

ABSTRACT

Title of Thesis: THE EFFECT OF INDIRECT INTERPERSONAL EXPOSURE
TO COUNSELING ON WILLINGNESS THROUGH
ATTITUDES

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The present study examined whether attitudes toward seeking professional psychological help partially mediated the relationship between the frequency and valence of Asian Americans' indirect interpersonal exposure to counseling and willingness to see a counselor. Statistically significant indirect effects were found. An exploratory factor analysis revealed that indirect interpersonal exposure to counseling through *family members* and *friends* emerged as two distinct factors. Partial mediation was found only for the frequency of indirect interpersonal exposure to counseling through family members on willingness to see a counselor (personal, academic/career, health problems) through attitudes. Using hierarchical linear regression, this study examined whether collectivism moderated the relationship between the frequency and valence of indirect interpersonal exposure to counseling on attitudes toward seeking professional psychological help. Moderation was not found. Collectivism and conformity to norms did not moderate the relationship between indirect interpersonal exposure to counseling through family members and friends on attitudes.

THE EFFECT OF INDIRECT INTERPERSONAL EXPOSURE TO COUNSELING ON
WILLINGNESS THROUGH ATTITUDES

by

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Chapter 1: Introduction to the Problem

The goal of this thesis was to gain a better understanding of the help-seeking experiences of the Asian American population. Given the persisting problem of Asian Americans underutilizing psychological services, I explored whether the frequency and valence of indirect interpersonal exposure to counseling influenced their willingness to see a counselor through their attitudes toward seeking psychological help. I was also interested in examining whether adherence to collectivism plays a role in how the frequency and valence of indirect interpersonal exposure to counseling relates to attitudes toward seeking professional psychological help.

Asian American Mental Health

The Asian American population has now become the fastest growing racial group in the United States (U.S. Census Bureau, 2010a). Despite this rise, the Asian American population has been relatively understudied in mental health research (Hall & Yee, 2012; Sue, Cheng, Saad, & Chu, 2012). Within the limited existing literature, findings on the prevalence of mental distress and clinical disorders in the Asian American population are complex (i.e., Sue et al., 2012). On the one hand, research has shown that Asian Americans are *less likely* to report or are comparable in reporting psychiatric disorders (i.e., mood, anxiety, and substance disorders; Abe-Kim et al., 2007) or psychological distress (i.e., feeling sad, nervous, restless; Barnes, Adams, & Powell-Griner, 2008) compared to the general population in nationally representative samples. On the other hand, Asian Americans who do report mental health difficulties actually have more severe symptoms than the general population (Chang, 2002; Okazaki, 2002; Sorkin, Nyugen, & Ngo-Metzger, 2011; Sorkin, Pham, & Ngo-Metzger, 2009). For example, Sorkin et al. (2009) found that Asian American older adults were more likely to report serious mental health symptoms than Non-Hispanic White older adults.

Upon examining several studies that looked at the mental health status of the Asian American population, I found that studies focused on either the number of Asian American individuals who report psychological distress or the severity of their psychological distress. Studies that focus on how often individuals are reporting psychological distress indicated that *fewer* Asian Americans report psychological distress (Kim et al., 2007). Studies that focus on the severity of individual's psychological distress indicated that Asian Americans report *more severe* psychological distress (Sorkin et al., 2009). Depending on whether studies focus on the frequency or severity, the results may present a different picture of the mental health state of Asian Americans. Nonetheless, researchers have argued that this variability in the findings on Asian Americans' mental health across studies is due to the heterogeneity of this racial group (e.g., Sue et al., 2012) with more than twenty different ethnicities (Leong & Lau, 2001; U.S. Census Bureau, 2010b).

Underutilization of Psychological Services

A more consistent and compelling theme that emerged from the literature was the overwhelming evidence the Asian American population utilizes psychological services significantly *less* than the general population (i.e., Abe-Kim et al., 2007; Le Meyer, Zane, Cho, & Takeuchi, 2009; Sorkin et al., 2009; Sorkin et al., 2011). For example, in the National Latino and Asian American Study, 8.6% of Asian Americans received services for their mental health needs (Abe-Kim et al., 2007) as compared to 17.9 % of the general population in a comparable study, National Comorbidity Survey Replication (NCS-R). Asian American individuals who met the criteria for a mental health disorder were also found to use specialty mental health services 28% of the time as compared to 54% in the general population found in the NCS-R (Le Meyer et al., 2009).

This problem—the underutilization of mental health services by Asian Americans—was the basis for this study. I was interested in understanding the process through which Asian American individuals approach seeking psychological help by examining whether: (a) their attitudes toward seeking professional psychological help mediate the relationship between the frequency and valence of their indirect interpersonal exposure to counseling and their willingness to see a counselor; and (b) collectivism moderates the relationship between the frequency and valence of indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help.

Willingness to See a Counselor

Although the ideal outcome of interest was the direct utilization of counseling services, I used willingness to see a counselor as a proxy for behavioral intent, which has been shown to be a proxy for actual help-seeking behavior (Vogel et al., 2005). Prior research has indicated that behavioral intent is a strong predictor of actual counseling experience (Vogel et al., 2005). Basic research has defended the use of willingness as a proxy for actual behavior based on the theory of reasoned action which states that a person's intention to engage in a behavior predicts actual engagement in that behavior (Kim & Park, 2009). Some researchers have argued that behavioral intention is synonymous with willingness (e.g., Albarracin, Johnson, Fishbein, & Muellerleile, 2001). In the psychological help domain, prior research has studied college students' willingness to seek help based on various psychological concerns relevant to college populations, such as general anxiety, alcohol problems, and dating difficulties (Cash, Begley, McCown, & Weise, 1975; Ponce & Atkinson, 1989; Gim et al., 1990).

Using willingness to see a counselor as an outcome variable instead of measuring actual help seeking experiences reduced two costs: time in measuring actual counseling experience

which requires a longer timeframe for data collection, and resources in recruitment efforts. Given that Asian Americans make up 5.6 percent of the total population in the (U.S. Census Bureau, 2010a), obtaining sample sizes that are either adequate or representative of the general makeup of this racial group is difficult (Sue et al., 2012). In addition to the relatively small total Asian American population, acquiring representative sample sizes of Asian Americans who actually *utilize mental health services* is even more challenging because of the low percentage of mental health service utilization (e.g., Masuda et al., 2009). Accessing Asian Americans who *intend to seek counseling* is also challenging because intent is largely dependent on Asian Americans having a reason to see a counselor. This would reduce the acquired sample size by restricting the sample to only Asian Americans who had a reason to seek counseling. By using willingness to see a counselor as a proxy for intent to seek counseling, I was able to expand my population pool to obtain the best approximation of my population of interest.

Indirect Interpersonal Exposure to Counseling and Willingness to See a Counselor

Prior research has linked factors such as stigma (e.g., Leong & Lau, 2001; Park, 2010) and Asian values (Choi, 2013; Kim, Atkinson, & Yang, 1999) to Asian Americans' unwillingness to see a counselor. However, less research has looked at how Asian Americans' indirect interpersonal exposure to counseling could contribute to their unwillingness to seek counseling. The idea of indirect interpersonal exposure to counseling stemmed from two research findings. First, Asian Americans are less likely to know family members or friends who have received mental health services compared to other racial groups (e.g., Masuda et al., 2009). To take it a step further, these individuals may have fewer opportunities for *modeling* behavior, a process through which an individual learns a behavior through observing another person model that behavior (Bandura, 1971). Asian Americans may be less likely to observe others seek

counseling. Second, Asian Americans are less likely to understand the counseling process, which negatively affect their ratings of the therapeutic relationship compared to European American college students (Wong, Beutler, & Zane, 2007). Wong et al. (2007) suggested that this may be due to Asian Americans being less familiar with the purpose and nature of counseling. These two findings suggest that knowing fewer family members or friends who have received counseling and less familiarity with the concept of counseling may be related to less willingness to see a counselor for Asian Americans.

The *interpersonal* aspect of exposure may be of particular relevance because of the importance placed on interpersonal relationships in the Asian American population. Interpersonal exposure to counseling might impact Asian American individuals differently from the general population because of the potential influence of collectivism from their culture of origin, either directly or indirectly through their parents (i.e., Berry, Phinney, Sam, & Vedder, 2006; Kim et al., 1999). Their adherence to collectivism, such as valuing and behaving in ways consistent with ingroup norms and sacrificing personal goals for those of the group (Triandis et al., 1988), might strengthen the relationship between indirect interpersonal exposure to counseling and willingness to see a counselor. Asian Americans who adhere strongly to collectivism may be more likely to follow what they believe that their ingroup members think about counseling. Those individuals may also, on a personal level, feel the need for counseling but if the ingroup has strong negative views about counseling, they may be more likely to forego their own needs for the sake of collective group. This is further discussed in a later section on collectivism.

Indirect Interpersonal Exposure to Counseling

Exposure, in general, is having contact with an object (or images of and/or messages about the object) either directly or through media (e.g., television, Internet; Kaplan, Vogel, Gentile, & Wade, 2012; Vogel, Gentile, & Kaplan, 2008; Zebrowitz, White, & Weineke, 2008). Exposure to *counseling* has been categorized into two different types: direct and indirect. Direct counseling exposure is having had actual counseling experience. A common strategy in the literature for assessing direct exposure to counseling has been to ask individuals about their prior counseling experience (e.g., Chu et al., 2011; Masuda et al., 2009; Vogel, Wade, Larson, & Hackler, 2007; Vogel, Wester, Wei, & Boysen, 2005). In the present study, direct exposure was controlled for to obtain a more accurate estimate of the effect of the indirect interpersonal exposure on willingness.

Indirect exposure to counseling occurs through other means, such as TV/media, education, and interpersonal exposure (Kaplan et al., 2012; Maynard, Maynard, & Rowe, 2004; Vogel et al., 2005; Vogel et al., 2008). For example, individuals can be indirectly exposed to counseling through the media by watching television shows that portray therapists as characters such as *Law & Order: SVU* (e.g., Vogel et al., 2008). In an educational context, college students can be indirectly exposed to counseling through a course that covers psychology and/or therapy (e.g., Maynard et al., 2004).

In an *interpersonal* context, individuals are indirectly exposed to counseling by knowing someone who went to counseling (e.g., Masuda et al., 2009; Vogel et al., 2007). More than 90 percent of individuals who sought counseling themselves knew of someone who also sought psychological help (Vogel et al., 2007). Among 74 – 78 percent of those who sought counseling, someone they knew suggested that they seek help (Vogel et al., 2007). However, Asian

Americans were less likely to know a close person who sought therapy, and know someone with a psychological disorder compared to White Americans (Masuda et al., 2009). Thus, little is known on how Asian Americans are indirectly exposed to counseling through interpersonal means.

The *valence* of the indirect interpersonal exposures is also important. These indirect interpersonal exposures to counseling can be positive or negative in their content as well as the expected outcome. For example, hearing from friends that counselors are empathic and good listeners or watching a video clip of an individual who felt better after seeing a counselor (Kaplan et al., 2012) would be positive indirect interpersonal exposures to counseling. Examples of negative indirect interpersonal exposures to counseling would be watching television shows that provide over-exaggerations and inaccurate information about psychologists (Vogel et al., 2008) or hearing from a friend that he/she felt worse after counseling. Depending on whether the indirect interpersonal exposure to counseling was considered positive or negative in studies, the relationship between interpersonal exposure to counseling and attitudes toward seeking professional psychological help differed. On the one hand, negative exposure to counseling, such as portrayals of unethical psychologists on television (Vogel et al., 2008) was associated with less positive attitudes toward seeking professional psychological help. On the other hand, positive indirect exposure to counseling, such as listening to testimonials of how counseling resulted in positive changes, was positively associated with more positive attitudes toward seeking professional psychological help.

However, mere exposure, exposure with no established positive or negative valence, has been found to increase one's liking for an object (Zebrowitz et al., 2008). Exposure to ethnic minority faces different from the participants in and of itself increased their liking of a new set of

faces in those ethnic minority groups (Zebrowitz et al., 2008). In other words, mere exposure alone led to individuals liking an object more. Applying this mere exposure concept to the psychology field, researchers have theorized that repeated exposure to the field of psychology would increase an individual's positive attitudes towards psychology (Fischer & Farina, 1995). Therefore, this study tested both the frequency of indirect interpersonal exposure to counseling (how many exposures they had) and the valence (whether the exposures were more positive or more negative). This determined whether there was a difference between the frequency of indirect interpersonal exposure to counseling and the valence of indirect interpersonal exposure to counseling.

Attitudes as a Mediator between Indirect Interpersonal Exposure and Willingness

One variable that might explain the relationship between exposure and willingness is attitudes (e.g., Lawson & Walls-Ingram, 2010). According to social psychologists, “an attitude represents an evaluative integration of cognitions and affects experienced in relation to an object” (Crano & Prislin, 2006, p. 347). These overall attitudes can be positive, negative, or neutral, to varying degrees (Petty, Wheeler, & Tormala, 2013). One can develop positive, negative, or neutral overall attitudes toward seeking counseling. For example, if a person believes that counseling is helpful, this would reflect having a more positive overall attitude towards counseling. If an individual believes that counseling is best suited for individuals who are “crazy” (in a stigmatized sense), he/she has a more negative overall attitude towards counseling. If an individual holds positive and negative attitudes toward counseling, he/she has a more ambivalent overall attitude toward counseling. For this study, I focused on the aggregate of an individual’s positive and negative attitudes toward seeking professional psychological help.

Prior studies have found that positive indirect interpersonal exposure to counseling, in the form of audiovisual clips, increased individuals' attitudes toward seeking professional psychological help (Kaplan et al., 2012). Other studies have linked attitudes toward seeking professional psychological help and willingness to see a counselor (Kaplan et al., 2012; Kim & Omizo, 2003; Kim & Park, 2009; Vogel et al., 2005; Vogel et al., 2007). For example, more positive attitudes towards seeking help were associated with a higher intention to seek help with interpersonal and drug/alcohol issues (Vogel et al., 2005). In other words, if a person views seeking psychological help in a more positive light, he/she will be more inclined to see a counselor (Vogel et al., 2005).

Collectivism as a Moderator between Indirect Interpersonal Exposure and Attitudes

One factor that was hypothesized to influence the relationship between indirect exposure to counseling and attitudes toward seeking professional psychological help was an individual's adherence to collectivism. Collectivism is a commonly studied traditional Asian cultural value (e.g., Kim et al., 1999; Triandis et al., 1988), in which "individuals may be induced to subordinate their personal goals to the goals of some collective, which is usually a stable ingroup (e.g., family, band, tribe), and much of the behavior of individuals may concern goals that are consistent with the goals of this ingroup" (Triandis et al., 1988, p. 324). An emphasis on harmony within their stable ingroups creates an atmosphere of abiding by the rules of the group (Triandis et al., 1988). As indicated earlier, collectivistic influences may be part of the acculturative experience for Asian American individuals (i.e., Berry et al., 2006; Kim et al., 1999). These values may affect how individuals internalize the indirect interpersonal exposures to counseling they encounter through the people around them.

In addition to valuing the group more than the individual, another important aspect of collectivism involves whether following familial or societal norms are important to the individual. Asian Americans may value the opinions of those in their ingroups more and place more weight on their opinions (e.g., parents have more influence in decisions) than those not in their ingroups. Therefore, higher adherence to collectivistic values would be related to a stronger positive relationship between their indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help.

The Present Study

The purpose of the present study was to test mediation and moderation hypotheses regarding the relationships between the frequency and valence of indirect interpersonal exposure to counseling, attitudes toward seeking professional psychological help, willingness to see a counselor, and collectivism. The Frequency and Valence Indirect Interpersonal Exposure to Counseling [IIEC Frequency, IIEC Valence] were the predictor variables in the primary and secondary hypotheses. Attitudes toward Seeking Professional Psychological Help [Attitudes] was the theorized mediator in the primary hypothesis and the theorized criterion variable in the secondary hypothesis. Collectivism was the theorized moderator in the secondary hypothesis. Willingness to See a Counselor [Willingness] was the criterion variable in the primary hypothesis.

Mediation

The first set of mediation hypotheses were: 1a) the frequency of indirect interpersonal exposure to counseling will significantly predict more positive attitudes toward seeking professional psychological help (path a_1); 1b) more positive attitudes toward seeking professional psychological help will significantly predict more willingness to see a counselor

(path b_1); 1c) a higher frequency of indirect interpersonal exposure to counseling will significantly predict more willingness to see a counselor (path c_1); and 1d) the indirect effect ($a_1 \times b_1$) will be statistically significant and the range of the confidence interval will not contain zero, resulting in a partial mediation.

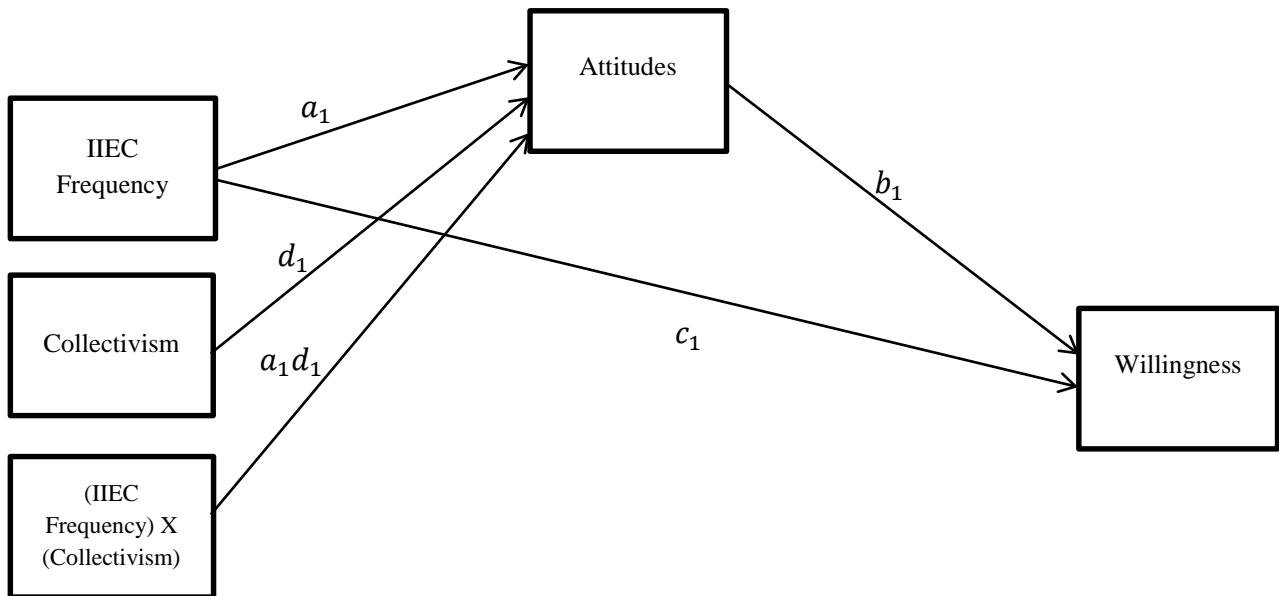
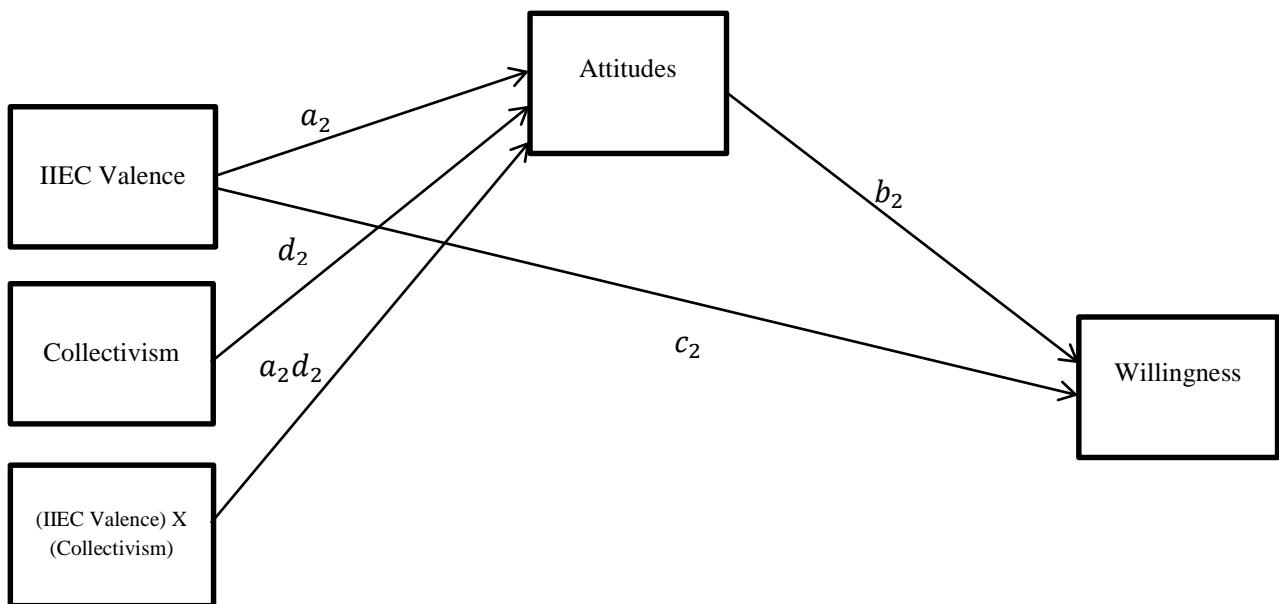
The second set of hypotheses were: 2a) higher positive valence of indirect interpersonal exposure to counseling will significantly predict more positive attitudes toward seeking professional psychological help (path a_2); 2b) more positive attitudes toward seeking professional psychological help will significantly predict more willingness to see a counselor (path b_2); 2c) higher positive valence of indirect interpersonal exposure to counseling will significantly predict more willingness to see a counselor (path c_2); and 2d) the indirect effect $a_2 \times b_2$ will be statistically significant and the range of the confidence interval will not contain zero, resulting in a partial mediation.

Moderation

The moderation hypotheses tested whether collectivism moderated the relationship between the frequency and valence of indirect interpersonal exposure to counseling, separately, and attitudes toward seeking professional psychological help. I hypothesized that higher frequency of indirect interpersonal exposure to counseling and more positive valenced indirect interpersonal exposure to counseling, each separately, would significantly predict more positive attitudes toward seeking professional psychological help; and collectivism would predict less positive attitudes toward seeking professional psychological help, consistent with previous studies that found a negative relationship between collectivism and positive attitudes toward seeking professional psychological help (i.e., Kim, Li, & Ng, 2005). I then hypothesized that collectivism would moderate the relationship between the frequency and valence of indirect

interpersonal exposure to counseling, each separately, and attitudes toward seeking professional psychological help.

If the interaction effects of collectivism and the frequency and valence of indirect interpersonal exposure to counseling on attitudes toward seeking professional psychological help were statistically significant, I would examine the simple slopes of collectivism at the mean, 1 standard deviation above the mean, and 1 standard deviation below the mean. I predicted that collectivism at 1 standard deviation above the mean would predict a stronger positive relationship between how exposed an individual is to counseling through family members or friends and their positive attitudes toward seeking professional psychological help. I also predicted that collectivism at 1 standard deviation above the mean would predict a stronger positive relationship between how positive an individual's exposures to counseling are and their positive attitudes toward seeking professional psychological help.

Model A:Model B:*Figure 1.* The predicted models of A and B.

Chapter 2: Literature Review

In order to build a theoretical foundation for this thesis, literature on mental health issues in the Asian American population, indirect interpersonal exposure to counseling, attitudes toward seeking professional psychological help, willingness to see a counselor, and collectivism were reviewed. The first section on mental health issues in the Asian American population highlights literature on its mental health status and underutilization of psychological services. The second section reviews literature on willingness to see a counselor and its connection to indirect interpersonal exposure to counseling. Literature regarding indirect interpersonal exposure to counseling and its relationship to attitudes toward seeking professional psychological help is reviewed in the third section. Literature on attitudes toward seeking professional psychological help's role as a mediator and its connection to willingness to see a counselor is then reviewed. The fifth section reviews literature on collectivism and its role as a moderator between indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help.

Asian American Mental Health

The Asian American population is now the fastest growing major racial group in the United States from 2000 to 2010 (U.S. Census Bureau, 2010a). This racial group is comprised of more than fifteen different ethnic groups (Census Bureau, 2010b). The five largest Asian groups are Chinese, Filipinos, Asian Indians, Vietnamese, and Korean (Census Bureau, 2010b). The mental health state of the Asian American population has been relatively understudied (Hall & Yee, 2012; Sue et al., 2012). In this section, I highlight two themes: existing evidence of psychological distress and underutilization of mental health services.

Evidence of Psychological Distress

A review of the existing literature shows a complex picture of the mental health state of the Asian American population. Depending on what outcome was measured, research findings were inconsistent. However, upon further analysis, a consistent theme emerged: the difference in findings on psychological distress depended on whether frequency or severity outcomes were measured. Frequency refers to the prevalence rates of individuals with psychological distress, while severity refers to individuals having higher symptom severity.

Studies that researched the frequency of mental distress indicated lower prevalence rates of individuals reporting psychological distress (Barnes et al., 2008; SAMHSA, 2013a; SAMHSA, 2013b). Compared to the general population, Asian Americans were less likely to report higher psychological distress (Barnes et al., 2008; SAMHSA, 2013a; SAMHSA, 2013b). In a nationally representative sample of individuals 18 years or older from the 2004 - 2006 National Health Interview Surveys, Barnes et al. found statistically significant differences at the .05 level in psychological distress when comparing Asian American adults with other racial groups. Asian Americans were less likely to feel sad, nervous, restless, and hopeless (Barnes et al., 2008). These results were generated after estimates were age-adjusted for the complex sampling design used for this study. More recently, Asian Americans, 12 years or older, were less likely to have suicide ideation, any suicide plans, or attempted suicide than the general population in a nationally representative sample of the combined 2008 - 2011 National Surveys on Drug Use and Health, significant at the .05 level (SAMHSA, 2013a). Also, Asian Americans or Pacific Islanders (4.9 %; $N = 558,000$) were less likely to need treatment for alcohol use or substance use compared to individuals in other racial groups [(9.5% ; $N = 22.5$ million), $p < .05$ (SAMHSA, 2013b)].

Studies that researched the severity of mental distress indicated that Asian American individuals had higher symptom severity than the general population (Chang, 2002; Okazaki, 2000; Sorkin et al., 2009). Asian Americans reported higher levels of psychological distress compared to White Americans (e.g., Chang, 2002; Okazaki, 2000; Sorkin et al., 2009), as well as the general population (e.g., Yeung et al. 2008). These findings were consistent with a wide range of population samples from college students (Chang, 2002; Okazaki, 2000) to older adult samples (Sorkin et al., 2009). For example, Okazaki (2000) found higher levels of interpersonal anxiety in Asian American college students ($M = 66.60$; $SD = 15.46$) compared to White Americans ($M = 51.60$; $SD = 12.64$), $F(1, 78) = 22.30$, $p < .001$, $d = 0.99$. Chang (2002) also found that Asian American college students reported higher anxiety ($d = 0.32$), stress ($d = 0.56$), depression ($d = 0.42$), and general distress ($d = 0.33$), compared to White Americans. In the Sorkin et al. (2009) study, Asian Americans were more likely to report psychological distress than White Americans in a statewide sample of adults over 55 years of age (from the 2007 California Health Information Survey, respectively). Even after adjusting for education level, employment status, food security, and English language proficiency, Filipino-American (aOR = 2.25; 95% CI = 1.14 – 4.47) and Korean-American (aOR = 2.10; 95% CI = 1.06 – 4.17) individuals had more than two times the odds of reporting psychological distress compared to non-Hispanic White Americans (Sorkin et al., 2009).

Therefore, the mental health status of the Asian American population differs depending on whether studies looked at rates of their psychological distress or the severity of their symptoms. This highlights the importance of specifying the desired outcome of interest. One possible explanation is that Asian Americans may report lower rates of psychological distress than the general population but those who *do* report psychological distress have more severe

symptomatology than the general population (Huang, 2013). If this is the case, then the main concern is whether Asian Americans who are in need of mental health services are actually seeking and/or receiving psychological services.

Underutilization of Psychological Services

Numerous studies indicate that Asian Americans tend to underutilize mental health care compared to the general population (Abe-Kim et al., 2007; Le Meyer et al., 2009; Sorkin et al., 2009; Sorkin et al., 2011; Takeuchi et al., 2007). From a nationally representative sample of Asian American adults 18 years or older, derived from the National Latino and Asian American Study (NLAAS), 8.6% sought mental health services (Abe-Kim et al., 2007) compared to 17.9% of the general population derived from the National Comorbidity Survey Replication (NCS-R). Even after isolating only those who meet the diagnostic criteria for a psychiatric disorder, Asian Americans (28%) were less likely to utilize mental health services (i.e., specialty mental health care, primary care, or alternative care) compared to the general population with the same diagnoses in the NCS-R (Le Meyer et al., 2009). In terms of treatment for individuals who were 12 years or older in need of treatment for alcohol use or illicit drug use, Asian American or Pacific Islander individuals (5.3%; $N = 30,000$), were significantly less likely than individuals of other racial groups (10.4%; $N = 2.3$ million) to utilize specialty resources (SAMHSA, 2013b), significant at the .05 level.

Summary of the Asian American Mental Health Section

Asian Americans who experience mental distress have more severe symptoms than the general population (i.e., Huang, 2013). In addition to the severity findings, empirical evidence of Asian Americans utilizing mental health resources at significantly lower rates than the general population is consistent and clear (e.g., SAMHSA, 2013b).

Willingness to See a Counselor

Willingness is broadly defined as a “cheerful readiness to do something” (Merriam-Webster online, n.d.) or an inclination toward an actual behavior. This concept was used in this study as a proxy for behavioral intent, which has been shown to be a strong predictor of actual help-seeking behavior (Vogel et al., 2005). Even though capturing actual help-seeking behavior is ideal in understanding Asian Americans’ utilization of psychological services, problems exist in successfully acquiring representative samples. Of the Asian American population that makes up 5.6 percent of the total population (Census Bureau, 2010a), obtaining representative sample sizes has been found to be challenging (Sue et al., 2012). Focusing on Asian Americans who *utilize* mental health services also adds to the difficulty given the low percentage of mental health service utilization (e.g., Masuda et al., 2009). If I were to obtain an adequate sample size of Asian American individuals who seeking counseling, I would face the costs of additional resources in recruitment and more time for data collection. In addition, acquiring an adequate sample size of Asian Americans who intend to see a counselor would also be a challenge. Since intent requires Asian Americans to have a reason to see a counselor, this would also reduce the sample size to only Asian Americans who have a reason to see a counselor.

By using a proxy, I obtained the best approximation of Asian Americans that allowed me to acquire an adequate sample size. I used willingness to see a counselor as a proxy for behavioral intent, which has strong empirical support as being a strong predictor of actual help-seeking behavior (e.g., Vogel et al., 2005). Studies have successfully used willingness to see a counselor as a proxy for actual counseling seeking behavior based on the theory of reasoned action (Kim & Park, 2009; Vogel et al., 2005). According to the theory of reasoned action, a person’s intention to engage in a behavior predicts actual engagement in that behavior and is

distinct from attitudes (TRA; Fishbein & Ajzen, 1975). Behavioral intention has also been argued to be synonymous with willingness (Albarracin et al., 2001; Kim & Park, 2009).

In the literature, studies have gauged how willing individuals were to see a counselor for a few concerns such as academic or personal problems (e.g., Atkinson, Lowe, & Matthews, 1995; Barry & Mizrahi, 2005) or a longer list of problems (i.e., Cash et al., 1975; Gim et al., 1990). In order to be more inclusive of about the many issues or concerns that people would be willing to seeking psychological help for, Willingness to See a Counselor (WSC; Gim et al., 1990) was used in this study. WSC provides the most extensive list covering 24 problems (e.g., general anxiety, alcohol problems).

The development of this list of problems began with the Personal Problems Inventory (PPI; Cash et al., 1975). The PPI includes 15 problems that college students typically face. These problems include general anxiety, alcohol problem, shyness, sexual functioning, depression, conflicts with parents, speech anxiety, dating difficulties, career choice, insomnia, drug addiction, inferiority feelings, test anxiety, difficulty making friends, and trouble studying (Cash et al., 1975). Ponce and Atkinson (1989) then revised the PPI by adding five problems (adjustment to college, academic performance, financial concerns, feelings of loneliness or isolation, and feelings of alienation or not belonging) that they believed Hispanic college students often face. Gim et al. (1990) further modified Ponce and Atkinson's (1989) version by adding four more problems (ethnic identity confusion, general health problems, ethnic or racial discrimination, and roommate problems). These four problems were identified in a pilot study as specific concerns to Asian American college students (Gim et al., 1990). Studies have used Gim et al.'s (1990) modified version measuring one's willingness to see a counselor. For example, Kim and Omizo (2003) found that adherence to Asian values was negatively related to

willingness to see a counselor, after controlling for age, generation status, and previous counseling experience.

Evidence also supports the importance of attending to the unique factors associated with Asian Americans' willingness to seek counseling. For example, Asian Americans tend to be more willing to see a professional for academic concerns over personal problems (Atkinson et al., 1995). In another study, Asian Americans were less willing to see a counselor for personal and health problems but not for academic and career problems (Kim & Omizo, 2003). This difference in which problems Asian Americans are willing to see a counselor for was shown in a mediation analysis. Kim and Omizo found that attitudes toward seeking professional psychological help mediated the relationship between adherence to Asian values and willingness to see a counselor for personal and health problems. However, this mediation was not statistically significant for academic and career problems. Asian Americans who hold stronger Asian values were more likely to have less positive attitudes toward seeking professional psychological help, and thus, were less willing to see a counselor for personal and health problems. On the other hand, Asian Americans' willingness to see a counselor for academic and career problems did not depend on their attitudes toward seeking professional psychological help or their adherence to Asian values.

Willingness to See a Counselor and Indirect Interpersonal Exposure to Counseling

In prior studies, willingness to see a counselor has been often linked to stigma (e.g., Leong & Lau, 2001; Park, 2010), acculturation (Gim et al., 1990), fears about counseling and self-disclosure of emotions (Vogel et al., 2005), and Asian values (Choi, 2013; Kim & Omizo, 2003). However, less focus has been placed on the link between indirect interpersonal exposure to counseling and willingness to see a counselor. The Asian American population is of particular

importance given the visible evidence of the underutilization of mental health services in this population (i.e., Sorkin et al., 2009). These individuals are less likely to go to counseling (Sorkin et al., 2009) or know others, family or friends, who have been to counseling (Masuda et al., 2009).

Also, Asian Americans have more difficulty in understanding counselors and have given lower ratings of the therapeutic relationship compared to European Americans, in a college student sample (Wong et al., 2007). Asian Americans' unfamiliarity with the concept of counseling (Wong et al., 2007) could be a result of having less exposure to counseling. Indirect interpersonal exposure to counseling is one specific type of exposure to counseling that may be relevant for this population because of their potential adherence to collectivism. Collectivism emphasizes placing more weight on the group than the individual and behaving in ways consistent with the group (Triandis et al., 1988). Asian Americans may espouse collectivism from their culture of origin, direct or indirect through their parents (i.e., Berry et al., 2006; Kim et al., 1999). As a result, their adherence to collectivism may strengthen the influence that others and others' opinions have on the individual. This illustrates the relevance of the concept of indirect interpersonal exposure to counseling in the Asian American population.

Summary of Willingness to See a Counselor Section

In sum, the present study assessed Asian Americans' willingness to see a counselor. I then explored whether one's indirect interpersonal exposure to counseling is related to one's willingness to see a counselor. Next, I examined whether Asian American's adherence to collectivism influences the way in which their indirect interpersonal exposure to counseling relates to other variables.

Indirect Interpersonal Exposure to Counseling

Indirect interpersonal exposure to counseling resides under a larger umbrella of general exposure. More generally, exposure is contact with images of and/or messages about, or the object itself. This can occur directly or indirectly via television, or internet (i.e., Kaplan et al., 2012; Vogel et al., 2008; Zebrowitz et al., 2008). In the current existing literature, the most common themes of research on the topic of exposure has been the effects of drugs (e.g., Zhang et al., 2013), violence (e.g., Busby, Lambert, & Ialongo, 2013), and discrimination (e.g., Lewis et al., 2012). Exposure to counseling, however, has been studied (Kaplan et al., 2012) but to a lesser extent. Within those existing studies, counseling exposure seems to fall into two types: direct and indirect.

Since the focus of the present study was to measure the indirect exposure, direct exposure—having had previous counseling experience—was controlled for in this study. By doing so, I reduced the potential confounding effect that previous counseling experience could have on the dependent variable altering the results of this study. Consistent with prior studies that assessed direct counseling experience (e.g., Chu et al., 2011; Masuda et al., 2009; Vogel et al., 2005; Vogel et al., 2007), the present study assessed direct exposure to counseling by asking participants whether they sought counseling with a “yes” or “no” response option.

The indirect nature of the exposure was of particular interest because of the empirical support for modeling, a learning process in which individuals benefit from “models who exemplify the cultural patterns in their own behavior” (Bandura, 1971, p. 5). Several studies have applied modeling to the context of counseling by having psychologists model a desired behavior, such as a prosocial behavior, and help clients imitate and learn them (e.g., Bailey, 2001). This was relevant to this study because even those individuals may not be directly exposed to

counseling, their indirect exposure, such as the case with modeling, may influence their engagement in or avoidance of a particular behavior, such as seeking counseling, by observing or learning through others.

Indirect exposure to counseling can occur through television, internet, or through other individuals. Assessing indirect exposure to counseling has been mainly through media such as television and the Internet (e.g., Kaplan et al., 2012; Vogel et al., 2008). For example, participants saw a 7-minute video clip on testimonials of individuals who benefitted from counseling (Kaplan et al., 2012). Increased exposure to positive aspects of counseling increased participants' positive attitudes toward seeking help (Kaplan et al., 2012). These positive changes in their attitudes toward seeking professional psychological help persisted after three weeks but only for those individuals who had repeated exposure to the video clips after one exposure at 1.5 weeks ($p = .02$, $\eta_p^2 = .12$), after two exposures at 2.5 weeks ($p = .03$, $\eta_p^2 = .11$), and after no additional exposures at 5.5 weeks ($p = .01$, $\eta_p^2 = .15$). According to Cohen (1988), these results are considered medium to large effect sizes. These positive changes in attitudes toward seeking professional psychological help did not occur for those in the single exposure group ($ps > .07$) or the control group ($ps > .16$) (Kaplan et al., 2012).

Another study assessed how many hours of television shows (*Law & Order, Frazier*) participants watched that regularly included psychologists as characters (Vogel et al., 2008). Through a mediation model, Vogel et al. found that more exposure to these television shows was positively correlated with increased stigma, then reduced attitudes toward seeking professional psychological help, and then decreased willingness to see a counselor. In other words, exposure to psychology in television decreases one's willingness to see a counselor through higher stigma and negative attitudes towards counseling. Television exposure was also found to be negatively

related to anticipated benefits, how beneficial an individual views talking to a therapist about psychological problems, which was then associated with less attitudes toward seeking professional psychological help, and then less willingness to see a counselor. Correlations between the television exposure and stigma and anticipated benefits were .25 and -.20, respectively (Vogel et al., 2008).

Another type of indirect exposure is through books and lectures (e.g., Maynard, Maynard & Rowe, 2004). In Maynard et al.'s study as an example, students obtained information about psychology and compiled a group presentation based on their findings as part of a course. Upon completion of the course, these students recommended the course and their knowledge of psychology increased over time (Maynard et al., 2004).

In the present study, the indirect exposure of greatest interest was interpersonal exposure to counseling through other individuals (Masuda et al., 2009; Vogel et al., 2007). Studies show that the frequency of exposures is significant. The majority of individuals who went to counseling (90%) were found to know someone who also went to counseling (Vogel et al., 2007). For most of those individuals who went to counseling, someone had also suggested that they go to counseling (Vogel et al., 2007). However, less is known about the Asian American population given that exposure studies included few Asian American participants (e.g., Vogel et al., 2005). Asian Americans were found to be less likely to know someone who went to counseling or had a psychological disorder compared to the general population (Masuda et al., 2009).

The quality of these interpersonal exposures to counseling is also of importance. In addition to knowing fewer people who went to counseling, Asian Americans perceived that their family and extended family members thought more negatively about seeing a counselor than

their professors (Kim & Park, 2009). In post hoc analyses, Kim and Park (2009) found that the overall effect and pairwise contrasts between professors and family members (mother, father, siblings, relatives, and ancestors) were all statistically significant. Perhaps, their interpersonal exposure to counseling looks different than the general population, not only in terms of quantity but also in quality.

Indirect interpersonal exposure to counseling can be either positive or negative in its content, such as various aspects of counseling itself, as well as the expected outcome, such as distress reduction. In terms of positive indirect interpersonal exposure to counseling, examples would be listening to a friend praising his/her counselor's empathy. A negative indirect interpersonal exposure to counseling would be either viewing over-exaggerated portrayals of psychologists with inaccurate information about therapy in television shows (Vogel et al., 2008) or listening to a friend mentioning feeling worse from therapy as a child. The present study specified whether these exposures were positive or negative. Depending on the valence of the exposure, the relationship between attitudes toward seeking professional psychological help and willingness to see a counselor were hypothesized to differ. Negative exposure to counseling (via television shows that frequently show unethical psychologists) has been linked to less positive attitudes toward seeking professional psychological help (Vogel et al., 2008). Conversely, positive exposure to counseling (via audiovisual clips that informed the viewer of how individuals felt better after counseling) has been linked to more positive attitudes toward seeking professional psychological help (Kaplan et al., 2012). Therefore, the relationships of the frequency and the valence of indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help were assessed separately.

Summary of the Indirect Interpersonal Exposure to Counseling Section

In sum, individuals who have more indirect interpersonal exposure to counseling are more likely to seek counseling themselves (e.g., Vogel et al., 2007). Whether this relationship occurs similarly in the Asian American population had not yet been explored. This study explored the extent to which Asian Americans are indirectly interpersonally exposed to counseling and how this exposure relates to their willingness to see a counselor and attitudes toward seeking professional psychological help.

Attitudes toward Seeking Professional Psychological Help

One possible mechanism through which indirect interpersonal exposure to counseling relates to willingness to see a counselor is through attitudes. Attitudes are commonly defined as evaluations of a given object, such has people or ideas (Crano & Prislin, 2006; Petty et al., 2013). In this study, I was interested in focusing on individuals' attitudes toward seeking counseling. We can develop several attitudes about an object. These overall attitudes can have a positive, negative or neutral valence (Petty et al., 2013). An overall positive attitude can include viewing counseling as a viable option when in mental distress. An overall negative attitude can include thinking that therapy is for "weak" people. An overall neutral attitude occurs when one holds positive and negative views about counseling, creating a more ambivalent-like state (Petty et al., 2013).

Evidence to support the pathway of attitudes mediating the relationship between exposure and willingness has been found in a clinical study (e.g., Lawson & Walls-Ingram, 2010). Attitudes toward parenting children with Down syndrome partially mediated the relationship between how many individuals with Down syndrome participants were exposed to and whether they would selectively abort pregnancy (Lawson & Walls-Ingram, 2010). Correlations were

statistically significant between exposure and attitudes ($r = .29$); attitudes and willingness ($r = -.31$); and exposure and willingness ($r = -.33$ and $-.24$).

Other studies have successfully operationalized attitudes toward seeking professional psychological help as a mediator between either a cultural or psychological variable and willingness to see a counselor (Kim & Omizo, 2003; Kim & Park, 2009; Vogel et al., 2005). For example, attitudes toward seeking professional psychological help mediated the relationship between Asian values and willingness to see a counselor (Kim & Omizo, 2003). Given the empirical evidence that supports using attitudes as a mediator, I used attitudes toward seeking professional psychological help as a mediator between indirect interpersonal exposure to counseling and willingness to see a counselor.

Interpersonal Exposure to Counseling and Attitudes toward Seeking Professional Psychological Help

In the first part of the mediation model, it has been established that general positive exposure has been found to increase one's positive attitudes toward an object to which one is exposed (e.g., Kaplan et al., 2012). By looking at the frequency of indirect interpersonal exposures to counseling, Kaplan et al.'s study (2012) explored whether indirect interpersonal exposure to counseling, regardless of its valence, related to the other variables. This hypothesis stemmed from the mere exposure effect that argues that mere exposure to an object increases one's liking of the object (Zebrowitz et al., 2008). In two separate experiments, White participants were given faces of Korean and White faces (experiment 1) and Black and White faces (experiment 2) and asked to rate those faces on a 7-point likeability scale after one and a second exposure to those faces. There was a significant interaction between the type of exposure shown (experiment 1: Korean or White faces; experiment 2: Black, White faces, or none) and the

rating of a new set of faces for experiment 1 [$F(1, 65) = 4.50, p = .04, \eta^2 = .06$] and experiment 2 [$F(2, 98) = 3.93, p = .02, \eta^2 = .07$]. Merely looking at faces for a few seconds of ethnic minority faces different from the participants increased their liking of a new set of faces in those different ethnic minority groups (Zebrowitz et al., 2008).

Moreover, applying this mere exposure effect to counseling, researchers have hypothesized that the more contact individuals have with the psychology field, the more likely they will hold more positive attitudes toward psychology (Fischer & Farina, 1995). In the contact hypothesis theory, when individuals have contact with members from a different group, especially in terms of racial groups, their prejudices and discriminatory beliefs of those members in another group lessen (Allport, 1954). In this study, I predicted that increased indirect interpersonal exposure to counseling would increase one's positive attitudes toward seeking professional psychological help.

Attitudes toward Seeking Professional Psychological Help and Willingness to See a Counselor

In another part of the mediation model, positive attitudes toward seeking professional psychological help have been shown to relate to more willingness to see a counselor (e.g., Kim & Omizo, 2003). Attitudes and willingness, in general, have been viewed as distinct constructs determined by their positioning towards engaging in behavior. On the one hand, attitudes are cognitively and affectively based (Crano & Prislin, 2006), in which an individual has an opinion(s) about an object or event; it implies no movement to act behaviorally but rather a state of being. On the other hand, willingness reflects an inclination or leaning towards a behavior. Studies have made the related yet distinct relationship between attitudes towards seeking professional psychological help and willingness to see a counselor in college student samples

(Vogel et al., 2005; Vogel et al., 2007; Kim & Park, 2009; Kim & Omizo, 2003; Kaplan et al., 2012). Individuals with more positive help-seeking attitudes were more willing to seek counseling for issues related to interpersonal concerns and substance issues (Vogel et al., 2005).

Previous studies have highlighted this dual relationship between the two constructs using Asian American college student samples (Kim & Omizo, 2003; Kim & Park, 2009). Asian American participants tended to hold less positive attitudes towards seeking professional help yet be more willing to see a counselor for specific academic issues (Atkinson, Morten, & Sue, 1998). Correlations between these two constructs ranged from .36 (Vogel et al., 2005) to .53 (Kim & Omizo, 2003). Several studies have used this relationship between attitudes and willingness in mediation models (Vogel et al., 2005; Vogel et al., 2008) similar to the proposed study.

Summary of the Attitudes toward Seeking Professional Psychological Help Section

An individual's attitudes toward seeking professional psychological help has been shown to be a pathway in which one construct (e.g., Asian values) relates to another construct (e.g., willingness to see a counselor) (e.g., Kim & Omizo, 2003; Choi, 2013). This study explored whether attitudes toward seeking professional psychological help also mediates the relationship between indirect interpersonal exposure to counseling and willingness to see a counselor. These attitudes have been shown to be distinct from willingness to see a counselor in the literature (e.g., Vogel et al., 2005). Research indicates that individuals with more positive attitudes toward seeking professional psychological help are more willing to see a counselor (Vogel et al., 2005). I hypothesized in this study that this positive relationship between positive attitudes toward seeking professional psychological help and willingness to see a counselor would occur and these attitudes would also mediate the relationship between indirect interpersonal exposure to counseling and willingness to see a counselor.

Collectivism

Collectivism entered the theorized model because of the likelihood that the Asian American population would be influenced by this Asian cultural value (Kim et al., 1999; Triandis et al., 1988). Specifically, one aspect of collectivism involves placing one's personal goals secondary to the goals of a collective group (i.e., family; Triandis et al., 1988). As a result, Asian American individuals may value the opinions of those in their ingroups more and place more weight on their opinions (e.g., parents have more influence in decisions) than White Americans.

Another important aspect of the collectivistic picture involves following the norms and engaging in behaviors consistent with the goals of a collective group. Asian Americans may value judgments that are consistent with what they perceived the opinions of those in their ingroup to be. Their desire to maintain cohesion in the group by following its norms may supersede their individual desires (Triandis et al., 1988). These two themes, sacrificing one's own needs for the sake of the group and following the group's norms, may strengthen how one internalizes and translates indirect interpersonal exposures to counseling to their positive attitudes toward seeking professional psychological help for Asian Americans. Thus, I proposed that adherence to these collectivistic values serve as a moderator between indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help.

Summary of Collectivism Section

Collectivism is a term used in this study to describe a way of thinking in relation to a collective group (Triandis et al., 1988). For this study, valuing the group more than the individual and a strong desire of follow the group norms represented collectivism. This ensured that only the specific aspects of collectivism that were theorized in this study were linked to

indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help. Theory and research suggest that collectivism can successfully moderate the relationship between indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help.

Summary of Literature Review

Consistent findings in the literature reveal the problem of Asian American individuals underutilizing psychological resources. Researchers address this issue by examining the effects of various factors on individuals' willingness to see a counselor, such as attitudes. However, little research has looked at the effect of indirect interpersonal exposure to counseling on willingness to see a counselor in the Asian American population. Evidence from studies on exposure effects indicate that exposure has an effect on attitudes (Kaplan et al., 2012) and willingness (Lawson & Walls-Ingram, 2010). Research also indicates that Asian Americans have less indirect interpersonal exposure to counseling than the general population (Masuda et al., 2009). Thus, this study aimed to combine these two ideas and expand our knowledge of the effects of indirect interpersonal exposure to counseling on willingness to see a counselor. More specifically, this study aimed to investigate this mediation relationship between the frequency and valence of indirect interpersonal exposure to counseling and willingness to see a counselor through attitudes toward seeking professional psychological help.

The literature on collectivism and its relation to indirect interpersonal exposure to counseling were also explored. Collectivism, conceptualized in past studies as a cultural value (Triandis et al., 1988), contains two aspects that are most relevant: valuing the collective group more than the individual and conforming to the collective group's norms. Therefore, the present investigation aimed to determine whether collectivism influences the relationship between the

frequency and valence of indirect interpersonal exposure to counseling and willingness to see a counselor.

Chapter 3: Statement of the Problem

The Asian American population utilizes mental health resources significantly less than the general population (e.g., Le Meyer et al., 2009). This underutilization occurs even after narrowing the population to those who are in need of psychological services (SAMHSA, 2013b). This study is designed to increase our understanding of Asian Americans' help-seeking behavior. The present study used the variables—willingness to see a counselor, attitudes toward seeking professional psychological help, collectivism, and the frequency and valence of indirect interpersonal exposure to counseling—to test a mediation and a moderation. The primary goal of this study was to test whether attitudes toward seeking professional psychological help mediates the relationship between the frequency and valence of indirect interpersonal exposure to counseling and willingness to see a counselor. The secondary goal was to test whether collectivism moderates the effect of the frequency and valence of indirect interpersonal exposure to counseling on attitudes toward seeking professional psychological help.

Hypotheses

Primary Hypotheses

Frequency

- 1a: Higher frequency of indirect interpersonal exposure to counseling will significantly predict more positive attitudes toward seeking professional psychological help (path a_1).
- 1b: More positive attitudes toward seeking professional psychological help will significantly predict more willingness to see a counselor (path b_1).
- 1c: Higher frequency of indirect interpersonal exposure to counseling will significantly predict more willingness to see a counselor (path c_1).

1d: More positive attitudes toward seeking professional psychological help will mediate the relationship between higher frequency of indirect interpersonal exposure to counseling and more willingness to see a counselor. The indirect effect $a_1 \times b_1$ will be statistically significant and the range of the confidence interval will not contain zero, resulting in a partial mediation.

Valence

2a: More positively valenced indirect interpersonal exposure to counseling will significantly predict more positive attitudes toward seeking professional psychological help (path a_2).

2b: More positive attitudes toward seeking professional psychological help will significantly predict more willingness to see a counselor (path b_2).

2c: More positively valenced indirect interpersonal exposure to counseling will significantly predict more willingness to see a counselor (path c_2).

2d: More positive attitudes toward seeking professional psychological help will mediate the relationship between more positively valenced indirect interpersonal exposure to counseling and more willingness to see a counselor. The indirect effect $a_2 \times b_2$ will be statistically significant and the range of the confidence interval will not contain zero, resulting in a partial mediation.

Secondary Hypotheses

Frequency

3. (a). Higher frequency of indirect interpersonal exposure to counseling will significantly predict more positive attitudes toward seeking professional psychological help (path a_1); and higher collectivism will predict less positive attitudes toward seeking professional psychological help (path d_1).

(b). Depending on the level of collectivism, the relationship between the frequency of indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help will change in magnitude, indicated by a statistically significant interaction (path a_1d_1). At 1 standard deviation above the mean of collectivism, the relationship of the frequency of indirect interpersonal exposure to counseling on positive attitudes toward seeking professional psychological help will be stronger.

Valence

4. (a). More positively valenced indirect interpersonal exposure to counseling will significantly predict more positive attitudes toward seeking professional psychological help (path a_2); and collectivism will predict less positive attitudes toward seeking professional psychological help (path d_2).
- (b). Depending on the level of collectivism, the relationship between positively valenced indirect interpersonal exposure to counseling and willingness to see a counselor will change in magnitude, indicated by a statistically significant interaction (path a_2d_2). At 1 standard deviation above the mean of collectivism, the relationship of positively valenced indirect interpersonal exposure to counseling on positive attitudes toward seeking professional psychological help will be stronger.

Chapter 4: Method

Design Statement

This survey study used a cross-sectional design to test a mediation and a moderation analysis with 4 variables: one predictor variable (The Frequency and Valence of Indirect Interpersonal Exposure to Counseling), one mediator variable (Attitudes toward Seeking Professional Psychological Help), one moderator variable (Collectivism) and one criterion variable (Willingness to See a Counselor). The total data of all four variables were continuous. The Indirect Interpersonal Exposure to Counseling survey was created by the author. The Attitudes toward Seeking Professional Psychological Help-Short Form (ATSPPH-S; Fischer & Farina, 1995) and Willingness to See a Counselor (Gim et al., 1990) measures have been widely used and validated with Asian American college student populations. The Collectivism variable was derived from two subscales, Conformity to Norms and Collectivism, from the Asian American Values Scale-Multidimensional (AAVS-M; Kim, Li, & Ng, 2005). The AAVS-M has also been validated with Asian American college student populations (Kim et al., 2005).

Sample Size

Based on prior mediation studies using the three general constructs—exposure, attitudes and willingness (e.g., Lawson & Walls-Ingram, 2010), I hypothesized small-medium direct effects between the variables (path \hat{a} and \hat{b}) in my theorized model. Given that I employed mediation analyses, it was recommended to use indirect effects to determine a priori effect size estimates. Unfortunately, determining effect sizes using mediation analyses has been inconsistent in the methodological literature (Preacher & Kelley, 2011). However, Fritz and MacKinnon (2007) have provided recommendations to determine the necessary sample size required. In order to achieve a power of .80 ($\alpha = .05$) to find small-medium effect sizes, the necessary sample

size using the bias-corrected bootstrap method is $N = 148$ (Fritz & MacKinnon, 2007). I recruited 291 participants.

Participants

The sample consisted of Asian American self-identified college students at the University of Maryland. A recruitment email was sent out to 5, 555 people. Participant response rate was about 7 % ($N = 380$). After excluding missing data of more than 10 percent ($N = 9$), participants with previous counseling experience were excluded ($N = 80$) to focus on those without direct exposure to counseling. A total sample of 291 participants was retained (178 female, 112 male, 1 missing). The age of the participants ranged from 18 to 41 years old ($M = 21.08$; $SD = 3.69$). The largest ethnic groups were: 116 Chinese (39.9%), 51 Korean (17.5%), 50 Asian Indian (17.2%), 21 Vietnamese (7.2%), and 18 Taiwanese participants (6.2%). Of these participants, 67 were first years (23%), 52 were second years (17.9%), 61 were third years (21 %), 59 were fourth years (20.3%) in their undergraduate programs, 45 (15.5%) were graduate students, 5 were non-traditional students (1.7%), and 2 did not indicate their school status (0.7%). Generation status, mother's highest education and father's highest education is provided in Table 1.

Table 1

Demographic Information on Generation Status, Mother's Highest Education, and Father's Highest Education

Demographics	N	%
Generation Status		
2 nd generation	156	53.6
1.5 generation	71	24.4
1 st generation	49	16.8
3 rd generation	7	2.4
4 th generation	3	1
Unsure	3	1
5 th generation	2	0.7
Mother's Highest Education		
Bachelor's Degree	95	32.6
Graduate Degree (i.e., MA, MS, PhD)	58	19.9
High School	44	15.1
Associate's Degree	32	11
Some College	30	10.3
Below High School	17	5.8
Professional Degree (i.e., MD, JD)	13	4.5
Other	2	0.7
Father's Highest Education		
Graduate Degree (i.e., MA, MS, PhD)	102	35.1
Bachelor's Degree	73	25.1
Professional Degree (i.e., MD, JD)	35	12
High School	34	11.7
Some College	18	6.2
Below High School	13	4.5
Associate's Degree	13	4.5
Other	3	1

Procedure

After obtaining approval from the Institutional Review Board at the University of Maryland, I recruited participants at the University of Maryland through a listserv comprised of a random sample of self-identified Asian American college students. I provided a recruitment email with a web link to the informed consent followed by the measures of the study. The order of the measures, Indirect Interpersonal Exposure to Counseling, Attitudes toward Seeking Professional Psychological Help, Collectivism, and Willingness to See a Counselor were randomly ordered with twenty-four possible combinations. Randomizing the order of the four measures allowed for testing and ruling out ordering effects. I conducted an analysis of variance comparing the 24 different ordering combinations on the four measures and found no significant differences on the frequency of indirect interpersonal exposure to counseling ($F(23, 262) = 0.55, p = .96$), the valence of indirect interpersonal exposure to counseling ($F(23, 201) = 1.14, p = .31$), attitudes toward seeking professional psychological help ($F(23, 263) = 0.48, p = .98$), willingness to see a counselor ($F(23, 262) = 0.75, p = .79$), and collectivism ($F(23, 264) = 1.41, p = .11$). After completing the measures, participants were asked demographic questions and whether they have had previous therapy experience. Participants were then reminded of the confidentiality of the study and were given a chance to win one of ten Amazon.com, iTunes, or Target e-gift cards of a \$20 value.

Measures

Indirect interpersonal exposure to counseling. Indirect Interpersonal Exposure to Counseling (IIEC) is an author-developed measure based on prior exposure research (i.e., Kaplan et al., 2012; Vogel et al., 2008) that assesses individuals' perceived indirect interpersonal exposures to counseling. The Indirect Interpersonal Exposure to Counseling questionnaire (IIEC)

is comprised of a total of 12 questions divided into two parts: Frequency and Valence. The IIEC Frequency portion contains 6 questions (family: 1, 3, 5; friends: 7, 9, 11) asking participants to quantify their exposures to counseling through their family and friends by: a) hearing shared opinions about counseling such as “counseling is helpful”; b) knowing family or friends who has been to counseling; and c) hearing about family or friends’ specific counseling experiences.

A sample question is, “How often have family members shared their opinion of counseling with you, more broadly, such as saying, ‘we need more counseling in our society’, ‘counseling is only for really crazy people’, ‘counseling does not work’ or ‘counseling is helpful’?” The scaling for the IIEC Frequency is 0 (*never or none*), 1(*rarely or a few*), 2 (*occasionally or some*), 3(*frequently or many*) and 4 (*very frequently or almost all*). The internal consistency of the IIEC Frequency was $\alpha = .74$ in this study.

The IIEC Valence portion contains 6 questions (family: 2, 4, 6; friends: 8, 10, 12) that directly follow after the IIEC Frequency questions asked participants to rate the positive or negative valence of the exposure in the preceding question. Participants were asked to rate the valence of the exposures to counseling through their family and friends. A sample question is, “Overall, how were your family members’ opinions of counseling?” The scaling for the IIEC Valence is no score (N/A), 1 (*exclusively positive*), 2 (*mostly positive*), 3(*slightly positive*) 4(*about equally positive and negative*), 5 (*slightly negative*), 6 (*mostly negative*), and 7 (*exclusively negative*). The items were reversed scored to reflect a higher score indicating a more positive valence and a lower score indicating a more negative valence. In this study, the internal consistency of the IIEC Valence was $\alpha = .70$.

Attitudes toward seeking professional psychological help. Attitudes toward seeking professional psychological help were measured by the Attitudes toward Seeking Professional

Psychological Help-Short Form (ATSPPH-SF; Fischer & Farina, 1995). This 10-item measure assesses participants' attitudes toward seeking professional psychological help on a 4-point Likert scale ranging from 0 (*disagree*) to 3 (*agree*). A sample item is: "The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts." Some of the items were reversed scored so that higher scores indicate more positive attitudes toward seeking help.

Fischer and Farina (1995) have shown good internal consistency of .84 in college students. Kim and Park (2009) and Kim and Omizo (2003) have shown adequate internal consistency (.77 and .85, respectively) with Asian American college students. A 4-week test-retest correlation of .80 was found demonstrating the stability of the construct over time (Fischer & Farina, 1995). Fischer and Farina (1995) also provided convergent validity with the original 29-item measure (Fischer & Turner, 1970) showing that the 10-item measure is a good shortened version ($\alpha = .84$) of the original measure ($\alpha = .83$ and .86). In addition, they found that attitudes toward seeking professional psychological help were significantly correlated with previous help-seeking experience (measured by a dichotomous question of whether or not participants sought help) in a point biserial correlation of .39 ($p < .0001$). In this study, the internal consistency of the scores was $\alpha = .75$.

Willingness to see a counselor. Willingness to See a Counselor (WSC; Gim et al., 1990) assessed participants' willingness to see a counselor for a specified list of problems (e.g., general anxiety and depression). Gim et al. adapted this measure from Ponce and Atkinson's (1989) modified version of the Personal Problems Inventory (Cash et al., 1975) to include identified concerns relevant to Asian American students. The WSC consists of 24 items on a 4-point Likert

scale ranging from 1 (*not willing*) to 4 (*willing*). Higher scores indicate more willingness to see a counselor.

Kim and Omizo (2003) and Kim and Park (2009) found good internal consistencies (.92 and .93, respectively) with Asian American college student populations. Kim and Omizo (2003) also reported factor analytic validity for the WSC by demonstrating that the measure questions fit the three subscales well (personal problems, academic/career problems, and health problems) accounting for 58.2% of the variance. Kim and Omizo also provided evidence for construct validity by using goodness-of-fit tests to show that the measure matches well with the data (Goodness of Fit Index = .965). In the current study, the internal consistency was $\alpha = .93$.

Collectivism. Collectivism was measured by two subscales, Collectivism and Conformity to Norms, of the Asian American Values Scale-Multidimensional (AAVS-M; Kim et al., 2005). The two subscales, both containing 7 questions each, ask participants to rate how much they agree to the 14 statements. I specifically chose these two subscales because of my interest in assessing how participants value their relationship to groups. The AAVS-M items are scored on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The AAVS-M is a modified version of the Asian Values Scale providing a multidimensional measurement of values that distinguish Asian American and European American values (Kim et al., 2005). A sample item is, “One should recognize and adhere to the interpersonal expectations, norms, and practices.”

Coefficient alphas for the overall scale AAVS-M ranged from .88 (Wong, Tran, Kim, Kerne, & Calfa, 2010) to .89 (Kim et al., 2005). For the Collectivism subscale, coefficient alphas ranged from .80 to .82 (Kim et al., 2005). For the Conformity to Norms subscale, coefficient alphas ranged from .78 to .79 (Kim et al., 2005). Kim et al. also provided concurrent validity by

finding positive correlations with the Asian Values Scale score (since the AAVS-M was based off of this scale), the Loss of Face scale, and the Self-Construal Scale-Interdependent. Significant negative correlations were found with ATSPPH-SF scores as well. Kim et al. also found evidence of discriminant validity by finding no significant correlations with the Rosenberg Self-Esteem Scale or the Interpersonal Desirability Scale, which taps into the level of endorsement of a culturally desirable behavior. The AAVS-M has been widely used with Asian American college student populations (Kim et al., 2005; Wong et al., 2010). In the current study, the internal consistency of the combined Collectivism measure was $\alpha = .81$; Conformity to Norms and Collectivism subscales, $\alpha = .76$ and $.82$, respectively.

Chapter 5. Results

Preliminary Analyses

Missing data analysis was used to assess missing data in the surveys. I removed the surveys of participants who did not complete more than 10 percent of their responses ($N = 9$). The following assumptions for the regression models were checked: linearity, normality, homogeneity of variance, skewness, and kurtosis (Cohen, Cohen, West, & Aiken, 2003). Linearity was checked by plotting unstandardized residuals and unstandardized predicted values on scatterplots. The data points looked random and not systematic suggesting linearity. To check for normality, I looked at Q-Q plots and found that the unstandardized residual points fell on the straight suggesting normal distribution of the data. Homogeneity of variance (HOV) was tested using the Levene's test indicating that I could reject the null hypothesis and, thus, HOV was not violated indicating equal variance. According to the Kolmogorov-Smirnov test, the WSC and Collectivism were normally distributed; however, the IIEC Frequency, IIEC Valence, and ATSPPH-SF were not normally distributed. Therefore, caution should be taken when interpreting the results of this study. Skewness and kurtosis for each variable fell below the ± 1.0 cut off (Table 2). Descriptive Statistics and correlational analyses are presented in Table 2.

Table 2

Descriptive Statistics and Correlations for the Frequency and Valence of Indirect Interpersonal Exposure to Counseling, Attitudes Toward Seeking Professional Psychological Help, Willingness to See a Counselor, and Collectivism

Variable	1	2	3	4	5
1. IIEC Frequency	--				
2. IIEC Valence	.65**	--			
3. Attitudes	.13*	.19**	--		
4. Willingness	.08	.18**	.47**	--	
5. Collectivism	-.04	-.05	-.08	-.04	--
<i>M</i>	5.72	14.28	24.46	51.95	56.69
<i>SD</i>	4.21	8.18	4.90	13.83	10.86
Range	0 - 20	2 - 36	11- 36	24 - 96	17 - 88
Skewness	0.70	0.50	-0.24	0.18	-0.22
Kurtosis	0.16	-0.44	0.05	0.14	0.55
α	.74	.70	.75	.93	.81

Note. * $p < .05$. ** $p < .01$.

Mediation

This study tested the hypothesized mediation models using the bias-corrected bootstrap confidence interval (CI) method. This method was recommended when power is a concern (Hayes & Scharkow, 2013). For this method of analysis, I used the bias-corrected bootstrapping CI macro in SPSS (Hayes, n.d.), as described by Preacher and Hayes (2008). I determined the estimated product of the two path coefficients in two models ($a_1 \times b_1$) and ($a_2 \times b_2$), using 5,000 bootstrapping samples. For each model, I determined a 95% CI at the 2.5th and 97.5th percentile of the distribution, and used the bias-corrected CI that adjusted for a bias (Hayes & Scharkow, 2013). If the 95% CIs did not contain zero, the indirect effects, ($a_1 \times b_1$) and ($a_2 \times b_2$), were statistically significant.

Hypothesis 1a: Higher frequency of indirect interpersonal exposure to counseling will significantly predict more positive attitudes toward seeking professional psychological help (path a_1). The main effect of IIEC Frequency on Attitudes (path a_1) was statistically significant ($\beta = 0.14, p < .05$) shown in Table 3. Higher frequency of indirect interpersonal exposure to counseling significantly predicted more positive attitudes toward seeking professional psychological help (path a_1).

Hypothesis 1b: More positive attitudes toward seeking professional psychological help will significantly predict more willingness to see a counselor (path b_1). The main effect of Attitudes on Willingness (path b_1) was statistically significant ($\beta = 1.31, p < .01$) shown in Table 3. More positive attitudes toward seeking professional psychological help significantly predicted more willingness to see a counselor (path b_1).

Hypothesis 1c: Higher frequency of indirect interpersonal exposure to counseling will significantly predict more willingness to see a counselor (path c_1). The main effect of

IIEC Frequency on Willingness (path c_1) was not statistically significant ($\beta = 0.22, p = .27$) shown in Table 3. Higher frequency of indirect interpersonal exposure to counseling significantly predicted more willingness to see a counselor (path c_1).

Hypothesis 1d: More positive attitudes toward seeking professional psychological help will mediate the relationship between higher frequency of indirect interpersonal exposure to counseling and more willingness to see a counselor. The indirect effect $a_1 \times b_1$ will be statistically significant and the range of the confidence interval will not contain zero, resulting in a partial mediation. Support for hypothesis 1 was found, as indicated by significant $a_1 b_1$ estimates and the 95% bootstrapping confidence intervals not including zero (95% CI = [0.03, .37]). More positive attitudes toward seeking professional psychological help mediated the relationship between higher frequency of indirect interpersonal exposure to counseling and more willingness to see a counselor.

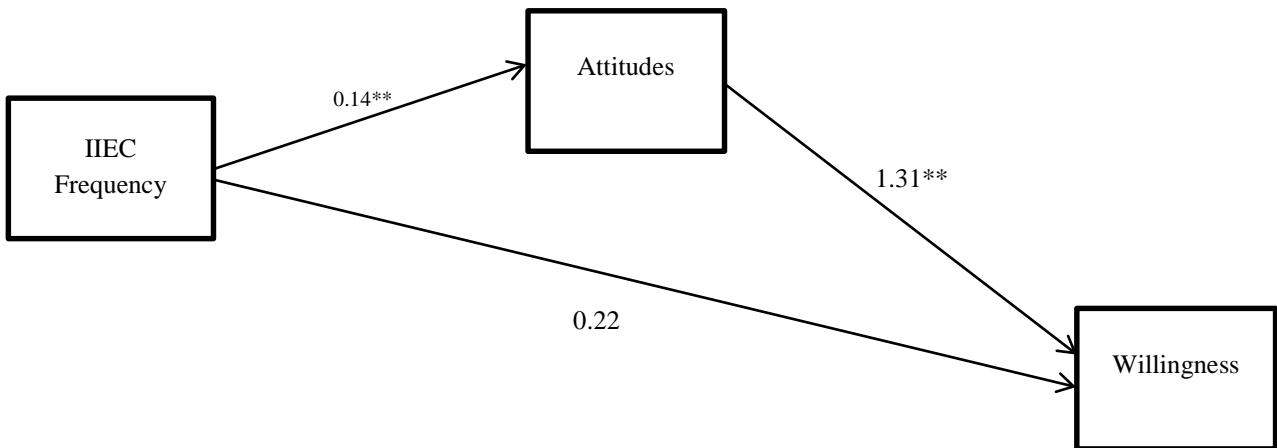
Hypothesis 2a: More positively valenced indirect interpersonal exposure to counseling will significantly predict more positive attitudes toward seeking professional psychological help (path a_2). The main effect of IIEC Valence on Attitudes (path a_2) was statistically significant ($\beta = 0.12, p < .01$) shown in Table 3. More positively valenced indirect interpersonal exposure to counseling significantly predicted more positive attitudes toward seeking professional psychological help (path a_2).

Hypothesis 2b: More positive attitudes toward seeking professional psychological help will significantly predict more willingness to see a counselor (path b_2). The main effect of Attitudes on Willingness (path b_2) was statistically significant ($\beta = 1.14, p < .01$) shown in Table 3. More positive attitudes toward seeking professional psychological help significantly predicted more willingness to see a counselor (path b_2).

Hypothesis 2c: More positively valenced indirect interpersonal exposure to counseling will significantly predict more willingness to see a counselor (path c_2). The main effect of IIEC Valence on Willingness (path c_2) was statistically significant ($\beta = 0.30, p < .01$) shown in Table 3. More positively valenced indirect interpersonal exposure to counseling significantly predicted more willingness to see a counselor (path c_2).

Hypothesis 2d: More positive attitudes toward seeking professional psychological help will mediate the relationship between more positively valenced indirect interpersonal exposure to counseling and more willingness to see a counselor. The indirect effect $a_2 \times b_2$ will be statistically significant and the range of the confidence interval will not contain zero, resulting in a partial mediation. Support for the indirect effect of frequency of indirect exposure to counseling was found, as indicated by significant $a_2 b_2$ estimates and the 95% bootstrapping confidence intervals not including zero (95% CI = [0.05, 0.24]). More positive attitudes toward seeking professional psychological help mediated the relationship between more positively valenced indirect interpersonal exposure to counseling and more willingness to see a counselor.

Mediation A:



Mediation B:

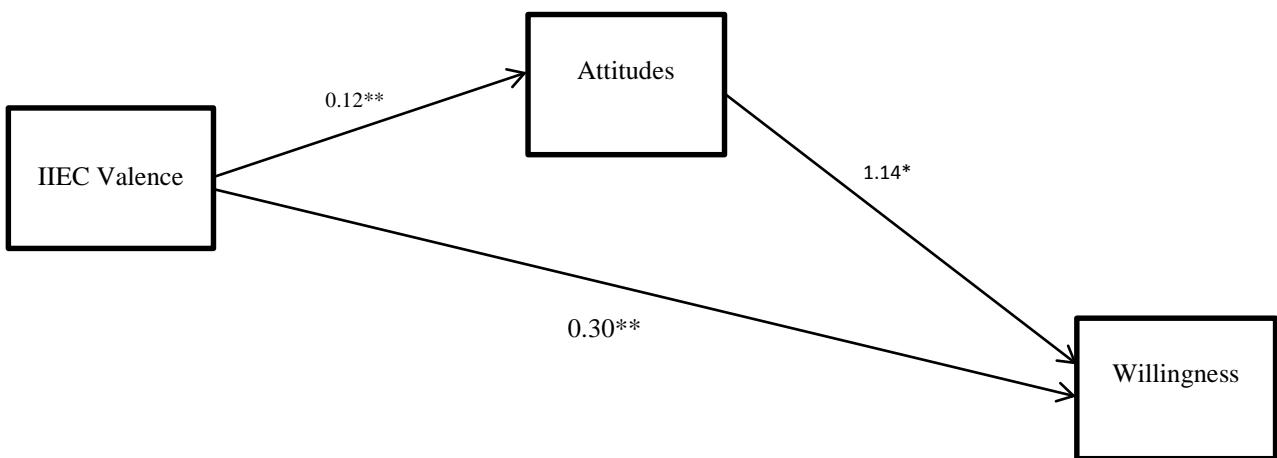


Figure 2. The observed path values of the mediation models for the frequency and valence of indirect interpersonal exposure to counseling to willingness to see a counselor through attitudes toward seeking professional psychological help.

Table 3

Unstandardized Indirect Effect of the Frequency of Indirect Interpersonal Exposure to Counseling on Willingness to See a Counselor through Attitudes toward Seeking Professional Psychological Help

	<i>a</i>	<i>b</i>	<i>c</i>	Unst.	<i>SE</i>	Bootstrapping BC 95% CI	
						Lower	Higher
IIEC Frequency	0.14*	1.31**	0.22	0.18	0.09	0.03	0.37
IIEC Valence	0.12**	1.14**	0.30**	0.13	0.05	0.04	0.24

Note. Unst. = unstandardized coefficient; *SE* = standard error; BC = bias-corrected; CI = confidence interval.

p* < .05. *p* < .01.

Moderation

I then tested the hypothesized moderation models using a hierarchical linear regression analysis. The frequency and valence of indirect interpersonal exposure to counseling, separately, and collectivism were entered in Step 1. The interaction terms of the frequency and valence of indirect interpersonal exposure to counseling and collectivism (IIEC Frequency X Collectivism; IIEC Valence X Collectivism) were entered separately in Step 2, shown in Table 4 and 5. A moderating effect of collectivism would occur if the interaction term was statistically significant.

Hypothesis 3a. Higher frequency of indirect interpersonal exposure to counseling will significantly predict more positive attitudes toward seeking professional psychological help (path a_1); and higher collectivism will predict less positive attitudes toward seeking professional psychological help (path d_1). The frequency of indirect interpersonal exposure to counseling and collectivism were included in Step 1 of the hierarchical linear regression analysis shown in Table 4. The two variables, frequency of IIEC and collectivism, accounted for 3% of the variance in attitudes toward seeing professional psychological help ($R^2 = .03, F(2, 277) = 3.55, p < .05$). Support was found for main effects of the frequency of indirect interpersonal exposure to counseling ($\beta = 0.13, p < .05$) and collectivism ($\beta = -0.09, p = .15$) on attitudes toward seeking professional psychological help.

Hypothesis 3b. Depending on the level of collectivism, the relationship between the frequency of indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help will change in magnitude, indicated by a statistically significant interaction (path a_1d_1). High collectivism and high frequency of indirect interpersonal exposure to counseling would predict more positive attitudes toward seeking professional help. High collectivism and low frequency of indirect interpersonal exposure

to counseling would predict less positive attitudes toward seeking professional psychological help. Low collectivism and high frequency of indirect interpersonal exposure to counseling and low collectivism and low frequency of indirect interpersonal exposure to counseling both would similarly predict moderate attitudes toward seeking professional psychological help. The interaction of the frequency of indirect interpersonal exposure to counseling and collectivism (IIEC Frequency X Collectivism) was added in Step 2. The results showed a significant amount of variance explained by the model ($R^2 = .03$, $F(3, 276) = 3.15$, $p < .05$). Contrary to my hypotheses, the β coefficient of the interaction (IIEC Frequency X Collectivism) was not statistically significant indicating there was no evidence of a moderation effect ($\beta = -0.47$, $p = .13$).

Table 4

Hierarchical Linear Regression Analyses Exploring Collectivism as a Moderator in the Relations of the Frequency of Indirect Interpersonal Exposure to Counseling with Attitudes Toward Seeking Professional Psychological Help

Variable	B	SE B	β	p	R^2	95% CI	ΔR^2	F
Step 1								
Collectivism	-0.04	0.03	-0.09	.15	.03	-0.09, 0.01	.03	3.55*
IIEC Frequency	0.15	0.07	0.13	.03		0.02, 0.29		
Step 2								
Collectivism	0.02	0.05	0.04	.68	.03	-0.07, 0.11	.01	3.15*
IIEC Frequency	0.67	0.35	0.58	.06		-0.01, 1.36		
IIEC Frequency X Collectivism	-0.01	0.01	-0.47	.13		-0.02, 0.00		

Note. CI = confidence interval.

* $p < .05$.

Hypothesis 4a. More positively valenced indirect interpersonal exposure to counseling will significantly predict more positive attitudes toward seeking professional psychological help (path a_2); and collectivism will predict less positive attitudes toward seeking professional psychological help (path d_2). The valence of indirect interpersonal exposure to counseling and collectivism were included in Step 1 of the hierarchical linear regression analysis shown in Table 5. The two variables, IIEC Valence and Collectivism, accounted for 6% of the variance in attitudes toward seeing professional psychological help ($R^2 = .06, F(2, 217) = 7.43, p < .01$). Support was found for main effects of the valence of indirect interpersonal exposure to counseling ($\beta = 0.11, p < .01$) and collectivism ($\beta = -0.07, p < .01$) on attitudes toward seeking professional psychological help.

Hypothesis 4b. Depending on the level of collectivism, the relationship between more positively valenced indirect interpersonal exposure to counseling and willingness to see a counselor will change in magnitude and direction, indicated by a statistically significant interaction (path a_2d_2). High collectivism and more positively valenced indirect interpersonal exposure to counseling would predict more positive attitudes toward seeking professional psychological help. High collectivism and less positively valenced indirect interpersonal exposure to counseling would predict less positive attitudes toward seeking professional psychological help. Low collectivism and more positively valenced indirect interpersonal exposure to counseling and low collectivism and less positively valenced indirect interpersonal exposure to counseling both would similarly predict moderate attitudes toward seeking professional psychological help. The interaction of the valence of indirect interpersonal exposure to counseling and collectivism (IIEC Valence X Collectivism) was added in Step 2. The results showed a significant amount of variance explained by the model

($R^2 = .06$, $F(3, 216) = 4.94$, $p < .01$). Contrary to my hypotheses, I did not find a significant moderation effect. The β coefficient of the interaction (IIEC Valence X Collectivism) was not statistically significant. There were no significant main effects when IIEC Valence X Collectivism was added to the model.

Table 5.

Hierarchical Linear Regression Analyses Exploring Collectivism as a Moderator in the Relations of the Valence of Indirect Interpersonal Exposure to Counseling with Attitudes toward Seeking Professional Psychological Help

Variable	B	SE B	β	p	R^2	95% CI	ΔR^2	F
Step 1								
Collectivism	-0.07	0.03	-0.17	.01	.06	-0.13,-0.02	.06	7.43**
IIEC Valence	0.11	0.04	0.19	.01		0.04, 0.19		
Step 2								
Collectivism	-0.09	0.07	-0.19	.19	.06	-0.22, 0.04	.00	4.94**
IIEC Valence	0.07	0.22	0.11	.76		-0.37, 0.50		
IIEC Valence X Collectivism	0.00	0.00	0.08	.83		-0.01, 0.01		

Note. CI = confidence interval.

** $p < .01$.

Post Hoc Analyses

Measure Modifications

Indirect interpersonal exposure to counseling. In response to suggestions on providing more reliability and validity information on the indirect interpersonal exposure to counseling (IIEC) measure, additional analyses were conducted on the IIEC. To further examine the IIEC by identifying subscales that may provide additional information about whether the frequency and valence of the IIEC appear as two separate factors, I conducted an exploratory factor analysis on the IIEC items using the overall sample of 291 participants (178 female, 112 male, 1 missing) in this study. Using the 12 items of the IIEC, I used principal axis factoring without specifying a factor solution. The scree plot indicated that the factor solution produced three factors. However, in order to identify meaningful factors from the items, I used the following criteria to establish the subscales: a) retain items with a factor loading greater than .50 (i.e., Costello & Osborne, 2005); b) retain items that consistently loaded on one factor (met criteria a for one factor and had low loadings on the other factors); and c) retain items that were conceptually congruent with each other. After applying the criteria, I retained 8 items in the final factor solution. The final factor solution indicated that the two-factor solution accounted for 76.2% of the variance, each factor accounting for 42.2%, and 76.2% of the variance. I labeled the two factors, IIEC-Family (4 items) and IIEC-Friends (4 items). The internal consistency for the IIEC total was .75, .81 for the IIEC-Family, and .84 for the IIEC-Friends. These results showed adequate reliability for the IIEC total and its two subscales.

However, although the factor solution indicated the frequency and valence items to load on the same factor for family and friends, I conducted the following analyses of mediation and

moderation using solely the frequency items. Conceptually, it did not make theoretical sense to combine frequency and valence as one construct and would create difficulty in making sense of the findings. The internal consistency for the IIEC-Family was .81, and .83 for the IIEC-Friends.

Willingness to see a counselor (WSC). Kim & Omizo (2003) conducted an exploratory and confirmatory factor analysis of the WSC and found that 19 items (6 items removed from the original scale) in three subscales (academic/career problems, health problems, personal problems) fit the data well. These three WSC subscales were categorized as follows: Personal Problems (9 items: questions 1, 3, 7, 10, 15, 16, 18, 19, and 23), Academic/Career Problems (6 items: questions 8, 11, 12, 17, 20, and 22), and Health Problems (4 items: questions 2, 5, 13, and 14). Six questions were not included in the subscales. The three subscales of the WSC measures were used in the mediation analyses.

The internal consistency for the WSC –Personal Problems was .91, .83 for the WSC-Academic/Career Problems, and .78 for the WSC-Health Problems. These results showed adequate reliability for the WSC subscales.

Collectivism and conformity to norms. Given that the bivariate correlation between the collectivism subscale and conformity to norms was low ($r = .29$), I concluded that the two subscales may be tapping into different underlying constructs. Therefore, I conducted separate moderation analyses for each subscale.

Table 6.

Descriptive Statistics and Correlations for the Family and Friends Indirect Interpersonal Exposure to Counseling, Attitudes Toward Seeking Professional Psychological Help, Willingness to See a Counselor (Personal Problems, Academic Problems, Health Problems), Collectivism, and Conformity to Norms

Variable	1	2	3	4	5	6	7	8
1. IIEC Family	-							
2. IIEC Friends	.12*	-						
3. Attitudes	.11	.01	-					
4. WSC-Personal	.16**	.03	.46**	-				
5. WSC-Academic	-.00	-.01	.25**	.61**	-			
6. WSC-Health	.07	.12*	.43**	.59**	.32**	-		
7. Collectivism	.16**	-.12*	-.18**	-.14*	-.06	-.16**	-	
8. Conformity to Norms	.06	-.08	.05	.08	.05	.06	.29**	-
<i>M</i>	1.12	2.28	24.46	16.99	13.26	9.81	29.16	27.55
<i>SD</i>	1.61	2.25	4.90	5.81	4.17	3.19	6.89	6.61
Range	0-7	0-8	11-36	9-36	6-24	4-16	7-49	10-45
Skewness	1.25	0.42	-0.24	0.54	0.13	-0.20	-0.05	-0.29
Kurtosis	0.69	-0.98	0.05	0.10	-0.42	-0.74	0.58	-0.35
<i>α</i>	.83	.81	.75	.91	.83	.78	.82	.76

Note. * $p < .05$. ** $p < .01$.

Additional Mediation Analyses

I tested the additional mediation models using the bias-corrected bootstrap confidence interval (CI) method.

Hypothesis 5a: Higher frequency of family indirect interpersonal exposure to counseling will significantly predict more positive attitudes toward seeking professional psychological help (path *a*) using separate criterion variables, WSC-Personal, WSC-Academic/Career, and WSC-Health, analyzed separately in the three mediation models.

The main effect of IIEC Family on Attitudes (path *a*) was not statistically significant for WSC-Personal ($\beta = 0.34, p = .06$), WSC-Academic/Career ($\beta = 0.33, p = .07$), and WSC-Health ($\beta = 0.34, p = .06$) shown in Table 7. There is no statistical evidence supporting a main effect of higher frequency of family indirect interpersonal exposure to counseling significantly predicting more positive attitudes toward seeking professional psychological help (path *a*).

Hypothesis 5b: More positive attitudes toward seeking professional psychological help will significantly predict more willingness to see a counselor (path *b*) for personal problems (WSC-Personal), academic and career problems (WSC-Academic/Career), and health problems (WSC-Health). The main effect of Attitudes on Willingness (path *b*) was statistically significant for WSC-Personal ($\beta = 0.52, p < .01$), WSC-Academic/Career ($\beta = 0.22, p < .01$), and WSC-Health ($\beta = 0.27, p < .01$) shown in Table 7. More positive attitudes toward seeking professional psychological help significantly predicted more willingness to see a counselor for personal problems, academic/career problems, and health problems (path *b*).

Hypothesis 5c: Higher frequency of family indirect interpersonal exposure to counseling will significantly predict more willingness to see a counselor (path *c*) for personal problems (WSC-Personal), academic and career problems (WSC-Academic/Career), and health problems (WSC-Health). The main effect of IIEC Family on

Willingness (path *c*) was statistically significant for WSC-Personal ($\beta = 0.59, p < .01$), but not for WSC-Academic/Career ($\beta = -0.00, p = .99$), and WSC-Health ($\beta = 0.13, p = .28$) shown in Table 7. Higher frequency of family indirect interpersonal exposure to counseling significantly predicted more willingness to see a counselor (path *c*) for personal problems but not for academic/career problems nor health problems.

Hypothesis 5d: More positive attitudes toward seeking professional psychological help will mediate the relationship between higher frequency of family indirect interpersonal exposure to counseling and more willingness to see a counselor for personal problems (WSC-Personal), academic and career problems (WSC-Academic/Career), and health problems (WSC-Health). The indirect effect *a X b* will be statistically significant and the range of the confidence interval will not contain zero, resulting in a partial mediation.

Support for hypothesis 5 was found, as indicated by significant *ab* estimates and the 95% bootstrapping confidence intervals not including zero for WSC-Personal (95% CI = [0.00, 0.37]), WSC-Academic/Career (95% CI = [0.00, 0.17]), and WSC-Health (95% CI = [0.00, 0.20]) shown in Table 7. More positive attitudes toward seeking professional psychological help mediated the relationship between higher frequency of family indirect interpersonal exposure to counseling and more willingness to see a counselor for personal problems, academic/career problems, and health problems.

Hypothesis 6a: Higher frequency of indirect interpersonal exposure to counseling through friends will significantly predict more positive attitudes toward seeking professional psychological help (path *a*) using separate criterion variables, WSC-Personal, WSC-Academic/Career, and WSC-Health, analyzed separately in the three mediation models. The main effect of IIEC Friends on Attitudes (path *a*) was not statistically significant for

WSC-Personal ($\beta = 0.02, p = .85$), WSC-Academic/Career ($\beta = 0.00, p = .98$), and WSC-Health ($\beta = 0.03, p = .82$) shown in Table 7. There is no statistical evidence supporting a main effect of higher frequency of indirect interpersonal exposure to counseling through friends significantly predicting more positive attitudes toward seeking professional psychological help (path *a*).

Hypothesis 6b: More positive attitudes toward seeking professional psychological help will significantly predict more willingness to see a counselor (path *b*) for personal problems (WSC-Personal), academic and career problems (WSC-Academic/Career), and health problems (WSC-Health). The main effect of Attitudes on Willingness (path *b*) was statistically significant for WSC-Personal ($\beta = 0.54, p < .01$), WSC-Academic/Career ($\beta = 0.21, p < .01$), and WSC-Health ($\beta = 0.27, p < .01$) shown in Table 7. More positive attitudes toward seeking professional psychological help significantly predicted more willingness to see a counselor for personal problems, academic/career problems, and health problems (path).

Hypothesis 6c: Higher frequency of indirect interpersonal exposure to counseling through friends will significantly predict more willingness to see a counselor (path *c*) for personal problems (WSC-Personal), academic and career problems (WSC-Academic/Career), and health problems (WSC-Health). The main effect of IIEC Friends on Willingness (path *c*) was not statistically significant for WSC-Personal ($\beta = 0.05, p = .73$), WSC-Academic/Career ($\beta = -0.03, p = .81$), and WSC-Health ($\beta = 0.16, p = .05$) shown in Table 7. There was no statistical evidence to support the hypothesis that higher frequency of indirect interpersonal exposure to counseling through friends significantly predicted more willingness to see a counselor (path *c*) for personal problems, academic/career problems, nor health problems.

Hypothesis 6d: More positive attitudes toward seeking professional psychological help will mediate the relationship between higher frequency of indirect interpersonal

exposure to counseling through friends and more willingness to see a counselor for personal problems (WSC-Personal), academic and career problems (WSC-Academic/Career), and health problems (WSC-Health). The indirect effect $a X b$ will be statistically significant and the range of the confidence interval will not contain zero, resulting in a partial mediation. Support for hypothesis 6 was not found, as indicated by significant ab estimates and the 95% bootstrapping confidence intervals including zero for WSC-Personal (95% CI = [-0.12, 0.14]), WSC-Academic/Career (95% CI = [-0.05, 0.06]), and WSC-Health (95% CI = [-0.06, 0.08]) shown in Table 7. More positive attitudes toward seeking professional psychological help did not mediate the relationship between higher frequency of indirect interpersonal exposure to counseling through friends and more willingness to see a counselor for personal problems, academic/career problems, and health problems.

Table 7

Unstandardized Indirect Effect of the Frequency of Indirect Interpersonal Exposure to Counseling on Willingness to See a Counselor (Personal, Academic, and Health Problems) through Attitudes toward Seeking Professional Psychological Help

Predictor Variable	Criterion Variable	<i>a</i>	<i>b</i>	<i>c</i>	Unst.	<i>SE</i>	Bootstrapping BC 95% CI	
							Lower	Higher
IIEC Family	WSC-Personal	0.34	0.52**	0.59**	0.18	0.09	0.00	0.37
	WSC-Academic/Career	0.33	0.22**	-0.00	0.07	0.04	0.00	0.17
	WSC-Health	0.34	0.27**	0.13	0.09	0.05	0.00	0.20
IIEC Friends	WSC-Personal	0.02	0.54**	0.05	0.01	0.07	-0.12	0.14
	WSC-Academic/Career	0.00	0.21**	-0.03	0.00	0.03	-0.05	0.06
	WSC-Health	0.03	0.27**	0.16	0.01	0.03	-0.06	0.08

Note. Unst. = unstandardized coefficient; *SE* = standard error; BC = bias-corrected; CI = confidence interval; IIEC = indirect interpersonal exposure to counseling; WSC = willingness to see a counselor.

* *p* < .05. ** *p* < .01.

Additional Moderation Analyses

Collectivism subscale. I tested the additional moderation models using a hierarchical linear regression analysis.

Hypothesis 7a. *Higher frequency of indirect interpersonal exposure to counseling through family members will significantly predict more positive attitudes toward seeking professional psychological help (path a); and higher collectivism (subscale) will predict less positive attitudes toward seeking professional psychological help (path d).* The frequency of indirect interpersonal exposure to counseling through family members and collectivism were included in Step 1 of the hierarchical linear regression analysis shown in Table 8. The two variables, frequency of IIEC Family and Collectivism, accounted for 5% of the variance in attitudes toward seeing professional psychological help ($R^2 = .05$, $F(2, 282) = 7.69, p < .01$). Support was found for main effects of the frequency of indirect interpersonal exposure to counseling through family members ($\beta = 0.15, p < .05$) and collectivism ($\beta = -0.20, p < .01$) on attitudes toward seeking professional psychological help.

Hypothesis 7b. *The higher the collectivism, the relationship between the frequency of indirect interpersonal exposure to counseling through family members and attitudes toward seeking professional psychological help will be stronger, indicated by a statistically significant interaction (path ad).* The interaction of the frequency of indirect interpersonal exposure to counseling through family members and collectivism (IIEC Family X Collectivism) was added in Step 2. The results showed a significant amount of variance explained by the model ($R^2 = .05$, $F(3, 281) = 5.24, p < .01$). Contrary to my hypotheses, the β coefficient of the interaction (IIEC Frequency X Collectivism) was not statistically significant indicating there was no evidence of a moderation effect ($\beta = -0.17, p = .54$). However, collectivism was a significant predictor of less positive attitudes toward seeking professional psychological help ($\beta = -0.18, t = -2.57, p < .05$).

Hypothesis 8a. Higher frequency of indirect interpersonal exposure to counseling through friends will significantly predict more positive attitudes toward seeking professional psychological help (path a); and higher collectivism (subscale) will predict less positive attitudes toward seeking professional psychological help (path d). The frequency of indirect interpersonal exposure to counseling through friends and collectivism were included in Step 1 of the hierarchical linear regression analysis shown in Table 8. The two variables, frequency of IIEC Friends and Collectivism, accounted for 3% of the variance in attitudes toward seeing professional psychological help ($R^2 = .03, F(2, 282) = 4.92, p < .01$). Support was found for a main effect of collectivism ($\beta = -0.18, p < .01$) but not for the frequency of indirect interpersonal exposure to counseling through friends ($\beta = -0.01, p = .89$) and on attitudes toward seeking professional psychological help.

Hypothesis 8b. The higher the collectivism, the relationship between the frequency of indirect interpersonal exposure to counseling through friends and attitudes toward seeking professional psychological help will be stronger, indicated by a statistically significant interaction (path ad). The interaction of the frequency of indirect interpersonal exposure to counseling through friends and collectivism (IIEC Friends X Collectivism) was added in Step 2. The results showed a significant amount of variance explained by the model ($R^2 = .03, F(3, 281) = 3.27, p < .05$). Contrary to my hypotheses, the β coefficient of the interaction (IIEC Friends X Collectivism) was not statistically significant indicating there was no evidence of a moderation effect ($\beta = 0.00, p = .99$). However, collectivism was a significant predictor of less positive attitudes toward seeking professional psychological help ($\beta = -0.19, t = -2.16, p < .05$).

Table 8.

Hierarchical Linear Regression Analyses Exploring Collectivism (Subscale) as a Moderator in the Relations of the Frequency of Indirect Interpersonal Exposure to Counseling with Attitudes Toward Seeking Professional Psychological Help

Predictor Variable	Variable	B	SE B	β	p	R^2	95% CI	ΔR^2	F
IIEC Family	Step 1								
	Collectivism	-0.14	0.04	-0.20	.01	.05	-0.23 – -0.06	.05	7.69**
	IIEC Family	0.44	0.18	0.15	.01		0.09 – 0.80		
	Step 2								
	Collectivism	-0.13	0.05	-0.18	.01	.05	-0.23 – -0.03	.00	5.24**
	IIEC Family	0.92	0.79	0.30	.25		-0.64 – 2.47		
IIEC Friends	Step 1								
	Collectivism	-0.13	0.04	-0.18	.01	.03	-0.21 – -0.05	.03	4.92**
	IIEC Friend	-0.02	0.13	-0.01	.89		-0.27 – 0.23		
	Step 2								
	Collectivism	-0.13	0.06	-0.19	.03	.03	-0.25 – -0.01	.00	3.27*
	IIEC Friend	-0.02	0.55	-0.01	.97		-1.11 – 1.07		
	IIEC Friend X Collectivism	0.00	0.02	0.00	.99		-0.04 – 0.04		

Note. CI = confidence interval.

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

Conformity to norms subscale.

Hypothesis 9a. Higher frequency of indirect interpersonal exposure to counseling through family members will significantly predict more positive attitudes toward seeking professional psychological help (path a); and higher conformity to norms (subscale) will predict less positive attitudes toward seeking professional psychological help (path d). The frequency of indirect interpersonal exposure to counseling through friends and conformity to norms were included in Step 1 of the hierarchical linear regression analysis shown in Table 9. The two variables, frequency of IIEC Friends and Collectivism, did not account for a statistically significant amount of variance (1%) in attitudes toward seeing professional psychological help ($R^2 = .01, F(2, 280) = 1.93, p = .15$). There was no statistical evidence of a main effect for the frequency of indirect interpersonal exposure to counseling through family members ($\beta = 0.11, p = .07$) or collectivism ($\beta = 0.04, p = .53$) on attitudes toward seeking professional psychological help.

Hypothesis 9b. The higher the conformity to norms, the relationship between the frequency of indirect interpersonal exposure to counseling through family members and attitudes toward seeking professional psychological help will be stronger, indicated by a statistically significant interaction (path ad). The interaction of the frequency of indirect interpersonal exposure to counseling through family members and conformity to norms (IIEC Family X Conformity to Norms) was added in Step 2. The results did not show a significant amount of variance explained by the model ($R^2 = .02, F(3, 279) = 2.31, p = .08$). Contrary to my hypotheses, the β coefficient of the interaction (IIEC Friends X Collectivism) was not statistically significant indicating there was no evidence of a moderation effect ($\beta = -0.47, p = .08$). However, the frequency of indirect interpersonal exposure to counseling through family

members was a significant predictor of more positive attitudes toward seeking professional psychological help ($\beta = 0.55$, $t = 2.11$, $p < .05$).

Hypothesis 10a. Higher frequency of indirect interpersonal exposure to counseling through friends will significantly predict more positive attitudes toward seeking professional psychological help (path a); and higher conformity to norms (subscale) will predict less positive attitudes toward seeking professional psychological help (path d). The frequency of indirect interpersonal exposure to counseling through friends and conformity to norms were included in Step 1 of the hierarchical linear regression analysis shown in Table 9. The two variables, frequency of IIEC Friends and Conformity to Norms, did not account for a statistically significant amount of variance (0.3%) in attitudes toward seeing professional psychological help ($R^2 = .003$, $F(2, 280) = 0.39$, $p = .68$). There was no statistical evidence of main effects for conformity to norms ($\beta = 0.05$, $p = .40$) or the frequency of indirect interpersonal exposure to counseling through friends ($\beta = 0.02$, $p = .78$) and on attitudes toward seeking professional psychological help.

Hypothesis 10b. The higher the conformity to norms, the relationship between the frequency of indirect interpersonal exposure to counseling through friends and attitudes toward seeking professional psychological help will be stronger, indicated by a statistically significant interaction (path ad). The interaction of the frequency of indirect interpersonal exposure to counseling through friends and conformity to norms (IIEC Friends X Conformity to Norms) was added in Step 2. The results showed a significant amount of variance explained by the model ($R^2 = .03$, $F(3, 279) = 2.71$, $p < .05$). In support of my hypothesis, the β coefficient of the interaction (IIEC Friends X Conformity to Norms) was statistically significant indicating a moderation effect ($\beta = -0.62$, $p < .01$). In addition, conformity to norms ($\beta = 0.22$, $t = 2.55$, p

$< .05$) and the frequency of indirect interpersonal exposure to counseling through friends ($\beta = 0.61$, $t = 2.69$, $p < .01$) were significant predictors of more positive attitudes toward seeking professional psychological help. The unstandardized simple slope for participants 1 SD below the mean of conformity to norms was .31, the unstandardized simple slope for participants 1 SD above the mean was -.33, and unstandardized simple slope for participants with a mean level of conformity to norms was -.01 (see Figure 3).

Table 9.

Hierarchical Linear Regression Analyses Exploring Conformity to Norms (Subscale) as a Moderator in the Relations of the Frequency of Indirect Interpersonal Exposure to Counseling with Attitudes Toward Seeking Professional Psychological Help

Predictor Variable	Variable	B	SE B	β	p	R^2	95% CI	ΔR^2	F
IIEC Family	Step 1								
	Conformity to Norms	0.03	0.04	0.04	.53	.01	-0.06 – 0.12	.01	1.93
	IIEC Family	0.33	0.18	0.11	.07		-0.03 – 0.69		
	Step 2								
	Conformity to Norms	0.09	0.06	0.12	.12	.02	-0.02 – 0.20	.01	2.31
	IIEC Family	1.67	0.79	0.55	.04		0.12 – 3.23		
	IIEC Family X Conformity to Norms	-0.05	0.03	-0.47	.08		-0.10 – 0.01		
IIEC Friends	Step 1								
	Conformity to Norms	0.04	0.04	0.05	.40	.00	-0.05 – 0.13	.00	0.39
	IIEC Friend	0.04	0.13	0.02	.78		-0.22 – 0.29		
	Step 2								
	Conformity to Norms	0.16	0.06	0.22	.01	.03	0.04 – 0.29	.03	2.71*
	IIEC Friend	1.33	0.49	0.61	.01		0.36 – 2.30		
	IIEC Friend X Conformity to Norms	-0.05	0.02	-0.62	.01		-0.08 – -0.01		

Note. CI = confidence interval.

* $p < .05$.

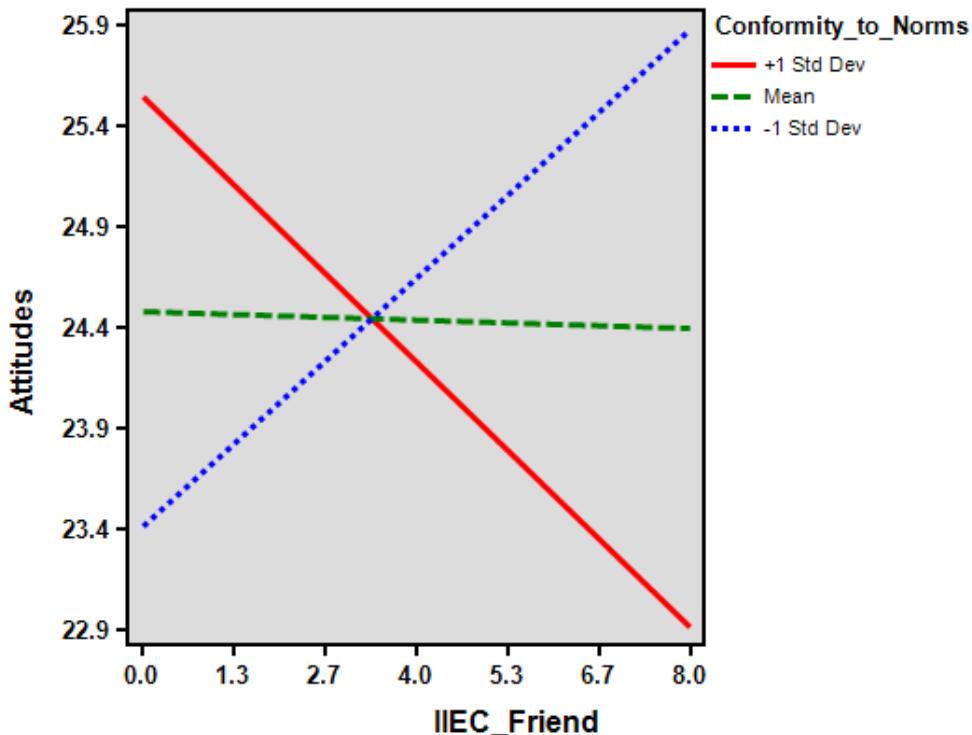


Figure 3. Simple slopes of indirect interpersonal exposure to counseling through friends predicting attitudes toward seeking professional psychological help for 1 SD below the mean of conformity to norms, the mean of conformity to norms, and 1 SD above the mean of conformity to norms (Interaction software used for the graph; Soper, 2006).

Chapter 6: Discussion

This study was aimed at expanding the research community's understanding of Asian Americans' indirect exposure to counseling through their family and friends. The specific goals of this research were to examine: a) the mediating effect of attitudes toward seeking professional psychological help on the relationship between the frequency of indirect interpersonal exposure to counseling and willingness to see a counselor; b) the mediating effect of attitudes toward seeking professional psychological help on the relationship between the valence of indirect interpersonal exposure to counseling and willingness to see a counselor; c) the moderating effect of collectivism on the frequency of indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help; and d) the moderating effect of collectivism on the valence of indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help. Post hoc analyses explored: a) the mediating effect of attitudes toward seeking professional psychological help on the relationship between the frequency of indirect interpersonal exposure to counseling through family members and friends, separately, and willingness to see a counselor for personal problems, academic/career problems, and health problems; and b) the moderating effect of collectivism and conformity to norms, separately, on the frequency of indirect interpersonal exposure to counseling through family members and friends, separately, and attitudes toward seeking professional psychological help.

In the mediation analyses, main effects were found for the frequency of indirect interpersonal exposure to counseling on attitudes toward seeking professional psychological help (path a_1), and attitudes toward seeking professional psychological

help on willingness to see a counselor (path b_1). A main effect for the frequency of indirect interpersonal exposure to counseling on willingness to see a counselor (path c_1) was not found for the frequency of indirect interpersonal exposure to counseling. However, since the bias-corrected bootstrapping confidence interval did not contain zero, partial mediation was found for the frequency of indirect interpersonal exposure to counseling on willingness to see a counselor through more positive attitudes toward seeking professional psychological help.

Asian Americans' indirect exposure to counseling was linked to more willingness to see a counselor through their positive attitudes toward seeking professional psychological help. More indirect interpersonal exposure to counseling predicts more positive attitudes toward seeking professional psychological help, which in turn, predict more willingness to see a counselor. Because the frequency of indirect interpersonal exposure to counseling is an aggregate of exposures that do not specify valence, this finding suggests that regardless of whether these exposures are positive or negative, these exposures predict more positive attitudes toward seeking professional psychological help. This is consistent with the mere exposure effect (Zebrowitz et al., 2008) that exposure in and of itself can increase one's positive attitudes toward an object. This research adds to the literature by suggesting that indirect exposure to counseling could have a positive effect on individuals' willingness to see a counselor through their positive attitudes toward seeking professional psychological help. This significant mediation highlights a more refined pathway through which Asian Americans are indirectly exposed to counseling.

I also found partial mediation of the valence of the indirect interpersonal exposure to counseling on willingness to see a counselor through attitudes toward seeking professional psychological help. Main effects were found for the valence of indirect interpersonal exposure to counseling on attitudes toward seeking professional psychological help, attitudes toward seeking professional psychological help on willingness to see a counselor, and the valence of indirect interpersonal exposure to counseling on willingness to see a counselor (paths a_2 , b_2 , and c_2). These findings indicate that more positive exposures to counseling predict more positive attitudes toward seeking professional psychological help, which, in turn, predict more willingness to see a counselor. This significant partial mediation highlights the importance of differentiating between positive and negative indirect interpersonal exposures to counseling for Asian Americans.

However, the mediation post hoc analyses indicated that rather than the frequency and valence of indirect interpersonal exposure to counseling emerging as two separate factors, as previously hypothesized, the distinction that was made was *from whom* individuals are indirectly exposed by—family members or friends. Indirect interpersonal exposure to counseling through *family members* and *friends* were shown to be two distinct factors. In addition, when the frequency of indirect interpersonal exposure to counseling through family members and friends were analyzed separately in mediation analyses, the results were different—partial mediation occurring for indirect interpersonal exposure to counseling through family members but not for friends.

In the mediation model examining indirect interpersonal exposure to counseling through family members, attitudes toward seeking professional psychological help

partially mediated the relationship between indirect interpersonal exposure to counseling through family members and willingness to see a counselor for personal problems, academic/career problems, and health problems. More indirect interpersonal exposure to counseling through family members was positively associated with more positive attitudes toward seeking professional psychological help, which in turn was positively associated with more willingness to see a counselor for personal, academic/career, and health problems. The strongest partial mediation occurred for willingness to see a counselor for personal problems. Conversely, partial mediation of attitudes toward seeking professional psychological help did not occur for indirect interpersonal exposure to counseling through friends and willingness to see a counselor for personal problems, academic/career problems, and health problems.

Different results of the mediation analyses between family and friend exposure provide further evidence that supports the distinction between family and friends that emerged from the exploratory factor analysis. This suggests that Asian American individuals may process their indirect exposures differently depending on whether the person they know who went to counseling was a family member or friend. If an Asian American individual knows a family member who went to counseling or heard a family member's counseling experience, he/she is more likely to have more positive attitudes toward seeking professional psychological help, and in turn, be more willing to see a counselor for personal problems, academic/career problems, and health problems. However, knowing a friend who went to counseling or hearing about a friend's counseling experience does not have the same relationship for Asian American individuals.

Kim and Park's (2009) study partially explains the present study's findings that Asian Americans may differentiate between family members and nonfamily members. Although Kim and Park (2009) compared family members and professors, whereas the present study compared exposure through family members and friends, this provides support that family members are different from nonfamily members in Asian American individuals' lives. In Kim and Park's study (2009), Asian American participants reported that they believed that family members had more negative views on seeing a counselor than their professors.

Interestingly, knowing more family members who have been to counseling is more predictive of whether Asian American individuals may seek psychological services than knowing friends who went to counseling. One possible explanation is that family members are more likely to be part of the ingroup of Asian American individuals. If an Asian American individual knows a family member who went to counseling, he/she may value their experience more because: 1) the salience effect may make the family exposure stand out more and thus, making a stronger impact; and 2) as part of the ingroup, he/she may be more persuaded by their modeling of having gone to counseling.

Higher adherence to Asian values has been shown to be associated with less positive attitudes toward seeking professional psychological help (i.e., Kim & Omizo, 2003). Family members who have gone to counseling may have had to overcome barriers such as potentially bringing shame to their family by going outside to seek help (i.e., Kim, Li, & Ng, 2005). This unusual event of a family member going to counseling may grab one's attention more and be more influential and thus, affect one's judgment, referred by social psychologists as *salience* (Stangor, 2011, p. 53). On the other hand,

hearing about a friend going to counseling may be more typical and less salient for an Asian American individual thereby having less influence on their help-seeking attitudes and willingness. Additionally, individuals are generally more persuaded by those who they perceive as more similar to them (Stangor, 2011, p.135). In this study's case, Asian Americans may have more positive attitude toward counseling when seeing their family members go to counseling than their friends because they may view their family members as more similar to them and as a result be more persuaded by them.

These results highlight the importance of differentiating between the different types of indirect exposures to counseling. Although Asian American individuals are being indirectly exposed to counseling through friends at school, their indirect exposure to counseling through their family members may be more salient in their attitudes toward seeing, and willingness to see, a counselor.

In the moderation analyses, a main effect of the frequency of indirect interpersonal exposure to counseling on attitudes toward seeking professional psychological help was found but not for collectivism. However, when the interaction term was added to see the moderating effect of collectivism, the frequency of indirect interpersonal exposure to counseling was no longer predictive of more positive attitudes toward seeking professional psychological help. The interaction between collectivism and the frequency of indirect interpersonal exposure to counseling, was not statistically significant. In this study, there was no statistical evidence to support my hypothesis that collectivism moderates the relationship between how much indirect exposure to counseling Asian Americans have and their attitudes toward seeking professional psychological help. Therefore, the influence of collectivism, more specifically, focusing

on the group over the individual and sacrificing one's own needs may not play a role in how Asian Americans are indirectly exposed and their attitudes toward seeking professional psychological help.

I found similar results when testing whether collectivism moderated the relationship between the valence of indirect interpersonal exposure to counseling on attitudes toward seeking professional psychological help. Significant main effects of both the valence of indirect interpersonal exposure to counseling and collectivism on attitudes toward seeking professional psychological help were found. More positively valenced indirect interpersonal exposure to counseling predicted more positive attitudes toward seeking professional psychological help; whereas higher adherence to collectivism predicted less positive attitudes toward seeking professional psychological help.

Support for the moderating effect was not found because the interaction between collectivism and the valence of indirect interpersonal was not statistically significant. In this study, there was no statistical evidence to support my hypothesis that collectivism influences the relationship between the valence of indirect exposures to counseling and their attitudes toward seeking professional psychological help for Asian Americans. This finding suggests that the influence of focusing on the group over the individual and sacrificing one's own needs may not play a role in how the valence of Asian Americans' indirect interpersonal exposure to counseling and their attitudes toward seeking professional psychological help are related.

In the post hoc analyses examining the moderating effect of collectivism (subscale) on the relationship between indirect interpersonal exposure to counseling

through family and friends, separately, and attitudes toward seeking professional psychological help, there was no supporting statistical evidence to confirm moderation effects. Consistent with my hypotheses, higher adherence to collectivistic values was negatively associated with positive attitudes toward seeking professional psychological help in both the models involving indirect interpersonal exposure to counseling through family and friends. However, the main effect of only the indirect interpersonal exposure to counseling through family members was positively associated with more positive attitudes toward seeking professional psychological help, but not through friends. Contrary to my hypotheses, the interaction terms of collectivism and indirect interpersonal exposure to counseling through family members and friends were not statistically significant. Depending on the level of adherence to collectivistic values, the relationship between how exposed an individual is to counseling through family members or friends and their attitudes toward seeking professional psychological help does not change.

In the post hoc analyses examining the moderating effect of conformity to norms on the relationship between indirect interpersonal exposure to counseling through family and friends, separately, and attitudes toward seeking professional psychological help, there were mixed results. On the one hand, in the moderation model involving indirect interpersonal exposure to counseling through family members, there was no statistical evidence to support main effects of indirect interpersonal exposure to counseling through family members or conformity to norms, nor the interaction term of collectivism and indirect interpersonal exposure to counseling through family members.

On the other hand, there was a statistically significant interaction term of conformity to norms and indirect interpersonal exposure to counseling through friends. However, in examining the simple slopes of the different levels of conformity to norms, the simple slopes of indirect interpersonal exposure to counseling through friends predicting attitudes toward seeking professional psychological help was not statistically significant at 1 SD below the mean of conformity to norms ($p = .06$), the mean of conformity to norms ($p = .93$), and 1 SD above the mean of conformity to norms ($p = .08$). In addition, contrary to my hypothesis of a positive relationship, the moderation effect resulted in an *inverse* relationship between indirect interpersonal exposure to counseling through friends and attitudes toward seeking professional psychological help as the level of conformity to norms increased. Therefore, I conclude that there was no statistical evidence to support my predicted moderation effect of conformity to norms on the relationship between indirect interpersonal exposure to counseling through friends and attitudes toward seeking professional psychological help. Given that the conformity to norms subscale did not specify the reference to which norms were indicated, the results could not be further explained without more information in regards to the norms. In future directions, specifying the norms, such as norms exclusively looking at counseling, could potentially provide more information to make inferences about a moderation effect.

The present study explored how Asian American individuals are indirectly exposed to counseling and how their indirect interpersonal exposure to counseling relates to their willingness to see a counselor and attitudes toward seeking professional psychological help. Attitudes toward seeking professional psychological help was found to partially mediate the relationship between the frequency and valence of indirect

interpersonal exposure to counseling, separately, and willingness to see a counselor. Further analyses also indicated that the partial mediation occurred for attitudes toward seeking professional psychological help between indirect interpersonal exposure to counseling through family members and willingness to see a counselor but not for those exposed to friends who went to counseling. Additionally, analyses showed that there was no statistical evidence to support the moderation of adherence to collectivism in the relationship between the frequency and valence of indirect interpersonal exposure to counseling and attitudes toward seeking professional psychological help. Further analyses also showed that moderation did not occur for the two subscales, collectivism and conformity to norms, separately, in the relationship between indirect interpersonal exposure to counseling through friends and family and attitudes toward seeking professional psychological help. Although a significant interaction was found for conformity to norms moderating the relationship between indirect interpersonal exposure to counseling through friends, the direction was inconsistent with the hypotheses based on theory and previous empirical research and therefore, did not support the hypothesized moderation. This study adds to the literature in understanding more of how Asian American individuals are being exposed to counseling even if they have never gone to counseling themselves.

Limitations

Although the present study has practical applicability in addressing the underutilization problem in the Asian American population, recruiting Asian American college students, a specific subset, limited the generalizability of the results to the entire racial group. As a result, factors, such as characteristics of certain underrepresented

ethnicities or other age groups such as the elderly, may not have been taken into account in this sample. Another limitation of this study was the 7 percent response rate from the initial email recruitment. In future studies, more recruitment efforts will be taken to improve the response rate such as sending the email additional times as a reminder for potential participants; post flyers on campus; and informing relevant student organizations about the study. In addition, one regression assumption test was violated: normality. Kolmogorov-Smirnov tests indicated that the data points of the IIEC Frequency, IIEC Valence, and the ATSPPH-SF were not normal distributed, which create a risk for a Type I error, a false positive. Therefore, interpretation of the results to this study should be done with caution.

Another limitation is that this study could not explain causality in the relationships between the variables because of the use of correlational analyses. Furthermore, using willingness to see a counselor as the outcome variable, instead of actual help-seeking behavior, limits the inference that can be drawn from the research findings. In addition, the effect size for indirect interpersonal exposure to counseling on willingness might increase if a simulation or intervention study is conducted. Future research directions to address these limitations are in the next section. Although these limitations exist, the findings add to the help-seeking literature and refine future directions for research in improving ways to address the problem of the underutilization of mental health resources.

Implications for Research and Practice

The present study extends the research on exposure to counseling in important ways. By specifying the *indirect* nature of the exposures, this study sheds light on the power of interpersonal exposure to counseling. Regardless of whether Asian Americans

seek counseling themselves, they are being indirectly exposed to counseling through others. Understanding the influence of indirect interpersonal exposure to counseling further increases our knowledge of Asian American's willingness to seek counseling. Although the present study gave a concrete way of measuring indirect exposure to counseling, only two types of exposures were assessed. Future studies could unpack this construct further using qualitative research design to look at *how*, *when*, and *by whom* Asian American individuals are indirectly exposed to counseling. Another direction could examine whether Asian Americans' indirect exposure to counseling is related to their familiarity with counseling principles. This would confirm Wong et al.'s (2007) hypothesis that Asian Americans may give therapist lower ratings than White Americans because they may lack a fundamental understanding of counseling. Research could also compare Asian Americans' indirect exposure to counseling with the general population. This would confirm the hypothesis that Asian Americans are less indirectly exposed to counseling than other racial groups which may be one reason for Asian Americans' underutilization of psychological services.

To address the limitation of the correlational design of this study, one promising future direction would be to conduct an experimental or quasi experimental research design to make causal inferences about indirect interpersonal exposure to counseling. This potential study would expand on Bandura's modeling theory (1971) using either an in vivo observation in a controlled laboratory setting of an Asian American confederate discussing his/her personal counseling experience or a video clip similar to Kaplan et al.'s (2012) study. Since participants would observe a person going to counseling, this potential study's effect size may increase compared to the present study. This

intervention could also a) ask participants to model or copy the observed behavior because *reproduction* (Bandura, 1971, p. 7) has been shown to increase the effectiveness of modeling; or b) provide participants with examples of possible positive reinforcements that result from a person who goes to counseling (confederate given a compliment for going to counseling) because *motivation* (p. 8) has also been found to be a positive factor in modeling.

Given that there was a statistically significant interaction for conformity to norms as a moderator, it would be helpful to further unpack which norms Asian Americans are referring to, which could not be determined in this study due to limited information. Assessing and testing whether Asian Americans' norms specific to counseling is a moderator would provide more explanation for the statistically significant interaction found in this study.

The main focus for this paper was to address the underutilization of psychological services in the Asian American population. This study was designed to expand our understanding of indirect interpersonal exposure to counseling and provide applications of this study's findings for mental health professionals working with Asian American individuals. Given the significant findings of this study, increasing Asian Americans' indirect exposure to counseling through their family members and friends may play a positive role in their help-seeking behaviors, particularly their family members. It is recommended that mental health professionals also increase the visibility of counseling services in the Asian American community.

It was also found that there is a distinction between whether individuals are indirectly exposure to counseling through family or friends; partial mediation occurred

only for indirect exposure through family members. Focusing efforts on increasing the dialogue about counseling among family members may be helpful in increasing indirect interpersonal exposure to counseling. This could be accomplished by raising awareness about mental health and counseling by providing information about mental health issues, cultural factors such as stigma, and also available resources in the community for Asian Americans. The purpose of providing this information would be to increase the likelihood of Asian American individuals to be more informed about mental health issues to pass on the information about resources to family members struggling with mental health issues such as depression and addiction. These practical avenues of outreach can begin to address the underutilization of psychological services in the Asian American community by applying a more refined understanding of their exposure to counseling found in this present study's findings.

Appendix A

Willingness to See a Counselor

INSTRUCTIONS: The following items request problems that some college students have. Please rate your willingness to seek counseling for each of the problems listed below. Use the rating scale given below to indicate your willingness for each item.

Rating Scale

1 = Not Willing to See a Counselor 3 = Probably Willing to See a
Counselor

2 = Probably Not Willing to See a Counselor 4 = Willing to see a Counselor

- | | |
|---|---|
| ____ 1. General Anxiety | ____ 14. Drug Addiction |
| ____ 2. Alcohol Problems | ____ 15. Loneliness or Isolation |
| ____ 3. Shyness | ____ 16. Inferiority Feelings |
| ____ 4. College Adjustment
Problems | ____ 17. Test Anxiety |
| ____ 5. Sexual Functioning
Problems | ____ 18. Alienation |
| ____ 6. Depression | ____ 19. Problems Making Friends |
| ____ 7. Conflict with Parents | ____ 20. Trouble Studying |
| ____ 8. Academic Performance
Problems | ____ 21. Ethnic or Racial
Discrimination |
| ____ 9. Speech Anxiety | ____ 22. Roommate Problems |
| ____ 10. Dating or Relationship
Problems | ____ 23. Ethnic Identify Confusion |
| ____ 11. Financial Concerns | ____ 24. General Health Problems. |
| ____ 12. Career Choice Problems | |
| ____ 13. Insomnia | |

Appendix B**Attitudes toward Seeking Professional Psychological Help Scale: Short Form**

INSTRUCTIONS: Use the scale below to respond to the following items.

Rating Scale

0 = Disagree 1 = Partly Disagree 2 = Partly Agree 3 = Agree

- _____1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.
- _____2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.
- _____3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.
- _____4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.
- _____5. I would want to get psychological help if I were worried or upset for a long period time.
- _____6. I might want to have psychological counseling in the future.
- _____7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.
- _____8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.
- _____9. A person should work out his or her own problems; getting psychological counseling would be a last resort.
- _____10. Personal and emotional troubles, like many things, tend to work out by themselves.

Appendix C**Collectivism**

INSTRUCTIONS: Use the scale below to indicate the extent to which you agree with the value expressed in each statement.

- 1 = Strongly Disagree**
- 2 = Moderately Disagree**
- 3 = Mildly Disagree**
- 4 = Neither Agree or Disagree**
- 5 = Mildly Agree**
- 6 = Moderately Agree**
- 7 = Strongly Agree**

- 1. One should recognize and adhere to the social expectations, norms and practices.
- 2. The welfare of the group should be put before that of the individual.
- 6. One's personal needs should be second to the needs of the group.
- 10. The needs of the community should supersede those of the individual.
- 11. One should adhere to the values, beliefs and behaviors that one's society considers normal and acceptable.
- 14. The group should be less important than the individual.
- 23. One's efforts should be directed toward maintaining the well-being of the group first and the individual second.
- 25. One need not blend in with society.
- 27. Conforming to norms provides order in the community.
- 28. Conforming to norms provides one with identity.
- 34. One need not sacrifice oneself for the benefit of the group.
- 37. One need not always consider the needs of the group first.
- 39. One should not do something that is outside of the norm.
- 42. Conforming to norms is the safest path to travel.

Appendix D

Indirect Interpersonal Exposure to Counseling

Counseling is defined as one or more confidential sessions in which a person sees a counselor to talk about and work through various emotional or social issues.

Indirect Interpersonal Exposures to Counseling are ways in which a person comes in contact with counseling through others, such as knowing someone who went to counseling, hearing about someone's personal counseling experience, or hearing someone's views on counseling itself. Individuals often view these exposures as positive or negative. Examples of negative interpersonal exposures are: someone saying that "counseling is for crazy people", knowing someone had a bad experience with counseling, or a family member saying how unhelpful counseling was for him/her. Examples of positive interpersonal exposures are: someone saying that "counseling is a good thing and needed in our society", knowing a friend who went to crisis counseling and received the help he/she needed, or someone telling you how counseling saved his/her life.

Instructions: Please answer the following questions as best you can. All your responses will be kept confidential.

*This first set of question asks you to think about your **family members** only. Please do not include friends in your responses.*

1. How often have **family members** shared their opinion of counseling with you, more broadly, such as saying, "we need more counseling in our society", "counseling is only for really crazy people", "counseling does not work" or "counseling is helpful"?
 - Never (0)
 - Rarely (1 time)
 - Occasionally (2 – 3 times)
 - Frequently (4 – 5 times)
 - Very Frequently (6 or more times)

2. Overall, how were your **family members'** opinions of counseling?
 - N/A
 - Exclusively positive
 - Mostly positive
 - Slightly positive
 - About equally positive and negative
 - Slightly negative

- Mostly negative
- Exclusively negative

3. How many **family members** do you know who have been to counseling?

- None (0)
- A few (1 family member)
- Some (2 - 3 family members)
- Many (4 - 5 family members)
- Almost all (6 or more family members)

4. Of the **family members** you know who have been to counseling, how did their experiences seem?

- N/A
- Exclusively positive
- Mostly positive
- Slightly positive
- About equally positive and negative
- Slightly Negative
- Mostly negative
- Exclusively negative

5. Of your **family members** who have been to counseling, how often did they *talk to you specifically* about their own personal counseling experiences?

- N/A
- Never (0)
- Rarely (1 time)
- Occasionally (2 – 3 times)
- Frequently (4 – 5 times)
- Very Frequently (6 or more times)

6. When your **family members** *talked to you specifically* about their own counseling experiences, how did it seem?

- N/A
- Exclusively positive
- Mostly positive
- Slightly positive
- About equally positive and negative
- Slightly Negative
- Mostly negative
- Exclusively negative

*This second set of question asks you to think about your **friends** only. Please do not include family members in your responses.*

7. How often have **friends** shared their opinion of counseling with you, more broadly, such as saying, “we need more counseling in our society”, “counseling is only for really crazy people”, “counseling does not work”, or “counseling is helpful”?

- Never (0)
- Rarely (1 time)
- Occasionally (2 – 3 times)
- Frequently (4 – 5 times)
- Very Frequently (6 or more times)

8. Overall, how were your **friends'** opinions of counseling?

- N/A
- Exclusively positive
- Mostly positive
- Slightly positive
- About equally positive and negative
- Slightly negative
- Mostly negative
- Exclusively negative

9. How many **friends** do you know who have been to counseling?

- None (0)
- A few (1 friend)
- Some (2 - 3 friends)
- Many (4 - 5 friends)
- Almost all (6 or more friends)

10. Of the **friends** you know who have been to counseling, how did their experiences seem?

- N/A
- Exclusively positive
- Mostly positive
- Slightly positive
- About equally positive and negative
- Slightly Negative
- Mostly negative
- Exclusively negative

11. Of your **friends** who have been to counseling, how often did they *talk to you specifically* about their own personal counseling experiences?

- N/A
- Never (0)
- Rarely (1 time)
- Occasionally (2 – 3 times)
- Frequently (4 – 5 times)
- Very Frequently (6 or more times)

12. When your **friends** *talked to you specifically* about their own counseling experiences, how did it seem?

- N/A
- Exclusively positive
- Mostly positive
- Slightly positive
- About equally positive and negative
- Slightly Negative
- Mostly negative
- Exclusively negative

Appendix E

Email Recruitment Letter

SUBJECT: Study of Asian Americans' Help-Seeking Experiences – \$20 gift card

Hello,

Did you know that the Asian American population is one of the most understudied groups in the United States? There is such a need in hearing your voice so that we can know more about Asian Americans' experiences and not be silenced.

This is where you come into the picture. Would you consider sharing your experiences as an Asian American by completing a brief online survey (only 10-15 minutes of your time)?

The purpose of this research project is to better understand Asian Americans' help-seeking experiences and attitudes. If you participate in the study, you will be entered in a raffle for a chance to win one of ten \$20 E-gift cards (Amazon, Starbucks, or iTunes).

My name is Gloria A. Huh, M.S.Ed., and I am a doctoral candidate in Counseling Psychology at the University of Maryland, College Park.

If you are interested in participating in this study, please click on the link to the survey:
https://umd.az1.qualtrics.com/SE/?SID=SV_6rK6O4BcoQ4s3hr. Completion of the online registration includes an online consent form and a brief demographics (e.g., age, self-identified gender, etc.) questionnaire. Raffle winners will be contacted by email.

This research has been fully approved through the Institutional Review Board (IRB) at the University of Maryland (IRB # 510597-2).

Thank you for your time and consideration. Please feel free to contact me with any questions, comments, or suggestions.

Sincerely,

Gloria A. Huh, M.S.Ed.
Doctoral Candidate
Department of Counseling, Higher Education, and Special Education
University of Maryland
College Park, MD 20742
glohuh@umd.edu

Appendix F**Informed Consent Form**

Project Title	The Effect of Indirect Interpersonal Exposure to Counseling on Willingness through Attitudes
Purpose of the Study	<p>This research is being conducted by Gloria A. Huh, under the supervision of Dr. Matthew J. Miller, Department of Counseling, Higher Education, and Special Education, at the University of Maryland, College Park. We are inviting you to participate in this research project because you are at least 18 years old and have self-identified as Asian or Asian American.</p> <p>The purpose of this research project is to better understand help-seeking behaviors in Asian and Asian American individuals. The results of this study may be helpful to counselors and other personnel in assisting Asian and Asian American individuals.</p>
Procedures	<p>The procedures of this study involve your participation in a brief survey. It should require about 10 to 15 minutes of your time. The survey will ask you about your attitudes, values, and help-seeking experiences. Sample questions are: "I would want to get psychological help if I were worried or upset for a long period time" and "How many family members do you know who have been to counseling?"</p> <p>At the end of the survey, you will be taken to a separate page where you will be asked to enter your first name as well as an email address should you wish to be entered into a raffle for a prize (one of ten \$20 E-gift cards—Amazon, Starbucks, or iTunes) as a token of our appreciation for your participation. Your contact information will not be connected to your survey responses.</p>
Potential Risks and	Minor emotional distress is a potential risk as some participants may be struggling with issues that need counseling.

Discomforts	
Potential Benefits	Although there are no direct benefits from your participation in this research study, the results of the study may help the investigators understand the help-seeking process of Asian and Asian American individuals. Through improved understanding of help-seeking processes, we hope to support the development of interventions that will benefit Asian and Asian American individuals in the future.
Confidentiality	<p>You will not be required to provide any information that may link your identity to your survey responses. At the end of the survey, you will be asked to enter your first name as well as an email address should you wish to be entered into a drawing for a prize as a token of our appreciation for your participation. However, to protect your confidentiality, you will be redirected to a separate landing page where your name and contact information will be separated from your survey responses. For those participants who submit their email addresses for the raffle, only the investigator will have access to it.</p> <p>We will do our best to minimize any potential loss of confidentiality. The data will be collected via an online survey provider and stored in the survey provider's database, which is only accessible with a password. Information submitted to the online survey provider will be backed up daily on their secure servers and the online survey provider will not use any of the information they receive.</p> <p>Once the information is downloaded from the online survey provider, it will be stored in a password-protected laptop computer. Permission will only be given to the investigators to access the data. As per the University of Maryland policy on records retention and disposal, all data and files pertinent to the research, including work done by students, will be retained for a period of no less than 10 years after the completion of the research and will then be destroyed.</p>

	<p>Any reports based on the survey information will only present the results in aggregate form (e.g., group averages). Individual survey response will never be reported.</p>
Medical Treatment	<p>The University of Maryland does not provide any medical, hospitalization or other insurance for participants in this research study, nor will the University of Maryland provide any medical treatment or compensation for any injury sustained as a result of participation in this research study, except as required by law.</p>
Right to Withdraw and Questions	<p>Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify. Choosing to participate in the study will have no effect on your grades or standing at the University of Maryland.</p> <p>If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report an injury related to the research, please contact the investigator(s): Gloria A. Huh, M.S.Ed. at glohuh@umd.edu; 3214 Benjamin Building, CAPS Department, University of Maryland, College Park, MD 20742 or Dr. Matthew J. Miller at mmille27@umd.edu; 3234 Benjamin Building, University of Maryland, College Park, MD 20742; (301) 405-8446.</p>
Participant Rights	<p>If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:</p> <p>University of Maryland College Park</p> <p>Institutional Review Board Office</p> <p>1204 Marie Mount Hall</p>

	<p>College Park, Maryland, 20742</p> <p>E-mail: irb@umd.edu</p> <p>Telephone: 301-405-0678</p>
Statement of Consent	<p>This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</p> <p>By selecting your choice below you are indicating your right to consent or not consent electronically. Selecting “Yes, I Consent” and clicking on the “Continue” button below indicates that you are at least 18 years old and have read and understand the terms of this study and thus voluntarily agree to participate. If you do NOT wish to participate in this study, please select “No, I DO NOT Consent” and click “Continue” to decline participation.</p>

Appendix G**Demographics Questionnaire**

Age: _____

Gender: _____

1. Female
2. Male
3. Other (specify) _____

Please indicate your racial group (Choose all that apply):

1. European American/Caucasian/White
2. African-American/Black
3. Asian American, Asian, Pacific Islander
4. Latina/o, Mexican, Hispanic
5. Middle Eastern
6. Native American/American Indian
7. Biracial
8. Multiracial
9. Other (specify): _____

Please indicate your Asian ethnic group (Choose all that apply):

1. Asian Indian
2. Bangladeshi
3. Bhutanese
4. Burmese
5. Cambodian
6. Chinese
7. Filipino
8. Hmong
9. Japanese
10. Korean
11. Laotian
12. Malaysian
13. Nepali
14. Pacific Islander
15. Pakistani
16. Singaporean
17. Sri Lankan
18. Taiwanese
19. Thai
20. Vietnamese
21. Other (Please specify) _____

Year in school: _____

1. Freshman
2. Sophomore
3. Junior
4. Senior
5. Graduate student
6. Other _____

Academic major: _____

Generation status: _____

1. 1st generation = you were born in Asia or other country and came to the U.S. as an adult
2. 1.5 generation = you were born in Asia or other country and came to the U.S. as a child or adolescent
3. 2nd generation = you were born in the U.S., either parent born in Asia or other country
4. 3rd generation = you were born in the U.S., both parents born in the U.S. and all grandparents born in Asia or other country
5. 4th generation = you and your parents born in the U.S. and at least one grandparent born in Asia or other country with remainder born in the U.S.
6. 5th generation = you and your parents born in the U.S. and all grandparents born in the U.S.
7. Don't know which generation fits the best for me since I lack some information

Years lived in the United States: _____

Did you have previous counseling experience?

1. No
2. Yes

If yes, what was the nature of your previous counseling experience?

Mother's Highest Education: _____

1. Below High School
2. High School
3. Some College
4. Associate's Degree
5. Bachelor's Degree
6. Graduate Degree (MA, MS, MSEd, PhD, etc.)
7. Professional Degree (MBA, JD, MD, etc.)
8. Other, please explain _____

Father's Highest Education: _____

1. Below High School
2. High School
3. Some College
4. Associate's Degree
5. Bachelor's Degree
6. Graduate Degree (MA, MS, MSEd, PhD, etc.)

7. Professional Degree (MBA, JD, MD, etc.)
8. Other, please explain _____

Raffle Registration

1. First name (please DO NOT provide your last name):
2. Email address (NOTE: we also need this to enter you in the raffle for your chance to win one of ten \$20 E-gift cards (Amazon, Starbucks, or iTunes); we will not share this information – as indicated in the consent form, we will do our best to keep your personal information confidential by replacing your name with a generic study ID and reporting results for the group – so that no one will know the identity of any one person)
3. Confirm email address

Appendix H**Resources**

Resources for those wishing to pursue assistance for personal and emotional issues (please note that these resources are not associated with the University of Maryland and do not represent an endorsement of the professional associations or services):

American Psychological Association's "Psychologist Locator": <http://locator.apa.org/>

Psychology Today's "Find a Therapist": <http://therapists.psychologytoday.com/rms/>

American Board of Professional Psychology "Find a Board Certified Psychologist":
http://www.abpp.org/i4a/member_directory/feSearchForm.cfm?directory_id=3&pageid=3292&showTitle=1

American Psychological Association's "Psychology Help Center":
<http://www.apa.org/helpcenter/index.aspx>

Continue ONLY when finished. You will be unable to return or change your answers.

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