years old) had less favorable attitudes toward seeking professional psychological help. This could be due to a lack of knowledge of mental health services on campuses or the belief that seeking professional help is associated with having a severe mental illness. Additionally, Ting et al. noted that younger students may have less favorable attitudes regarding help-seeking due to external influences by peers and society.

Religion and Mental Health

According to national surveys conducted by the Pew Research Center in 2018 and 2019, approximately 65% of Americans reported being affiliated with a religious group (i.e., Catholic, Jewish, Protestant, Buddhist, Muslim, etc.) However, the number of Americans who identified with no religion at all has recently grown. The Pew Research Center (2019) found that 26% of Americans identified as atheist (the belief that there is no God or gods), agonistic (the belief that the existence of God is unknown), or had no religious affiliation. This was a 17% increase from the percentage of Americans who identified as atheist, agnostic, or with no religious affiliation in 2009.

The Pew Research Center (2015) found that from 2007 to 2014, the percentage of Americans who identified as Christian decreased from 78% to 70%. Additionally, the percentage of Americans who identified as evangelical Protestant slightly decreased from 26% to 25%, those who identified as mainline Protestant decreased from 18% to 14%, and those who identified as Catholic decreased from 23% to 20%. Furthermore, the percentage of Americans who identified as being unaffiliated with any religion increased from 16% to 22%. Ultimately, these statistics illustrate that the percentage of Americans who identified with a Christian religion in the United States has declined and the percentage of Americans who identified with no religion, are unsure regarding the existence of God, or do not believe in God has increased. That said, Christianity is still one of the most predominate religions in the country even after accounting for these trends. The Pew Research Center (2015) identified that these trends were commonly seen in young adults but now occur among all age groups and vary among age, gender, and education level (Pew Research Center, 2015).

Campesino and Schwartz (2006) asserted that approximately 75-95% of Hispanic Americans identified as Catholic in the United States, with Roman Catholic being the predominant religion in Latin American countries. Additionally, some Hispanic Americans may identify as evangelical Pentecostalism, agnostic or atheist, or with non-Christian religions. That said, regardless of specific religious affiliation, Hispanic Americans who report being religious also report having an intimate relationship with God (Campesino et al., 2006). The Pew Research Center (2014) noted that the percentage of Hispanics who identified as Catholic in the United States has decreased and the percentage of Americans who identified with no religion has increased. According to data



collected by the Pew Research Center in 2010, 67% of Hispanics identified as Catholic whereas according to data from 2013, 55% of Hispanics identified as Catholic and 18% as unaffiliated with any religion. In 2014, 48% of Hispanics identified as Catholic and 20% identified as unaffiliated with any religion (Pew Research Center, 2015).

The Pew Research Center (2012) examined religious affiliations among Asian Americans using a survey method. The results illustrated that the two main religious affiliations endorsed by Asian Americans were Christianity and being non-religious. The survey showed that 42% of Asians identified as Christian while more specifically, 19% identified as Catholic and 22% identified as Protestant. Furthermore, 26% of Asians did not identify with any religion at all. Religiosity also varies between Asian Americans and other Americans. The Pew Research Center (2012) noted that Asian Americans who identified as being unaffiliated with any religion show less religious commitment than other Americans who identified this way. For example, 76% of Asian Americans stated that religion is not important in their lives compared to 58% of Americans who differ in racial or ethnic background and reported the same thing. Conversely, Asian Americans who identified as evangelical Protestant tend to be more religious than other Americans who identified with this same religion (Pew Research Center, 2012). For example, 76% of Asian Americans reported that they attend church on a regular basis while 64% White Americans reported that they attend church regularly (64%).

Pew Research Center (2014) examined religious affiliations among White Americans using a national survey. Out of 24,900 participants, 70% identified as Christian and 24% identified as unaffiliated with any religion. Of the participants who identified as Christian, 29% identified as evangelical Protestant, 19% identified as



Catholic, and 19% identified as mainline Protestant. Among those who identified as unaffiliated with any religion, 4% identified as atheist, 5% identified as agnostic, and 15% identified as "nothing in particular". In 2016, the number of White Americans who identified as Christian decreased and now represent fewer than half of all adults living in America (Cox & Jones, 2017).

A 2016 American Values Atlas survey was conducted by the Public Religion Research Institute and examined religious affiliations in a sample of more than 101,000 Americans in the United States (Cox et al., 2017). As of 2016, 43% of White Americans identified as Christian and 30% identified as Protestant. Additionally, the number of White Americans who identified as evangelical Protestant, mainline Protestant, and Catholic declined while non-Christian religious membership grew from 2006 to 2016. Lastly Cox et al. found that among the White respondents, older White individuals identified with Christian-related religious while younger individuals identified with non-Christian and unaffiliated religious groups such as atheist, agnostic, or secular.

Previous research has examined religion and mental health. Woodward et al. (1992) found that Hispanics who identified as religious reported that their faith was sufficient support to cope and leave problems in God's hands. For Asian Americans, mental illness may be viewed as spiritually based or as reflecting a lack of harmony in emotions (Kramer et al., 2002). Additionally, some Asian Americans who are Buddhists may ascribe mental illness to be a result of mistakes made in a past life (e.g., reincarnation) or by past ancestors. Asian Americans who are Confucianists may believe that it is unacceptable to display emotion, which then impacts their ability to discuss mental health issues and seek treatment (Kramer et al., 2002).



For other individuals who are religious, Wesselmann and Graziano (2010) note that having a mental illness may be a result of committing a sin and seeking help outside of the church community may be frowned upon and viewed a sign of personal failure. Additionally, attributing spiritually based causes (i.e., demon possession or living a sinful life) to mental illness may influence professional psychological help-seeking attitudes (Fox et al., 2020). Furthermore, individuals who are religious and express high levels of religious commitment may be less likely to seek professional psychological help. This could be due to fear that their religious views may not be respected by Western psychotherapists or seeking professional psychological help would weaken their faith. (Fox et al., 2020) Lastly, some religions today may still believe and endorse that mental illness is caused by a "weakness in faith" and that mental illness can be overcome through "willpower", prayer, and greater commitment to religious ideals instead of seeking professional mental health services (Leong & Kalibatseva, 2011).

Fox et al. (2020) examined the relationship between spirituality, religiosity, and psychological help-seeking attitudes in a diverse adult sample. The researchers found that both spirituality and religiosity (i.e., religious commitment and religious affiliation) were negatively associated with professional psychological help-seeking attitudes.

Additionally, Crosby and Bossley (2012) examined religious help-seeking behavior among college students and found that religiosity was positively associated with religious help-seeking and negatively associated with psychological help-seeking. This indicated that students high in religiosity considered seeking religious help for mental health problems rather than seeking professional psychological help. The researchers noted that students who are religious may attribute a spiritually based etiology to their distress and



receiving help from a religious member rather than a mental health professional may affirm their religious beliefs and conceptualization of distress (Crosby et al., 2012).

Baker and Cruickshank (2009) found that when seeking mental health treatment, participants who identified as Christian were more likely to seek religious help than professional help in comparison to participants who identified as atheist or agnostic. The researchers also found that participants who identified as agnostic were most likely to seek professional mental health treatment in comparison to participants who identified as atheist or Christian. Based on previous research regarding religion and mental health, individuals who are religious may be more likely to seek help from spiritual or religious leaders rather than from professionals for mental health concerns.

The Current Study

As reviewed above, college students are at increased risk for mental health problems as they experience various stressors while transitioning and adjusting to college life. Furthermore, there are many psychological disorders that have an age of onset during young adulthood, making it even more likely for college students to be diagnosed with a psychological disorder. In the past, and to date, college students' mental health treatment utilization rates remain far behind the alarming increases of endorsed mental health symptoms. Moreover, barriers have been identified which may further hinder students from receiving mental health services. Previous research has separately examined ethnicity and religion in relation to collegiate mental health. To date, however, few studies have examined ethnicity and religious affiliation among college students in regard to perceptions of psychotherapy. The current study explored perceptions of mental health treatment, religious affiliation, and ethnicity in a college student sample.



Hypotheses

Hypothesis 1: White participants will report positive perceptions of psychological treatment in comparison to their Latinx and Asian counterparts.

Hypothesis 2: White participants will perceive therapists more favorably in comparison to Latinx and Asian participants.

Hypothesis 3: Participants who identify as Agnostic/Atheist will report positive perceptions of psychological treatment in comparison to Catholic/Christian participants.

Hypothesis 4: Participants who identify as Agnostic/Atheist will have favorable perceptions of therapists in comparison to participants who identify as Catholic/Christian.



CHAPTER 2

METHOD

Participants

The current study used archival data from the author's research advisor's study titled, *Gender and Symptomatology*. These data were collected from September 2018 to May 2019. A subset of this larger data set was utilized in the current study to examine the effects of ethnicity and religious affiliation on views of mental health treatment among college students. Participants were 401 college students at California State University, Fullerton. The sample was comprised of 318 (79%) participants who identified as female, 81 (20%) participants who identified as male, and 2 participants who identified as "other" gender. Participants ranged in age from 18 to 60 years; the majority (90%; n = 361) were between 18 and 23 years old.

The ethnic composition of the sample was 67 (17%) White, Non-Hispanic participants; 238 (59%) Hispanic/Latinx participants; and 96 (24%) East Asian or Asian American participants. Out of 401 participants, 212 (53%) self-identified as Catholic, 121 (30%) as Christian/Non-Catholic, and 68 (17%) as Agnostic/Atheist. The vast majority (96%; n = 385) of participants were undergraduate students, with the remaining participants being high school graduates or graduate students. Most participants (82%; n = 327) indicated that they had no previous or current experience with psychotherapy for a mental illness, psychological condition, trauma, or distressing circumstance. There were



70 students (17%) who reported psychotherapy experience in the form of individual therapy or family therapy.

Materials

An online protocol was used for data collection through Qualtrics, a web survey software platform. The protocol included an informed consent (see Appendix A), a demographics information questionnaire (DEMO; see Appendix B), Attitudes Toward Seeking Professional Psychological Help Scale (ATP – see Appendix C; Fischer & Turner, 1970), and the modified version of the Therapist Credibility Index (TCI – see Appendix D; Widgery & Stackpole, 1972).

Informed Consent (Appendix A)

Participants were asked to read an informed consent before participating in the Gender and Symptomatology study. The informed consent outlined what the study examined as well as the procedure for reading case vignettes, answering questions, and providing information about participants' background and own experiences with mental illness and psychotherapy. The informed consent explained that participation in the study was entirely voluntary and all information provided would be anonymous and privacy protected to the extent allowed by the law. The informed consent also contained information regarding receiving experimental credit for participation and included resources for participants to contact if they had any questions or distress due to the study.

Demographic Information Questionnaire (DEMO) (Appendix B)

Participants completed a demographic questionnaire at the end of the protocol. Items in the demographic questionnaire asked about participants' backgrounds and included age, gender, ethnic status, religious affiliation, and education level. Also



included were items that inquired about participants' previous experience with mental illness, psychotherapy, medication, diagnosis of mental illness, previous experience with medication, and preference of psychotherapist characteristics.

Attitudes Toward Seeking Professional Psychological Help Scale (ATP) (Appendix C)

The Attitudes Toward Seeking Professional Psychological Help Scale (ATP) was developed by Fischer and Turner (1970) as a way to examine individuals' attitudes toward seeking professional help during times of distress. The scale yields a total score as well as four subscale scores. Each subscale describes attitudes related to accessing mental health services. These include: Subscale 1 - Recognition of the Need for Psychological Help (RECOG); Subscale 2 - Stigma Tolerance (STIGMA); Subscale 3 – openness to discussing personal matters with a therapist or other health professional (OPEN); and Subscale 4 - Confidence in Mental Health Practitioners and Treatment (CONFID).

Each of the 29 questions of the ATP is scored using a four-point Likert scale with response options of "Agree" = 0, "Probably Agree" = 1, "Probably Disagree" = 2, and "Disagree" = 3. Of the 29 items, 11 are positively stated and 18 are negatively stated. Those that are negatively stated are reverse coded. Scores of the 29 items were summed to compute the ATP total score which ranges from 0 to 87. High scores indicate positive views of psychological treatment and mental health professionals. Fischer and Turner (1970) demonstrated acceptable internal reliability (Cronbach's α = .86) for the scale, and moderate to good (Portney & Watkins, 2015) test-retest reliability with coefficients ranging from .73 to .89 when given at varying intervals of five days .86 (n = 26), two weeks .89 (n = 47), four weeks .82 (n = 31), six weeks .73 (n = 19) or two months .84 (n = 20).



Fischer and Turner (1970) examined the validity of the ATP by comparing scores of participants who had or were currently seeking psychological help (contact group) to participants who never received psychological help (no contact group). Results revealed that participants who received professional psychological help held more favorable attitudes than those with no prior experience. The mean differences between contact and no contact groups were significant with p < .001 for males and p < .0001 for females. To date, the ATP is the most commonly accepted standardized instrument for measuring psychological help seeking attitudes (Nam et al., 2013).

Therapist Credibility Index (TCI) (Appendix D)

The Therapist Credibility Index was originally developed by Berlo, Lermert, and Mertz (1969; 1970) as a way to assess source credibility. Widgery and Stackpole (1972) revised this scale and examined the credibility of interviewers. The Widgery and Stackpole revised scale was used to measure the credibility of therapists in a series of studies by Mori and associates (L. Mori, personal communication, September 3, 2020). For purposes of clarity, the Widgery and Stackpole revised scale was renamed the Therapist Credibility Index (TCI) and referenced as such in several conference poster presentations (e.g., Gonzales, Bautista & Mori, 2018; Kaur, Rhoden, Pacis & Mori, 2019; Millard, Gutierrez, Kaur, & Mori, 2019; Shangraw, Janelli, Herrera-Gardea, Pollard, & Mori, 2017).

The TCI is comprised of 18 items that describe characteristics such as "safe", "friendly", "empathetic", "kind", and "agreeable" and "congenial". The responses to the 18 items were summed to obtain mean scores of overall credibility. The TCI also has three subscales: 1) Safety (Trustworthiness); 2) Qualification; and 3) Dynamism). Each



subscale is composed of six items and scores of these six items were summed to obtain subscale scores. Low scores indicate more positive perceptions of therapists and high scores indicate more negative perceptions of therapists. For the purposes of this study, participants read a vignette describing a fictitious psychologist and her client and completed the TCI in reference to the credibility of the vignette psychologist.

Procedure

The *Gender and Symptomatology* study adhered to legal and ethical research standards involving the use of human participants in research studies. The California State University, Fullerton Institutional Review Board (IRB) approved this study. The focus and procedure of this study were provided to participants in the informed consent. As mentioned previously, archival data that was collected from September 2018 to May 2019 was used for the proposed study.

Participants were recruited through the social media site, Reddit, and the CSUF psychology department's experiment pool, SONA (online portal). Reddit has many subcommunities or subreddits called "SampleSize" where the study link was posted.

Reddit participants voluntarily self-selected to complete the study's protocol and received no compensation. The CSUF Psychology Research Participation System (SONA) is an online portal where introductory psychology students sign up to participate in various research studies and receive course credit. After completion of participation in this study, these students received 0.5 hours of experiment credit.

The *Gender and Symptomatology* study examined participants' perceptions of mental illness, psychotherapists, and psychotherapy. Participants were first presented with the informed consent form followed by various case vignettes and self-report



measures including the ATP, TCI, and DEMO. Upon completion of the study, participants clicked a "Finish" link, which then led to a debriefing statement thanking them for their participation, explaining the purpose of the study, and included referral information to mental health resources.



CHAPTER 3

RESULTS

Statistical Analyses and Descriptives

The data software program that was used for statistical analysis and hypothesis testing was SPSS v.27. The independent variables in this study were ethnicity (Asian, Latinx, White) and religious affiliation (Agnostic/Atheist and Catholic/Christian), and the dependent variables were college students' mental health treatment perceptions and therapist perceptions. Mental health treatment perceptions and therapist perceptions were measured by scores on the Attitudes Toward Seeking Professional Psychological Help Scale (ATP total and subscales: 1) Recognition of the Need for Professional Psychological Help; 2) Stigma Tolerance; 3) Interpersonal Openness; and 4) Confidence in Mental Health Practitioners); and by scores on the Therapist Credibility Index (TCI total and subscales: 1) Safety (Trustworthiness); 2) Qualification; and 3) Dynamism).

A between-subjects, 3 (Asian, Latinx, White) x 2 (Agnostic/Atheist, Catholic/Christian) MANOVA was conducted to examine main and interaction effects among the aforementioned variables. Results indicated that 389 participants completed all of the scales and were included in data analyses. Of the participants, 24.1% (n = 94) identified as Asian, 59.1% (n = 230) identified as Latinx, and 16.7% (n = 65) identified as White. Furthermore, 16.7% (n = 65) identified as Agnostic/Atheist and 83.2% (n = 65)



324) identified as Catholic/Christian. Additionally, participants with and without psychotherapy experience were used in the analyses.

Means and Standard Deviations by Ethnic Group

The ATP and TCI means and standard deviation scores for each ethnic group are listed below in Table 1 (Asian participants), Table 2 (Hispanic/Latinx participants), and Table 3 (White participants). A review of the means shows that, with the exception of ATP subscale 4 (CONFID), Asian participants typically endorsed less positive views of psychotherapy than their White counterparts. Hispanic/Latinx and White participants, for the most part, answered similarly on the ATP, with the exception of ATP subscale 4 (CONFID). On this subscale, Hispanic/Latinx respondents indicated lower expectations than their White peers that psychotherapy is effective and that therapists are competent health professionals. TCI means and SD scores are similar for all three ethnic groups.

Table 1. Means and Standard Deviations for Asian Participants

ATP	M	SD
ATP total	72.78	5.86
ATP subscale 1 (RECOG)	18.98	2.51
ATP subscale 2 (STIGMA)	13.34	1.86
ATP subscale 3 (OPEN)	12.13	2.21
ATP subscale 4 (CONFID)	13.33	1.62
TCI	M	SD
TCI total	49.87	12.67
TCI subscale 1 (Safety)	11.81	5.75
TCI subscale 2 (Qualification)	14.59	6.18
TCI subscale 3 (Dynamism)	23.48	4.84

Note. *N*= 94.



Table 2. Means and Standard Deviations for Hispanic/Latinx Participants

ATP	M	SD
ATP total	75.15	7.52
ATP subscale 1 (RECOG)	19.80	2.75
ATP subscale 2 (STIGMA)	13.73	2.09
ATP subscale 3 (OPEN)	12.63	2.31
ATP subscale 4 (CONFID)	13.19	1.98
TCI	M	SD
TCI total	48.44	13.84
TCI subscale 1 (Safety)	11.48	5.65
TCI subscale 2 (Qualification)	14.36	7.02
TCI subscale 3 (Dynamism)	22.60	4.59

Note. *N*= 230.

Table 3. Means and Standard Deviations for White Participants

ATP	M	SD
ATP total	77.65	8.43
ATP subscale 1 (RECOG)	20.51	3.07
ATP subscale 2 (STIGMA)	13.71	2.04
ATP subscale 3 (OPEN)	13.18	2.60
ATP subscale 4 (CONFID)	13.66	1.99
TCI	M	SD
TCI total	46.58	14.67
TCI subscale 1 (Safety)	9.74	5.54
TCI subscale 2 (Qualification)	13.83	7.70
TCI subscale 3 (Dynamism)	23.02	4.83

Note. *N*= 65.

Means and Standard Deviations by Religious Affiliation

The ATP and TCI means and standard deviation scores for each religious affiliation are listed below in Table 4 (agnostic/atheist participants) and Table 5



(Catholic/Christian participants). TCI means and SD scores are similar for the two religious affiliation groups.

Table 4. Means and Standard Deviations for Agnostic/Atheist Participants

ATP	M	SD
ATP total	74.58	6.94
ATP subscale 1 (RECOG)	19.45	2.85
ATP subscale 2 (STIGMA)	13.68	1.97
ATP subscale 3 (OPEN)	12.71	2.23
ATP subscale 4 (CONFID)	12.91	1.73
TCI	M	SD
TCI total	46.40	13.59
TCI subscale 1 (Safety)	9.66	5.15
TCI subscale 2 (Qualification)	13.86	7.49
TCI subscale 3 (Dynamism)	22.88	4.69

Note. N = 65.

Table 5. Means and Standard Deviations for Catholic/Christian Participants

ATP	M	SD
ATP total	75.07	5.57
ATP subscale 1 (RECOG)	19.77	2.78
ATP subscale 2 (STIGMA)	13.62	2.05
ATP subscale 3 (OPEN)	12.58	2.38
ATP subscale 4 (CONFID)	13.38	1.93
TCI	M	SD
TCI total	48.90	13.72
TCI subscale 1 (Safety)	11.59	5.74
TCI subscale 2 (Qualification)	14.42	6.83
TCI subscale 3 (Dynamism)	22.88	4.70

Note. N = 324.



Main and Interaction Effects

The results of the MANOVA revealed a significant main effect for ethnicity on mental health treatment perceptions (F(16, 752) = 2.39, p = .002). The results also revealed no significant main effect for religious affiliation on mental health treatment perceptions or therapist perceptions. Additionally, there was a significant interaction effect for ethnicity and religious affiliation on mental health treatment perceptions (F(16, 752) = 1.91, p = .017).

Follow-Up Analyses and Simple Effects Tests

Univariate tests indicated a significant difference across ethnicity for the ATP total, (F(2, 383) = 5.29, p = .005) and for ATP subscale 4: Confidence in Mental Health Practitioners, (F(2, 383) = 3.59, p = .029). No significant differences were found for ATP subscale 1 (RECOG), ATP subscale 2 (STIGMA), or ATP subscale 3 (OPEN). However, results approached significance on ATP subscale 3 (OPEN) at p = .051. Furthermore, univariate tests indicated that there were no significant differences found for the TCI total as well as no differences for TCI subscale 1 (Safety), TCI subscale 2 (Qualification), and TCI subscale 3 (Dynamism) scores.

Pairwise comparison tests revealed that White participants differed significantly (p = .032) from Hispanic participants on ATP subscale 4 (CONFID). White participants had higher mean scores on this subscale in comparison to Hispanic participants. Thus, White participants seem more likely to believe that mental health treatment or seeing a mental health professional for psychological problems will be beneficial. White participants also differed significantly (p = .004) from Asian participants on ATP total scores. White participants had higher mean scores in comparison to Asian participants.



This result indicated that White participants overall had more positive perceptions of mental health treatment and seeing a mental health professional for psychological problems.

As mentioned earlier, an interaction effect was found for ethnicity and religious affiliation on mental health treatment perceptions. The test of between-subjects effects illustrated that this interaction was only evident for ATP subscale 1: Recognition of the Need for Professional Psychological Help (p = .014). This result indicated that both ethnicity and religious affiliation influenced college students' acceptance that professional consultation or intervention may be warranted for psychological problems. However, univariate and pairwise comparison tests revealed no significant differences on the ATP subscale 1 (RECOG). The results of the follow-up tests illustrated that the interaction effect found for ethnicity and religious affiliation was not a powerful one and calls into question whether ethnicity and religious affiliation in combination yielded any influence on mental health treatment perceptions for the present sample.

Hypothesis Testing

The results of the MANOVA, post hoc analyses, and simple effects testing were used to determine if the hypotheses in this study were supported. Hypothesis 1: White participants will report positive perceptions of psychological treatment in comparison to their Hispanic/Latinx and Asian counterparts was partially supported. Hypothesis 2: White participants will perceive therapists more favorably in comparison to Latinx and Asian participants was not supported. Hypothesis 3: Participants who identify as Agnostic/Atheist will report positive perceptions of psychological treatment in comparison to Catholic/Christian participants was not supported. Finally, Hypothesis 4:



Participants who identify as Agnostic/Atheist will have more favorable perceptions of therapists in comparison to participants who identify as Catholic/Christian was not supported in the current study.



CHAPTER 4

DISCUSSION

The current study compared perceptions of psychological treatment across religious affiliation and ethnicity among a sample of diverse college students. Previous literature has separately examined ethnicity and religion as it relates to mental health views and has identified potential barriers to seeking mental health services. However, little research has examined ethnicity and religious affiliation within a college student sample and how these variables may affect views of mental health treatment. The results of the present study indicated that ethnicity alone significantly affected mental health treatment perceptions. Religious affiliation did not significantly affect mental health treatment attitudes of college students, and the combination of ethnicity and religious affiliation also did not appear to significantly influence mental health treatment perceptions of college students.

Ethnicity and Mental Health Treatment Perceptions

As mentioned previously, there was a significant main effect for ethnicity on college students' mental health treatment perceptions. In particular, White college students reported overall more favorable perceptions of mental health treatment and mental health professionals in comparison to Asian college students, as indicated by ATP total scores. Additionally, White college students were more likely to believe that receiving mental health treatment for psychological problems and seeing a mental health



professional would be beneficial in times of distress in comparison to Hispanic/Latinx college students, as indicated by ATP subscale 4 (CONFID) scores.

The results of this study align with previous research which found that BIPOC college students tended to report less favorable perceptions of mental health treatment (Loya et al., 2010; Masuda et al., 2009) in comparison to their majority counterparts. Additionally, Fischer and Turner (1970) determined in their creation of the ATP scale that ATP subscale 1 (RECOG) and subscale 4 (CONFID) were most related to an individual's inclination to seek professional help for mental health problems. The results of the current study support Fischer and Turner's point in that lack of confidence in mental health professionals (i.e., Hispanic/Latinx participants) and generally less favorable perceptions of mental health treatment (i.e., Asian participants) potentially may be key reasons that college students of color are less likely to seek out mental health treatment services during times of distress than their White peers.

Furthermore, other cultural factors may explain the less favorable mental health treatment attitudes reported by Asian college students. Mental illness and mental health may be stigmatized in Asian communities thus seeking psychological treatment for mental health problems may be frowned upon, seen as inappropriate, or viewed as being disloyal to the family. Additionally, within collectivist cultures such as Asia or Central America, the needs of the group are prioritized over the needs of the individual. In Asian culture, seeking mental health treatment may be self-aggrandizing and places emphasis on the individual rather than the group. Furthermore, expressing emotions, which is a common component of psychotherapy, may be viewed as unacceptable or selfish and burdensome to others. This may contribute to negative attitudes toward psychological



treatment in that Asian college students may not believe that it is appropriate to express negative emotions in psychotherapy.

Hispanic/Latinx college students reported less confidence in mental health professionals in comparison to White college students. It may be that within Hispanic/Latinx cultures, it is acceptable to discuss emotions and mental health problems, but it is not acceptable to do so with members outside of the immediate family. It may also be possible that Hispanic/Latinx individuals value the opinion of family members and close others more than strangers. This may explain why Hispanic/Latinx college students reported less confidence in and less perceived benefit of speaking with mental health practitioners for mental health concerns.

Additionally, Hispanic/Latinx individuals may be more concerned about perceived discrimination, racism, or bias from a mental health provider in comparison to White individuals. McGuire and Miranda (2008) found that Hispanic adults had lower mental health care utilization rates than White adults and that people of color were concerned about the quality of care they received due to the potential for discrimination and bias. It may be that because of these factors, Hispanic/Latinx college students believed that there was no benefit to speaking with a mental health professional for psychological problems. Furthermore, within Hispanic/Latinx culture, mental illness may be viewed as spiritual in nature such that having a mental illness may be seen as predetermined fate or moral punishment. As such, Hispanic/Latinx individuals who attribute spiritual causes to mental illness may be more willing to speak with religious members about mental health concerns rather than mental health professionals.



Psychological treatment, specifically psychotherapy, is very westernized and aligns more with individualist culture. The structure, format, and process of psychotherapy may be in direct opposition with what is the appropriate way to solve problems in collectivist cultures. Traditional psychotherapy includes speaking one-onone with a mental health professional who is a complete stranger about personal problems, having to disclose intimate parts of an individual's life and discussing thoughts and feelings, attending a psychotherapy session at a scheduled time, and usually only involving the individual or client when creating a treatment plan unless a therapist is providing family counseling. Attending psychotherapy for mental health problems in general may not align with what is considered appropriate in Asian culture and talking to a stranger who is not part of the family unit may not align with what is considered appropriate in Hispanic/Latinx culture. Thus, a cultural clash exists between what traditional psychotherapy has always been and what may be a more appropriate way for dealing with mental health problems in collectivist cultures which may help explain the results of the present study.

Religion and Mental Health Treatment Perceptions

In the current study, no main effect for religion on mental health treatment perceptions was found. This result conflicted with previous research conducted by Crosby and Bossley (2012) who identified that religiosity was negatively associated with psychological help-seeking behaviors and attitudes in a sample of college students. In the study conducted by Crosby and Bossley, a sample of predominately White American college students was used to examine the aforementioned variable. In contrast, the current study utilized a sample of mostly Hispanic/Latinx American college students. Also, it

should be noted that the present study did not use religiosity as a variable but rather religious affiliation. That said, the conflicting results between the current study and the Crosby and Bossley study may be due to ethnic differences in each sample.

Additionally, a study conducted by Baker and Cruickshank (2009) found that participants who identified as Christian were more likely to seek religious help and less likely to seek professional psychological help in comparison to participants who identified as atheist or agnostic. In the study conducted by Baker and Cruickshank, the researchers used a sample of Christian, Muslim, atheist and agnostic young adults and separately examined whether these groups more likely to seek religious help or psychological help for mental health problems. Additionally, the Baker and Cruickshank study had a relatively similar number of participants in each religious group they examined. In contrast, the current study combined atheist/agnostic and Christian/Catholic religious groups together due to the low numbers of participants who identified as atheist or agnostic. The different methods (i.e. grouping participants versus not grouping participants) of examining religious affiliation on mental health treatment perceptions between the current study and the Baker and Cruickshank study may explain the differences in results found for each.

It is important to note that the number of college students who identify with the Christian religion has decreased within the young adult population. The Pew Research Center (2015) asserted that the decline in Americans who identified as Christian from 2007 to 2014 was most pronounced among young adults. That said, it is plausible that more college students are likely to identify as secular, instead of with common religions in the United States such as Christianity, Catholicism, etc. It may also be likely that



parental religious beliefs influence college students' perceptions of and views toward mental health treatment even if college students do not identify with the same religions as their parents. Mayrl and Uecker (2011) noted that college students' religious beliefs may be affected by close relationships or social ties with others (i.e., parents, peers, or community members) and there may be potential intergenerational transmission of religious beliefs and practices. It is possible that although some college students may identify as secular, if their parents identify with common religions such as Christianity, Catholicism, or any other religion in which receiving mental health treatment by professionals instead of religious members may be frowned upon, then this may affect college students' views toward mental health treatment for psychological problems.

Theory of Planned Behavior

Ajzen and Fishbein's (1980) theory of planned behavior (TPB) is a well-studied model that has been used to examine intended behaviors of individuals based on attitudes, subjective norms, and perceived behavioral control. Previous research has examined the help-seeking process, specifically seeking mental health treatment, using this model and have identified three stages of help-seeking. The first stage is to overcome barriers related to seeking professional help for mental health problems. Using the Ajzen and Fishbein model, barriers might include internalized self-stigma and represent subjective norms. The second stage is to develop positive attitudes surrounding seeking mental health treatment which occurs once barriers are reduced. The third stage is the intention to seek mental health treatment, which precedes the actual behavior or action of doing so (Song et al., 2019).

Although there were not any main effects or interaction effects found on mental health treatment perceptions by way of ATP subscale 2 (STIGMA) in the current study, previous research has found that stigma, particularly self-stigma or internalized stigma is negatively associated with help-seeking behaviors and attitudes (Eisenberg et al., 2009; Miranda et al., 2015; Nam et al., 2013). Addressing barriers, including stigma, to mental health services is important to increase attitudes toward and ultimately the intention of seeking mental health treatment services for college students.

The results of the current study tie in with the theory of planned behavior in that BIPOC students reported overall less favorable perceptions of mental health treatment as indicated by lower mean ATP total scores in comparison to White college students. (While Hispanic/Latinx participants averaged lower ATP total scores than White participants, this means comparison did not reach significance, unlike the Asian-White ATP total means contrast.) This suggests that BIPOC versus White college students are less favorably inclined toward psychological treatment which makes sense given the barriers that are reported by BIPOC students in relation to seeking mental health treatment. Some of the barriers that BIPOC college students have previously reported include stigma (self-stigma and public stigma) related to mental illness and mental health treatment as a result of cultural norms and values, financial concerns related to paying for mental health services, lack of time to attend psychotherapy, preference to deal with problems on one's own or within the family, and uncertainty of whether mental health problems warranted the need for treatment (Eisenberg et al., 2009; Miranda et al., 2015).

Moreover, the results of the current study tie in with the theory of planned behavior and illustrate that since White college students are more likely to have less



barriers and more favorable attitudes toward mental health treatment, they are more likely to be intentional and follow through with seeking mental health services. This is illustrated by the research conducted by Kearney et al. (2005) who found that White college students had significantly higher mental health counseling utilization rates in comparison to Asian, Hispanic, and African American college students.

Clinical Implications

Considering the results of the current study and the theory of planned behavior, clinical implications of this research can be discussed. As illustrated by the results of this study, White participants had more positive views of mental health treatment than Asian participants. Additionally, White participants reported more confidence in mental health treatment and mental health practitioners in comparison to Hispanic/Latinx participants. TPB researchers have found a strong relationship between positive attitudes toward psychological services and actual help-seeking behaviors (Nam et al., 2013). The clinical implications of this research may be that White college students are more likely to seek mental health services on campus when they experience psychological distress because they are favorably included toward psychotherapy in comparison to BIPOC college students who are not.

As mentioned by Song et al. (2019) in regard to the theory of planned behavior, White college students may be more likely to engage in the action of seeking psychotherapy (i.e. scheduling appointments, attending sessions, reporting mental health symptoms) due to the favorable attitudes toward counseling that they hold. This can be problematic for BIPOC college students given that they also experience mental health problems, and potentially at an increased rate, in comparison to White college students.



According to Lederman (2020), college students of color and those from underrepresented groups are more likely than their majority counterparts to develop psychological symptoms such as anxiety and depression.

Given that BIPOC college students are less likely to report favorable perceptions of mental health treatment and yet are still likely to report distress and experience mental health problems, additional policies or practices may need to be implemented to help increase counseling service utilization rates on college campuses for BIPOC students. College counseling centers may want to consider promoting cultural awareness through outreach, trainings, or discussions during new student orientations. Additionally, college counseling centers may want to consider onboarding culturally competent and diverse counselors and staff who can help implement culturally sensitive interventions. Furthermore, changes to the structure and format of counseling may be needed. It may be helpful to culturally tailor the counseling experience to students of color to increase counseling service utilization rates among this population.

Traditional psychotherapy aligns more with western European values or individualist culture (i.e., the importance of self-disclosure in therapy, only providing services to the individual and focusing on the individual, and the importance of discussing emotions), however this may clash with the values of those from collectivist cultures. Counseling centers could tailor the therapy experience to students of color by using interventions and practices that more closely align with students' cultures. For example, when working with an Asian college student, a counselor could focus less on the importance of self-disclosure and discussing feelings and instead explore the barriers to seeking mental health services, the potential for being uncomfortable while discussing

feelings, the role of stigma, or the opinions of family members regarding seeking counseling for mental health problems. When working with a Hispanic/Latinx student, a counselor could include the individual's family when creating a treatment plan, consult with important religious members in the individual's life, or discuss religion or spirituality and how this may affect the student's view of his or her presenting problem.

Changes to the actual structure of psychotherapy for BIPOC students may be illustrated by the implementation of culturally sensitive assessment strategies at the beginning of counseling. When counselors are conducting their assessment for students of color, they may want to ask questions to elicit cultural views, values, norms, and beliefs to determine how this affects the student's and counselor's conceptualization of the student's presenting problem. Additionally, college counseling centers may want to foster a campus family or sense of support for BIPOC students who come from collectivist cultures. This may be done through increasing the amount of support groups or therapy groups available to this population.

Implementing these changes and addressing other barriers to seeking mental health services may be easier to do as a result of the current COVID-19 pandemic. Most therapy services are now provided via telehealth, a private virtual platform used by counselors to provide psychotherapy. Creating a psychotherapy group that students can join online is an easy way to foster support and build a sense of community for students of color. This can even be explored during the assessment phase of psychotherapy and counselors can ask students if they are interested in receiving both individual and group counseling services or if they want to be connected to a support group of peers or include others in their treatment planning. Support groups may also be helpful in reducing self-



stigma and promoting universality among peers, showing BIPOC students that they are not alone in experiencing mental health concerns. Lastly, providing therapy services virtually may also reduce barriers related to accessibility of services and the concern of public stigma related to seeking mental health treatment.

By employing various culturally appropriate and necessary practices as well as making changes to the format, structure, and process of psychotherapy, college counseling centers may increase treatment engagement of BIPOC students. This may be accomplished through promoting an open dialogue about issues such as discrimination, racism, acculturative stress, stereotyping and marginalism, and mental health and learning that may influence college students' attitudes toward mental health treatment. Additionally, making changes to the structure and process of psychotherapy may help BIPOC students to feel more comfortable and welcomed. Furthermore, once students do seek treatment, tailoring the counseling experience to the needs of the individual based on his or her culture may also increase treatment engagement and participation as well as ultimately reduce attrition rates for these students.

<u>Limitations and Future Directions</u>

Limitations of the current study should be noted. First, there were unequal numbers of participants in each ethnic group (Asian, Latinx, White) and religious group (agnostic/atheist, Catholic/Christian) which may have affected the results in this study. Additionally, the current sample was comprised of a subset of a larger data set in which participants were mostly female. Given that females versus males typically express positive attitudes toward mental health treatment, the results of the current study may have been affected by the preponderance of female participants in comparison to male

participants. Furthermore, as this was a convenience sample of college students enrolled in psychology courses at California State University Fullerton, the results of this study may not fully represent the ethnic groups examined or generalize to all college students.

Additionally, the method of gathering data and in particular, the use of self-report measures, to identify perceptions of mental health treatment may have been problematic. The use of self-report measures could have led participants to answer in a socially desirable or biased manner which may be inconsistent with their true perceptions of psychological treatment. Alternative methods other than self-report of predicting views of psychotherapy might include examining the level of personal exposure to those who have sought psychotherapy, exposure to those who provide mental health services, or knowledge of mental health treatment (e.g., mental health literacy). To explore this, it may be helpful to use a qualitative research method and conduct semi-structured interviews to obtain participant's experiences with and determine attitudes toward psychotherapy. If future researchers continue using self-report measures, they may want to include a measure examining levels of religiosity or spirituality in order to better understand how these variables may impact attitudes toward psychological help. The current study did not include either of these measures which may also explain why a main effect was not found for religious affiliation on mental health treatment perceptions. Incorporating a self-report measure of religiosity or spirituality may be helpful in order to determine whether attitudes toward psychological help are affected by these variables and further determine barriers to seeking services.

Future researchers could address the current limitations by utilizing a sample with approximately equal numbers of participants in each group to determine if main effects



and/or interaction effects still exist for ethnicity and/or religion on mental health treatment perceptions. Future researchers should also include participants from different universities in order to increase the generalizability of results. Additionally, future researchers may want to utilize other methods of gathering data besides that of self-report measures given the drawbacks of using such measures, or incorporate other methods of gathering data in addition to self-report measures. Lastly, future researchers could also examine additional sociodemographic characteristics (i.e., gender, socioeconomic status, education level, level of acculturation) and how they are related to BIPOC college students' mental health treatment perceptions as this population is at increased risk for mental illness. The particular sample used in this study is reflective of the increased population of female-to-male college students in introductory psychology courses as California State University, Fullerton. Gender differences on views of mental health treatment have been identified in other studies but were not examined in the present study. It may be helpful to determine if gender affects views of mental health treatment in order to identify if this is an additional barrier to seeking mental health services for BIPOC students.

Concluding Remarks

Although there were limitations noted, this research added to the small body of knowledge on the relationship between ethnicity, religion, and college students' perceptions of psychological treatment using a sample of ethnically diverse college students at a large urban university. College students' mental health is an important topic to examine given that this population is at increased likelihood of experiencing mental health problems and stress during this time in their lives. Additionally, college students



have historically underutilized mental health treatment services for psychological problems, and underutilization is greatest for students of color. As such, it is imperative to determine barriers which may hinder service use and employ practices which may help increase mental health treatment utilization rates.

The current research sought to shed light on the particular role of ethnicity and religious affiliation in relation to perceptions of mental health treatment. These findings provide a basis for future research to further explore the potential interaction of both of these variables on views of psychological intervention. Increasing identification and awareness of cultural barriers which may hinder BIPOC college students from seeking mental health services is key to promoting greater utilization of psychotherapy. Culturally sensitive interventions can be tailored to specific ethnic groups represented in each university's student population, which then may help bridge the gap between BIPOC college students' reporting of psychological symptoms and their actual accessing of mental health services.

APPENDIX A

INFORMED CONSENT

Study Title: Gender and Symptomatology

Consent Form

You are being asked to take part in a research study carried out by Kiran Kaur, a master's student in the Department of Psychology at California State University, Fullerton, under the direction of Prof. Lisa Mori. This consent form explains the research study and your part in it if you decide to join the study. Please read the form carefully, taking as much time as you need.

This research study examines general perceptions of psychologists/psychotherapists, mental illness, and psychotherapy. Participation involves reading vignettes and answering questions related to these vignettes, surveys, as well as providing background information about yourself, such as your gender, age, education level, ethnicity, as well as your religious affiliation. You will also be asked about your own experiences, if any, with mental illness and psychotherapy, including diagnoses received and medications prescribed. Results of this study will be helpful to mental health professionals in improving outreach and psychological services to individuals.

Your participation in this study is entirely voluntary. This study will take, approximately, 20 to 30 minutes to complete. You may refuse to answer any or all questions or terminate your participation at any time without penalty. Your responses in



this study are anonymous. The information you provide will be confidential and used for research purposes only. No one will be able to link the information you provide to your identity in any subsequent professional presentations or publications, as no names are collected. All electronic copies of the data will be kept on Dr. Mori's password protected lab and office computer hard drives for up to ten years post-publication or post-presentation of these data. Your confidentiality will be protected to the full extent of the law.

For individuals answering for experiment credit, if you choose not to participate after reading this consent form, you will not receive experiment credit. If you end your participation prematurely, you will receive credit for the time of study participation completed (to the nearest half hour).

If you have questions about your rights as a research participant or would like to report a concern or complaint about this study, please contact the Institutional Review Board at (657) 278-7719, or e-mail irb@fullerton.edu.

Thank you for your research participation.

I have carefully read this consent form. By clicking on the I AGREE button, I agree that I am at least 18 years of age and choose to participate in this project.

- I AGREE
- I DISAGREE

APPENDIX B

DEMOGRAPHICS INFORMATION QUESTIONNAIRE

2. Gender:				
0	Male			
0	Female			
0	Other			
3. Ethr	nic status:			
0	White, Non-Hispanic			
0	Hispanic, Latino, or Spanish Origin			
0	East Asian or Asian American			
0	African American/Black			
0	American Indian/ Native American or Alaska Native			
0	Middle Eastern, North African, or Arab American			
0	Native Hawaiian or Other Pacific Islander			
0	South Asian, Asian Indian, or Indian American			
0	Some other race, ethnicity, or origin; Please specify:			
4. Reli	gious preference:			
0	Catholic			



1. Age: ___

0	Christian (Non-Catholic)
0	Jewish
0	Buddhist
0	Muslim
0	Hindu
0	Sikh
0	Agnostic
0	Atheist
0	Other (Please specify)
5. Whi	ch of the following describes how religious you are?
0	Not religious at all
0	A little religious
0	Somewhat religious
0	Very religious
6. Edu	cation level:
0	High school graduate
0	Current undergraduate
0	Completed bachelors
0	Masters/doctoral student
7 11	a you over been disapposed with a montal illness or revealed size on divisor?
	e you ever been diagnosed with a mental illness or psychological condition?
	No
0	Yes (please specify diagnosis)



8. Have you ever taken medication for a mental illness or psychological condition?				
0	No			
0	Yes (please specify medication)			
9. If y	es, please rate your medication experience:			
0	Extremely negative			
0	Somewhat negative			
0	Somewhat positive			
0	Extremely positive			
10. In	the past or currently, have you ever received some form of psychotherapy for a			
menta	l illness, psychological condition, trauma, or distressing circumstances?			
0	No			
0	Yes (Please specify therapy type)			
11. If	yes, how long did you receive therapy?			
0	1 session			
0	Less than 1 month			
0	Less than 6 months			
0	Less than 1 year			
0	Over 1 year			

12. If yes, how many different psychologists/psychotherapists have you received services



	0	1		
	0	2		
	0	3		
	0	More than 3		
13.	13. If yes, please rate your overall therapy experiences:			
	0	Extremely negative		
	0	Somewhat negative		
	0	Somewhat positive		
	0	Extremely positive		
14. How many friends or family members do you know who have received psychological				
ser	vice	es?		
	0	None		
	0	1		
	0	2		
	0	3		
	0	More than 3		
15.	Wl	nat is the likelihood that you would recommend any type of psychological		
tre	treatment to others?			
	0	Very unlikely		
	0	Somewhat unlikely		
	0	Somewhat likely		
	0	Very likely		



16. What is the likelihood that you would recommend any type of psychological treatment to others?

- Very unlikely
- o Somewhat unlikely
- Somewhat likely
- Very likely
- 17. What is your preference of race or ethnicity for a therapist/counselor?
 - o White/European
 - o Black/African American
 - o Hispanic/Latino
 - o American Indian/Native American/ Alaska Native
 - o Asian American
 - Hawaiian/Pacific Islander or Filipino
 - Middle Eastern/Persian
 - No preference
 - Other (please specify)

18. What is your preference of spiritual or religious beliefs for a therapist/counselor?

- o Catholic
- Christian (Non-Catholic)
- o Jewish
- o Buddhist
- Muslim



- o Hindu
- o Agnostic
- o Atheist
- o No preference

APPENDIX C

ATTITUDES TOWARD PROFESSIONAL PSYCHOLOGICAL HELP SCALE (ATP)

Below are a number of statements pertaining to psychology and mental health issues. Read each statement carefully and indicate your agreement, probable agreement, probable disagreement or disagreement. There are no "wrong" answers, and the only right ones are whatever you honestly feel or believe.

1. Although there are clinics for people with mental troubles, I would not have much faith
in them.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
2. If a good friend asked my advice about mental problem, I might recommend that he
see a psychiatrist.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
3. I would feel uneasy going to a psychiatrist because of what some people would think.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
4. A person with a strong character can get over mental conflicts by himself, and would
have little need of a psychiatrist.



Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
5. There are many times when I have felt completely lost and would have welcomed
professional advice for a personal or emotional problem.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
6. Considering the time and expense involved in psychotherapy, it would have doubtful
value for a person like me.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
7. I would willingly confide intimate matters to an appropriate person if I thought it would
help me or a member of my family.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
8. I would rather live with certain mental conflicts than go through the ordeal of getting
psychiatric treatment.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
9. Emotional difficulties, like many things, tend to work out by themselves.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
10. There are certain problems which should not be discussed outside one's immediate
family.

	Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
	(3)
11	. A person with a serious emotional disturbance would probably feel most secure in a
	good mental hospital.
	Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
	(3)
12	2. If I believed I was having a mental breakdown, my first inclination would be to get
	professional attention.
	Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
	(3)
13	. Keeping one's mind on a job is a good solution for avoiding personal worries and
	concerns.
	Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
	(3)
14	. Having been a psychiatric patient is a blot on a person's life
	Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
	(3)
15	. I would rather be advised by a close friend than by a psychologist, even for an
	emotional problem.
	Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
	(3)
16	6. A person with an emotional problem is not likely to solve it alone; he is likely to solve
	it with professional help.

	Agree	_ (0)	Probably Agree	(1)	Probably	Disagree	(2)	Disagree
	(3)							
17	. In resent a	a perso	on-professionally tr	ained o	r not- who	wants to know	w abo	ut my personal
	difficulties	S.						
	Agree	_ (0)	Probably Agree	(1)	Probably	Disagree	(2)	Disagree
	(3)							
18	. I would w	ant to	get psychiatric atto	ention i	f I was wo	rried or upset	for a	long period of
	time.							
	Agree	_(0)	Probably Agree	(1)	Probably 1	Disagree	_(2)	Disagree
	(3)							
19	. The idea o	of talk	ing about problems	with a	psycholog	ist strikes me	as a p	poor way to get
	rid of emo	tional	conflicts.					
	Agree	_ (0)	Probably Agree	(1)	Probably	Disagree	(2)	Disagree
	(3)							
20	. Having be	een m	entally ill carries w	ith it a	burden of s	hame.		
	Agree	_ (0)	Probably Agree	(1)	Probably	Disagree	(2)	Disagree
	(3)							
21	. There are	exper	riences in my life I	would 1	not discuss	with anyone.		
	Agree	_(0)	Probably Agree	(1)	Probably I	Disagree	_(2)	Disagree
	(3)							
22	. It is proba	ably b	est not to know eve	rything	about ones	self.		
	Agree	_(0)	Probably Agree	(1)	Probably I	Disagree	_(2)	Disagree
	(3)							

23. If I were experiencing a serious emotional conflict at this point in my life, I would be
confident that I could find relief in psychotherapy.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
24. There is something admirable in the attitude of a person who is willing to cope with his
conflicts and fears without resorting to professional help.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
25. At some future time I might want to have psychological counseling.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
26. A person should work out his own problems; getting psychological counseling would
be a last resort.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
27. Had I received treatment in a mental hospital, I would not feel that it ought to be
"covered up."
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)
28. If I thought I needed psychiatric help, I would get it no matter who knew about it.
Agree(0) Probably Agree(1) Probably Disagree(2) Disagree
(3)

29. It is difficult to talk about personal affairs with highly educated people such as doctors, teachers and clergymen.
Agree _____(0) Probably Agree _____(1) Probably Disagree _____(2) Disagree _____

Scoring:

(3)

High scores = more positive view of psych treatment.

11 positively worded items that need to be REVERSE SCORED: 2, 5, 7, 11, 12, 16, 18, 23, 25, 27, 28.

18 negatively worded items – do NOT reverse score.

Sum scores across all 29 items (once reverse scoring is complete) for the ATP Total score.

Sum scores of the listed items for each factor or subscale score.

ATP Factor 1 (Recognition of the need for professional psychological help): 4, 5, 6, 9, 18, 24, 25, 26.

ATP Factor 2 (Stigma Tolerance): 3, 14, 20, 27, 28.

ATP Factor 3 (Interpersonal Openness): 7, 10, 13, 17, 21.

ATP Factor 4 (Confidence in mental health practitioners): 1, 2, 8, 11, 12.

APPENDIX D

THERAPIST CREDIBILITY INDEX (TCI)

The Therapist Credibility Scale was developed on the work of Berlo, Lermert, & Mertz (1969-70) on assessing source credibility. Widgery & Stackpole appear to be among the first to use this course credibility work and apply it to measuring interviewer credibility.

From: Widgery, R., & Stackpole, C. (1972). Desk position, interviewee anxiety, and interviewer credibility: An example of cognitive balance in a dyad. *Journal of Counseling Psychology*, 19(3), 173-177.

Another posttest measured the subject's perception of interviewer credibility. Eighteen 7-point semantic differentials were used to measure the three dimensions of credibility reported by Berlo, Lemet, and Mertz (1970). These scales are (Numbers are added to show how respondents might indicate ratings and how they would be coded.):

<u>Safety (Trustworthiness)</u>

$$1 - 2 - 3 - 4 - 5 - 6 - 7$$

Safe Dangerous

$$1-2-3-4-5-6-7$$

Friendly Unfriendly

$$1-2-3-4-5-6-7$$

Pleasant Unpleasant

$$1 - 2 - 3 - 4 - 5 - 6 - 7$$

Kind

Cruel

$$1-2-3-4-5-6-7$$

Congenial Quarrelsome

$$1-2-3-4-5-6-7$$

Agreeable Disagreeable

Qualification

$$1-2-3-4-5-6-7$$

Safe Dangerous

$$1-2-3-4-5-6-7$$

Friendly Unfriendly

$$1-2-3-4-5-6-7$$

Pleasant Unpleasant

$$1 - 2 - 3 - 4 - 5 - 6 - 7$$

Kind Cruel

$$1 - 2 - 3 - 4 - 5 - 6 - 7$$

Congenial Quarrelsome

$$1 - 2 - 3 - 4 - 5 - 6 - 7$$

Agreeable Disagreeable

Dynamism

$$1-2-3-4-5-6-7$$

Empathic Hesitant

$$1 - 2 - 3 - 4 - 5 - 6 - 7$$

Forceful Forceless

$$1-2-3-4-5-6-7$$

Active Passive

$$1-2-3-4-5-6-7$$

Aggressive Meek

$$1-2-3-4-5-6-7$$

Frank Reserve

$$1-2-3-4-5-6-7$$

Bold Timid

Scoring:

Lower composite scores indicate more positive perceptions of therapists. Higher composite scores indicate more negative perceptions of therapists.

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