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Asian Americans Perceptions of Mental Health Help-Seeking

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Abstract

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Abstract

Mental health has critical importance in the development and functioning of an individual emotionally, psychologically, and socially throughout life. Thus, it is important for an individual to identify mental health issues when experiencing it and seek treatment. However, this understanding appears to differ across cultures and ethnic groups. For instance, Asians in the US have low mental health service utilization. Although researchers have sought to identify the reason, many of these studies are dated, and have not fully explored all the different factors that influence this behavior, nor explored if there are generational differences. In the current study, 102 Asians in the US completed an adapted version of the Day's Mental Illness Stigma Scale (ADMISS), and the Mental Help Seeking Intention Scale (MHSIS). The ADMISS results in seven factor scores, each associated with a specific stigma area, while the MHSIS provides a total overall score. There were significant differences between immigrants, first-generation, and second-generation Asians on three of the seven factor scores of the ADMISS (Interpersonal Anxiety, Family Disruption, and Relationship Disruption). Immigrants tended to have higher scores on the stigma factor scores, indicating higher levels of mental health stigmatization. Additionally, significant relationships were found between participants' intentions to seek mental health help and factors such as familial disruption and exposure to stigma and discrimination. Implications of this research and future directions are discussed.

Keywords: mental health perceptions, Asian, barriers to mental help seeking, intersectionality, mental health stigmatization

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Asian Americans Perceptions of Mental Health Help-seeking

Mental health has critical importance in the development and functioning of an individual emotionally, psychologically, and socially throughout life. The World Health Organization (2021) defined mental health as "A state of well-being in which the individual realizes his or her abilities, can cope with the normal stresses of life, and can work productively and fruitfully, and can contribute to his or her community." The development of mental health begins at birth, if not before birth, because of the parent-child interactions. Unfortunately, the outcome is not always positive.

According to the Department of Health and Human Services, one in five children and adolescents experience a mental health problem during their school years (Substance Abuse and Mental Health Services Administration [SAMHSA], 2020). In a State of Mental Health report conducted by Mental Health America, which analyzed data up to 2019, 15% of youth in the United States reported suffering from at least one major depressive episode in the last year (Reinert et al., 2021). Additionally, 11% of children and adolescents experienced severe depression, and the highest rate was among youth who identified as more than one race. Over 60% of those with major depression reported not receiving any mental health treatment. Even in states with the greatest access to treatment, around 1 in 3 youth did not receive treatment. Another study by Mental Health America (2021), highlighted increasing mental health issues in today's youth. The number of youths who accessed screenings was 9% higher than the average in 2019, and youth ages 11-17 were more likely than any other group to score moderate to severe symptoms on anxiety and depression (Mental Health America, 2021). In addition, SAMHSA (2019) reported that racial/ethnic differences in mental health service use among adults and adolescents exists, and the data involving Asians stood out. Estimates of mental health service

utilization among White adults (18%) and adults who reported two or more races (18%) were the highest, followed by Black or African American adults (9%), Hispanic or Latino adults (9%), and Native Hawaiian or other Pacific Islander adults (7%). Asian adults had the lowest, 6%, mental health service utilization among all groups (Center for Behavioral Health Statistics and Quality, 2021). Asian adults between 18 and 25 years age range were more likely to use mental health services than the other age groups (Center for Behavioral Health Statistics and Quality, 2021). The estimates for Asian adolescents were not much better (13%), falling in the bottom two estimates alongside Native Hawaiian or Other Pacific Islander adolescents (11%) for mental health service usage at non-specialty facilities. Among adolescents, those that identify as two or more races (20%), Black or African American (18%), American Indian or Alaska Native (18%) were the highest likelihood to use mental health services. White adolescents were around 16% for likelihood to use mental health services (Center for Behavioral Health Statistics and Quality, 2021). Given these data, it appears that Asian parents are less likely to seek mental health services for themselves or their children. This is important given there is strong evidence that children who are provided mental health services and supports show positive relationship and overall well-being, positive behaviors, engaged learning, and academic achievement (Basken et al., 2010; Suldo et al., 2011).

The general purpose of this study was to assess the perception of mental health and mental health service seeking of Asian Americans to inform mental health services for school children of Asian descent. In the following paragraphs, the factors that may contribute to Asian Americans limited mental health help-seeking, including the role of the traditional Asian values regarding mental health are discussed.

Asian American Demographic Trends and Experiences

As of the 2020 U.S. Census, Asian Americans make up 7% of the total U.S. population, or 24 million people, which is a 39% increase from the 2010 Census (U.S. Census Bureau, 2020). Additionally, the Asian American population is projected to double by the year 2060, making it the fastest growing racial or ethnic group (U.S. Census Bureau, 2020). According to the U.S. Census Bureau, Asians are "Any person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam" (U.S. Census Bureau, 2020). The U.S. Census Bureau definition is adopted for this study, cognizant of the vastly different historical experiences and cultures in the Asian continent such as linguistic roots and philosophical beliefs (e.g., Confucianism, Buddhism, and Catholicism).

Although the Asian American population is rapidly increasing; the group remains one of the most understudied in the United States because of funding biases for research on Asian Americans. A *JAMA Network Open* study conducted in 2019 highlighted the discrepancy in funding by the National Institute of Health (NIH), the nation's medical research agency and the largest funder of biomedical research in the world. This study showed that between 1992 and 2018, funding for research focused on Asian Americans and Pacific Islanders (AAPIs) accounted for only 0.2% of its total budget (Đoàn et al., 2019). Further, Asian American investigators were less likely to receive funding from the NIH than White investigators (Ginther et al., 2011; Hur et al., 2017).

One reason for this disparity in research involving the Asian American population may be the "model minority" stereotype. The term "model minority" was coined by the sociologist William Petersen in a *New York Times* article in 1966 titled "Success Story: Japanese American

style". In this article, Petersen highlighted the success of Japanese Americans in overcoming discrimination through hard work. Unfortunately, this model minority stereotype has evolved to create an illusion that all Asian Americans are physically and mentally healthy, and academically high achievers. In a *Scientific American* article, author Amy Yee interviewed different Asian researchers about comments they received when seeking funding for research. These researchers reported receiving comments like, "The struggles of Asian Americans are not as bad as for Blacks and Latinos" or "Asians are doing great, we don't need to study them" (Yee, 2021). Despite the claims about the healthiness of Asian Americans, the data suggest otherwise, they are not immune to physical and mental illness. Although beyond the scope of this study, to highlight the fallacy, incidence of diabetes, chronic hepatitis, and tuberculosis are high among Asian Americans (U.S. Department of Health and Human Services Office of Minority Health, OMH, 2020).

Regarding mental health, the National Study of Drug Use and Health conducted by the SAMHSA showed that serious mental health illness almost doubled from 3% (47,000) to 6% (136,000) in Asian American/Pacific Islander (AAPI) individuals ages 18 to 25 between 2008-2018. Major depressive episodes also increased from 10% to 14% in youth between the ages of 12 and 17, from 9% to 10% for ages 18 to 25, and from 3% to 5% for those between the ages of 26 and 49. Further, increased binge drinking, smoking, illicit drug use, and prescription pain reliever misuse are also more frequent among Asian American and Pacific Islander (AAPI) adults with mental illness (SAMHSA, 2018). According to the Office of Minority Health (2019), suicide was the leading cause of death for Asian/Pacific Islanders aged 15 to 24. Asian American males, in grades 9 to 12, were 30% more likely to consider attempting suicide compared to non-Hispanic White males (OMH, 2020). These studies include Pacific Islanders, thus, the data

should be viewed with caution. The rates of serious mental illness and treatment rates among Asian Americans could be higher or lower.

The issues discussed above might stem from the reluctance of the Asian American community to seek treatment or services for health problems. According to the Office of Minority Health study, Asians were 60% less likely to have received treatment for their mental health issues than the non-Hispanic White population (OMH, 2020). This may be because of systemic barriers that limit access to physical and mental health treatment, cultural values, and attitudes about mental illness, which are discussed next.

Barriers to Treatment

Acculturation, the process by which members of a minority group psychologically and culturally change their behaviors to match the majority, may be a major overarching factor that can influence mental health help-seeking behavior in the United States. Those who have higher levels of acculturation tend to have fewer barriers to mental health help-seeking. Abe-Kim et al. (2007) found that earlier generations of Asian Americans used mental health services less than Non-Asian Americans. However, by the 3rd generation, those views had shifted, and mental health service usage exceeded the national average (Abe-Kim et al., 2007). In 2006, around 88% of Asian American families had immigrant heads of household (Kim et al., 2006), which allows the traditional cultural beliefs to be passed to the 2nd generation. According to data collected in 2019 by the Pew Research Center, around 57% of all Asians in the United States are immigrants. The most recent data show that 79% of Mongolians, 62% of Chinese, 59% of Koreans, 50% of Filipinos, and 27% of Japanese are immigrants (Budiman & Ruiz, 2021). These numbers show that most Asian Americans are still immigrants. As more generations are born in the United States, it is likely that the succeeding generations will be more assimilated into the American

culture, moving away from more traditional viewpoints held by the older generations of Asian Americans. In addition, Leong and Kalibatseva (2007) identified four categories of cross-cultural barriers to mental health help-seeking of Asians in the United States: Cognitive, affective, value orientation, and physical and structural barriers. Cultural values and language barriers are two other relevant barriers to mental health help-seeking and permeate all categories of cross-cultural barriers.

Cognitive Barriers

Cognition refers to the mental processes involved in gaining knowledge and comprehension. One of the most important cognitive processes is learning by which individuals gain knowledge about and experience in a plethora of topics that influence their perceptions, beliefs, and actions. Culture is central to this process. Regarding mental illness, people's conceptions of mental illness, causes, symptomology, and cures seem to be influenced by culture (Leong & Lau, 2001). For example, in Buddhism, practiced throughout Asia, mental illness is seen as a direct result of bad karma from one's previous actions. Buddhism also includes the belief that spirits, and demons can influence one's daily life and indicate spiritual possession (Nguyen et al., 2012).

In terms of symptomology, traditional Chinese medicine (TCM) is one dominant philosophy for understanding physical and mental health in Asian communities around the world (Cyranoski, 2018; Lai & Chappell, 2006). TCM does not separate psychological and physical symptoms, unlike Western medicine where there is a clear split between mind and body (Ting, 2012), i.e., TCM seeks harmonious unity of body and emotions. Different organs are assumed to be associated with different emotions: The Five Organs (heart, liver, spleen, lungs, and kidneys) regulate seven main emotions (anger, joy, worry, thinking, sadness, fear, and shock). Physical

issues within an organ are believed to cause emotional issues. Thus, mental illness is a product of physical issues ((Hampton et al., 2007; Kleinman et al., 2011). As a result, most psychological distress among Asian Americans and Asians takes the form of physical symptoms, such as dizziness, tiredness, and poor appetite (Choi et al., 2016). This may confound both help-seeking and treatment of mental illness. For example, patients may complain of physical ailment and receive treatment for it, when they are suffering from psychological distress that they are unable to express to the care provider. Asian Americans may also seek non-psychiatric services thinking their issues are physical rather than psychological (Chen, 2012). One such informal service is TCM doctors or traditional healers, who understand the cultural aspect compared to mainstream psychiatry (Abe-Kim et al., 2007; Tang et al., 2007). Yang and Wonpat-Borja (2012) interviewed relatives of Chinese immigrants with psychosis. They found that although the relatives viewed psychiatric disorders as distinct from general physical illnesses, Chinese beliefs in the biological etiology of mental illnesses may predispose accurate identification of mental illness. And, without a cultural understanding, healthcare providers (e.g., psychiatrists and psychologists) may express skepticism or doubt about their patients.

Affective Barriers

Affective barriers, such as shame or stigma, can also influence Asian American mental health help-seeking behaviors. Affective barriers are the barriers that stem from negative emotions such as fear or distress (Lambert et al., 2009). In Buddhism, seeking professional help would be an admission of moral failure to oneself and others, resulting in personal and familial shame and social stigma (Mathews, 2011). Further, speaking a different language or having an accent may create a sense of shame that hinders Asian Americans from seeking help. Spencer and Chen (2004) found that discrimination based around speaking a different language or having

an accent led to the use of more informal services among Chinese Americans dissuading them from seeking mental health services.

The “model minority” stereotype, discussed earlier, may also affect the mental health help-seeking behaviors of Asian Americans. In a study conducted by Lee et al. (2009), one of the most common sources of stress among Asian American college students was the pressure to live up to the “model minority” stereotype. This stress may result in mental illness, however, because of the “model minority” stereotype and cultural values, these students may not seek help. Another stereotype that has resulted in discrimination and stress for Asian Americans is the “perpetual foreigner” stereotype. This stereotype occurs when the assumption is that one is foreign-born or does not speak English. This stereotype might have developed because Asian Americans typically retain their ethnic and cultural roots, which might result in the assumption that they are resistant to assimilating into the U.S. culture (Kim et al., 2011). Unlike the “model minority stereotype,” the “perpetual foreigner” stereotype is negative and has implications for mental health. Kim et al. (2011) found a relationship between English proficiency and adolescent depressive symptoms because of the indirect effects of speaking English with an accent, being labeled a foreigner, and discriminatory experiences. Further, in another study involving college students, awareness of the perpetual foreigner stereotype predicted identity conflict, lower sense of belonging to American culture, lower hope, and life satisfaction for Asian Americans (Huynh et al., 2011). These findings suggest that the “perpetual foreigner” experience negatively affects Asian Americans across ages.

The COVID-19 pandemic in 2020 resulted in an increase in mental health issues across the world and Asian Americans were no exception. Lee and Waters (2021) conducted a study during the summer of 2020 with a sample of 410 Asian Americans. They examined participants’

experiences of racial discrimination as well as their reported symptoms of mental illnesses including anxiety, depression, physical ailments, and sleep problems. Overall, they found that nearly one-third of their participants had experienced racial discrimination and reported that it had increased since the start of the pandemic. Additionally, they found that higher levels of discrimination significantly elevated anxiety, depression, physical ailments, and sleep problems in their participants. The consequence of affective barriers for this group may be twofold: First, it may induce stress that results in mental illness, and secondly, it may discourage help-seeking.

Value Orientation Barriers

Value orientation barriers refer to an individual's beliefs about right and wrong. Asian cultures are heavily influenced by Confucianism. Confucian thought highlights the importance of social harmony and places great emphasis on the family unit (Hwang, 2012). In Confucian thought, there are five core relationships (rulers to subjects, fathers to sons, husbands to wives, elder brothers to younger brothers, and friends to friends) and each of these relationships has appropriate behaviors that must be followed (Liu, 2018). In this system, individuals are small parts of a bigger system, such as the family, clan, or nation-state. Individuals are expected to put the greater good of the family first. Success brings social status, pride, and face (collective identity) to the family and its members, whereas failures result in shame, loss of face, stigma, and social isolation (Wynaden et al., 2005). Within this framework, familial relationship stressors have been the primary cause of mental illness (Hampton et al., 2007; Yang & Wonpat-Borja, 2012). This is because mental illness is viewed as the result of a lack of relational harmony within the family system as well as a cause of disharmony.

The fear of creating disharmony in the family system can cause some individuals to hide their mental illness symptoms (Chong et al., 2007), some may avoid seeking treatment, while

others seek treatments from informal services that are not mental health professionals (Jang et al., 2007). Some Asian Americans are so frightful of having their children labeled “sick” that they may reject testing or medications that are offered through schools or other professionals, even if it is viewed as helpful for the child (Ling et al., 2014). Confucian teachings place a large emphasis on the family and promote the idea that family harmony is more important than individual needs. This may result in members of the family sacrificing their well-being for the prosperity of the family. Mental health is especially neglected and considered taboo.

Physical and Structural Barriers

Physical and structural barriers refer to barriers that are related to social class, such as an individual’s lack of awareness about available services and inability to access services due to economic and geographic realities (e.g., having to work two jobs, unable to get time off to seek services, lack of childcare, unmanageable distance to a facility, lack of transportation, etc.; Leong & Lau, 2001). One of these barriers that affects the Asian American population is the language barrier. According to data collected by the Office of Minority Health, the percentage of persons 5 years or older who do not speak English very well varies among Asian American groups, for example around 42% of Chinese are not fluent in English. Overall, 31% of Asian Americans are not fluent in English. In 2019, 74% of Asian Americans spoke a language other than English at home (OMH, 2020), which may hinder help-seeking. English fluency was positively related to willingness to use psychological services among Asian immigrants (Barry & Grilo, 2002).

Other common physical and structural barriers that influence mental health-seeking behavior among Asian Americans include overall mental health service knowledge, such as how to access mental health services, how much these services cost, and how insurance coverage

works. According to the National Health Interview Survey conducted in 2018 by the Centers for Disease Control (CDC) and Prevention's National Center for Health Statistics, 75% of Asian Americans under the age of 65 were covered by private health insurance, 15% by Medicaid, and 3% by some other insurance, which leaves 7% who were uninsured (NHI, 2019). Although most Asian Americans have health insurance coverage, they are probably unsure of what mental health services are covered. A study conducted by the American Psychological Association in 2014 showed that more than 90% of Americans were unfamiliar that health insurance is required to provide coverage for mental health services. Although this study included all Americans, it is highly likely that the percentage is similar or higher for Asian Americans. Even with increased insurance coverage under the Affordable Care Act (ACA), the cost of services is still a major barrier to seeking mental health services. Using the CDC national survey data, the Center for American Progress found that 1 in 3 Asian Americans diagnosed with depression was unable to see a doctor due to cost (Kwon & Maxwell, 2018).

Intersectionality

Simpson and colleagues (1989) defined intersectionality as "The interconnected nature of social categorizations such as race, class, and gender, regarded as creating overlapping and interdependent systems of discrimination or disadvantage." This theory suggests that a person or group of people are not affected by just one factor (like discrimination or disadvantage), but that their different identities and experiences create a complex web of interconnected disadvantages that affect them. A person may be disadvantaged by race, social class, gender identity, religion, and other markers that make up an individual's identity. This theory recognizes that these markers do not only create oppression individually but rather interact with one another to create a more complex oppression. For example, a White woman may be oppressed because of her

gender identity as a woman, whereas a black woman faces greater oppression because of the discrimination based on her race amplifies the discrimination due to her gender. In this study, the theory of intersectionality explains how cognitive, affective, value orientation, and physical and structural barriers intersect to discourage mental health help-seeking among Asian Americans. The multiple barriers they face because of their race along with the barriers created within their own cultural values significantly hinder mental health help-seeking behaviors in the Asian American communities. For example, an Asian American man suffering from a mental illness may feel discouraged to seek help because of the stigma around men and mental health and because his religious and cultural values may discourage it. In this example, the Asian American man has multiple hurdles intersecting with one another that make it harder for him to seek mental health services. This intersectionality must be understood to inform prevention and intervention efforts for adults and school children. It is understood that parents acculturate their children and make decisions on their behalf. As Bornstein (2009) said, "Parenting occupies a central node in the nexus between culture and adaptive human development," however, parental influences can also be adaptive or maladaptive (Huang et al., 2017).

Current Study

In summary, a body of research has identified four categories of cross-cultural barriers to mental health help-seeking behaviors among Asian Americans in the West. *Cognitive barriers* are created by individuals' understanding of what mental illness connotes and is heavily influenced by culture, specifically Buddhism and Traditional Chinese Medicine. *Affective barriers,* such as shame and stigma, stem from negative emotions associated with stereotypes that are placed on Asian Americans. *Value orientation barriers* are based on an individual's beliefs of right and wrong, which are heavily influenced by Confucian teachings, specifically the

importance of putting the family before oneself. *Physical and structural barriers* limit services to specific groups of people. These barriers and the cultural foundations of the Asian American population seem to intersect to create a system that significantly hinders mental health help-seeking. However, research in this area is limited and some are dated. Further, studies involving multiple generations of Asians to inform services for adults and children do not seem to exist. Thus, this research is critical considering the rise of xenophobia towards Asian Americans because of the COVID-19 pandemic, and the subsequent rise in mental illness.

The purpose of this study was to identify the cultural and practical factors that contribute to mental health help-seeking practices of Asian Americans formally and informally (e.g., from psychiatrists and psychologists and healers and priests, respectively).

The following four predictions were examined:

1. Immigrants and 1st and 2nd generation Asian Americans will show more stigmatizing attitudes towards (a) mental illness and (b) people with mental health issues than the younger generation (3rd and 4th) Asian Americans. This prediction is supported by Lee et al. (2017) who found that 1st generation Asian Americans had overall lower rates of mental health service use compared to subsequent generations. The authors suggested that the strong cultural stigma of mental illness may be a cause.
2. Participants will report that their attitude about mental illness is informed by their degree of belief in Asian values. For example, one's concept of mental illness and treatment is informed by culture (Leong & Lau, 2001) including beliefs that spiritual possession (Nguyen et al., 2012) and physical issues (Hampton et al., 2007; Kleinman et al., 2011) are the cause of mental illness.

3. Participants will (a) report speaking English with an accent (Affective Barrier) and (b) maintaining family harmony (Value Orientation Barrier) as salient factors that prevent them from seeking mental health services. The sense of being an outsider that comes with accented speech (OMH, 2020); and Confucian teachings that places a large emphasis on family harmony than individual needs (Chong et al., 2007) are expected to influence mental health help-seeking.
4. Participants will report correlations between low mental illness help-seeking because of (a) stigma (Affective Barrier) and (b) familial values (Value Orientation Barrier) and seeking help from priests or traditional healers. The fear of creating disharmony in the family system may discourage participants from seeking treatment or they may seek treatments from informal services that are not mental health professionals (Jang et al., 2007).

Method

Participants

A total of 141 individuals of Asian descent participated in the study. Asians are "any person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam" (U.S. Census Bureau, 2020). Participants were recruited from multiple sites such as colleges, businesses, markets, and Asian organizations. Any individual who identified as Asian was able to participate in the study. Asians of all different ethnicities participated in the study. Of the 141 participants, 29 had ethnic origins in China, 24 in the Philippines, 23 in India, 8 in Laos, 4 in Pakistan. The rest, Korea, Vietnam, Thailand, Taiwan, Armenia, Bangladesh, and Japan had low participation, 3 or less individuals. All

participants completed a demographic questionnaire and the adapted Day's Mental Illness Stigma Scale (ADMISS). Table 1 Participant Demographic Information provides more details.

There were 39 participants who were removed because they either did not meet the criteria of the study, or they failed to complete the entire survey. These individuals were removed from the analyses to ensure that the analyses were not skewed by incomplete responses. The final participant count was 102 participants.

Measures

In the current study, three measures were used: Demographics questionnaire, Adapted *Day's Mental Illness Stigma Scale,* and the *Mental Help Seeking Intention Scale.*

Participant Demographic Questionnaire

The demographic questionnaire (Appendix B), created by the primary researcher, has 18 questions. Sample items include age, sex, and ethnic origins. In addition, to ascertain participants' length of acculturation, they are asked to identify how long they have lived in the United States, whether they are immigrants, or 1st or 2nd generation Asian Americans, for example. This information was used to assess if there were differences in attitudes towards mental illness and treatment based on how long individuals have lived in the United States. On questions 7 through 18 of the demographic questionnaire, participants were asked questions to understand their views on their cultural identity and the degree of discrimination that they face. This information was used to assess if these views impacted the participants' views surrounding mental health treatment and their intent to seek mental health services.

Adapted Day's Mental Illness Stigma Scale (ADMISS)

To assess participants' attitudes towards people with mental illness, an adapted version of the *Day's Mental Illness Stigma Scale* (ADMISS) was used (Appendix C). Day et al. (2007)

developed the scale to assess the general public's attitudes towards people with mental illness. The DMISS was chosen because the items align with the idea that attitudes toward mental health are related to help-seeking. The *Day's Mental Illness Stigma Scale* (DMISS) is a 28-item scale in which participants respond on a 7-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." Each possible answer is associated with a point value (e.g., Strongly Disagree = 1, Strongly Agree = 7). The items are associated with one of the seven main attitude dimensions: interpersonal anxiety, relationship disruption, poor hygiene, visibility, treatability, professional efficacy, and recovery. Each of the main attitudes had 4 questions associated with it. Each of the seven factors is scored by adding the points associated with the questions which belong to that factor. Sample items of the DMISS include "I feel nervous and uneasy when I'm near someone with a mental illness" and "I think that a personal relationship with someone with a mental illness would be too demanding" (Day et al., 2007).

The *DMISS* was initially constructed and validated by Day et al. (2007). The authors used confirmatory factor analysis to determine the appropriate number of factors. The analysis suggested that a seven-factor solution was appropriate. Therefore, the seven factors used in the *DMISS* are anxiety, relationship disruption, poor hygiene, visibility, treatability, professional efficacy, and recovery.

For this study, the DMISS was adapted to shorten the overall survey and answer additional research questions. The first change made to the DMISS was removing half of the questions so that instead of each factor having four questions associated with it, they now only had two. Questions were removed if they involved reverse-scoring or if they were slight variations on questions that were already present. This was done to decrease the length of the overall survey and make it easy for the participants. After removing these questions, the two

questions associated with the poor hygiene factor were modified to reflect a different factor that was more appropriate for this study. This new factor is the family disruption factor and was created as a reflection of the participants' belief in how mental illness can lead to family disharmony. Lastly, additional questions were folded into the adapted DMISS to answer additional research questions of the study. Some examples included, "If my child experiences mental illness, I would seek help ONLY from a priest or traditional healer" and "Stereotypes about my ethnicity stop me from seeking help for mental illness." In addition to these questions, the three questions of the Mental Help Seeking Intention Scale (MHSIS) were also added to the scale. The MHSIS is described in more detail below.

In the current study, each participant obtained seven different scores, one score for each of the seven factors of the ADMISS (anxiety, relationship disruption, family disruption, visibility, treatability, professional efficacy, and recovery). As described above, questions are presented in a 7-point Likert scale format. The total possible score a participant could obtain for each factor was 14 (7 for each question). The higher the score, the more stigma the participant has towards mental illness. It should be noted that adapting the DMISS to meet the demands of this study has the potential to change the psychometric properties of the scale. In addition, given the few items for each factor, Cronbach's alpha analysis could not be conducted.

Mental Help Seeking Intention Scale

To assess participants' intentions to seek help from a mental health professional, the *Mental Help Seeking Intention Scale (MHSIS)* (Hammer & Spiker, 2018) was used (Appendix D). Hammer and Spiker developed the scale to assess individuals' intention to seek help from a mental health professional if they had a mental health concern. The MHSIS has three items in which participants respond on a 7-point Likert scale. For example, for the item "If I had a mental

health concern, I would intend to seek help from a mental health professional" the respondent had the option of choosing "extremely unlikely" to "extremely likely." The three items provide a unidimensional "help-seeking intention" score.

The authors used confirmatory factor analysis to determine the appropriate number of factors. The analysis suggested that a unidimensional measurement model was appropriate. Therefore, the factor used in the *MHSIS* is help-seeking intention consisting of three items. Higher scores on the *MHSIS* indicate more intention toward seeking help from a mental health professional (Hammer & Spiker, 2018). In the current study, a total help-seeking intention score was used to answer research questions regarding the help-seeking intention of the participants.

Procedures

After obtaining approval from Eastern Illinois University's Institutional Review Board, leaders of Asian organizations at universities, managers at Asian markets, and administrators of Asian social media groups received an email or a message (Appendix E) requesting permission to distribute the survey directly to their members, or through social media posting. Email addresses were obtained from university or store websites and administrators of online groups typically found in the groups' information sections. Once permission was granted, the primary researcher provided the same message (Appendix E) to the members of the organizations or groups introducing the study and directing participants to a link to the survey. Additionally, a recruitment flyer (Appendix F) explaining the study and providing a link to the survey was posted on store fronts and social media platforms.

Participants completed the ADMISS, MHSIS, and demographic questionnaire using the Qualtrics survey program, a web-based online survey software. Participants were first informed that it would take about 20 minutes to complete the surveys. Informed consent (Appendix A) was

obtained electronically. Prior to completing any survey items, participants were presented with a description of the study and were prompted to give electronic consent. Participants were informed that the study was completely voluntary and that their responses would be kept confidential and anonymous. If a participant declined to participate, they were able to exit the page and no additional responses were recorded. No identifying information was collected as part of the study.

Data Analysis

To answer the first research question (Immigrants and 1st and 2nd generation Asian Americans will show more stigmatizing attitudes towards mental illness and people with mental health issues than the younger generations (3rd and 4th) Asian Americans), seven one-way ANOVA's were conducted to determine if there were significant differences among the five groups based on their generational status (immigrant, 1st generation, 2nd generation, 3rd generation, and 4th generation), as grouped in the demographic questionnaire, on each of the seven ADMISS factors. Post hoc tests were conducted to reveal any significant differences among the groups.

For the second prediction (Immigrants and 1st and 2nd generation Asian Americans will report that their attitude about mental illness is informed by their original cultural teaching based on Buddhism and Confucianism), seven bivariate correlations were used to determine if there was a relationship between the scores on questions related to belief in Asian values from the demographics questionnaire and each of the seven overall factor scores of the ADMISS.

For the third prediction (Participants will report speaking English with an accent and family harmony as salient factors that prevent them from seeking mental health services), bivariate correlation was used to determine if there was a relationship between the scores related

to speaking English with an accent and the overall family disharmony factor score of the ADMISS.

For the fourth and final prediction (Participants will report low help-seeking for mental illness because of (a)stigma and report a relationship between (b) familial values and seeking help from priests or traditional healers) a bivariate correlation was used to determine if there was a relationship between the overall perceived stigma scores from the demographic's questionnaire and the overall MHSIS score. For the second part of the prediction, a bivariate correlation was used to determine if there was a relationship between the overall family disharmony factor scores from the ADMISS and the participants' response to seeking help from priests or traditional healers.

Results

Research Question 1

To answer the first research question predicting that Immigrants and 1st and 2nd generation Asian Americans would show more stigmatizing attitudes towards mental illness and people with mental health issues than the younger generations (3rd and 4th) of Asian Americans, seven one-way ANOVAs were conducted to determine if there were significant differences between each of the seven overall factor scores of the ADMISS of participants based on their generational status. To group participants, each participant was asked to indicate whether they were an immigrant, 1st, 2nd, 3rd, or 4th generation, or if they did not know which generation they belong in (not sure). Five participants were removed so that they did not skew the statistical analysis of the other groups and so that post-hoc comparisons could be conducted among the groups. The participants who were removed identified themselves as 3rd or 4th generation or they were not sure which generation they fit in. Means and standard deviations of the four groups for

each of the ADMISS total factor scores can be found in Table 2. Results of the one-way ANOVA can be found in Table 3. The results of the multiple comparisons post-hoc tests can be found in Table 4.

At an alpha of 0.05, results showed that there were significant differences in the total interpersonal anxiety factor scores of participants based on their generational status, ($F(2,94)=3.348$, $p=.039$); however, results of a Tukey's HSD test indicated that there were no significant pairwise comparisons among the groups. This indicates that there were differences in the mean total interpersonal anxiety scores of the ADMISS between the different generations; however, additional analysis did not show the specific generational groups that differed.

At an alpha of 0.05, results showed that there were significant differences in the total family disruption factor scores of participants based on their generational status, ($F(2,94)=4.206$, $p=.018$). Results of a Tukey's HSD test indicated that participants who identified as immigrants scored significantly lower on the total family disruption overall factor score than those who identified as 2nd generation ($p=.026$). All other pairwise comparisons were not found to be statistically significant. This indicates that there were differences in the mean total family disruption scores of the ADMISS between the different generations. Immigrants tended to have a lower overall score compared to the 2nd generation, which suggested that immigrants did not see mental illness to cause disruption to their family as much as the 2nd generation Asians.

At an alpha of 0.05, results showed that there were significant differences in the total relationship disruption factor scores of participants based on their generational status, ($F(2,94)=7.782$, $p=.001$). Results of a Tukey's HSD test indicated that participants who identified as immigrants scored significantly higher on the total relationship disruption overall factor score than those who identified as 1st generation ($p=.000$). All other pairwise comparisons

were not statistically significant. This indicates that there were differences in the mean total relationship disruption between the different generations. Immigrants tended to have a higher overall score compared to the 1st generation, which indicates that immigrants felt mental illness causes disruption in their relationships more than the 1st generation Asians did.

At an alpha of 0.05, results showed that there were no significant differences in the total treatability factor scores ($F(2,94)=1.797$, $p=.171$), total professional efficacy factor scores ($F(2,94)=.397$, $p=.674$), total visibility factor scores ($F(2,94)=.354$, $p=.703$), and total recovery factor scores ($F(2,94)=1.474$, $p=.234$) of participants based on their generational status. This means that the mean scores of all generational groups for these four factors of the adapted DMISS were close as no significant differences were found.

Research Question 2

To answer the second research question predicting that participants would report that their attitude about mental illness is informed by their degree of belief in Asian values, a Spearman's rank order correlation was used to determine the relationship between participants' scores on each of the seven factor scores of the ADMISS, Treatability, Professional Efficacy, Relationship Disruption, Interpersonal Anxiety, Family Disruption, Visibility, and Recovery, and their degree of belief In Asian values. As seen in *Figure 1: Relationship Between ADMISS Factors and Degree of Belief in Asian Values* below, all factors, except Relationship Disruption and Visibility, resulted in a weak positive correlation between each factor and Belief in Asian Values that was not statistically significant. For the third factor score (Relationship Disruption), there was a weak but statistically significant, positive correlation between overall Relationship Disruption factor scores and degree of belief in Asian Values ($r_s(95) = .275$, $p = .006$). For the sixth factor score (Visibility), there was a weak but statistically significant, positive correlation

between overall Visibility factor scores and degree of belief in Asian values ($r_s(95) = .244$, $p = .016$). These results appear to indicate that the stronger individuals' belief in Asian values, the more stigmatizing views they hold on mental illness and people with mental illness. Table 5 contains the Spearman's ρ values for each ADMISS factor score.

Research Question 3

To answer the third research question that predicted that participants would report (a)speaking English with an accent and (b)maintaining family harmony as salient factors that prevent them from seeking mental health services, a Spearman's rank order correlation was conducted. There was a very weak positive correlation between speaking English with an accent and overall MHSIS score, which was not statistically significant ($r_s(95) = .061$, $p = .550$). It appears participants did not see a relationship between their intention to seek mental health services and speaking English with an accent.

There was also a weak to moderate, negative correlation between participants' overall Family Disruption factor score and their overall MHSIS score, which was statistically significant ($r_s(95) = -.267$, $p = .006$) indicating a weak correlation. As participants' scores on the Family Disruption factor went up, the lower their intent to seek mental health services. This may indicate that those who feel mental health causes disruption to their family are less likely to seek mental health services. Means and standard deviations of the 5 groups for the total MHSIS scores are found in Table 6.

Research Question 4

To answer the fourth research question that predicted that participants would indicate a relationship between low mental illness help-seeking because of (a) stigma and (b) familial values and seeking help from priests or traditional healers instead of mental health professionals,

a Spearman's rank order correlation was performed to determine the relationship between participants' overall exposure to stereotypes score and their MHSIS scores. There was a weak to moderate, negative correlation between participants' exposure to stereotypes score and their MHSIS score, which was statistically significant ($r_s(95) = -.220$, $p = .030$). This indicates that a weak correlation exists where participants who indicated they had been exposed to more discrimination based on race were less likely to seek services for mental health. For the second part of the prediction, there was also a weak negative correlation between participants' total family disruption factor score and their response to seeking help from priests or traditional healers, which was not statistically significant ($r_s(95) = -.169$, $p = .121$). This suggests that there is likely no relationship between the participants' degree of stigmatization towards mental health based on how it disrupts their families and their use of informal mental health services such as priests or healers.

Discussion

This study assessed the self-reported stigma surrounding mental health and intention to seek mental health help of Asians in the US. According to reports, serious mental health illness among the Asian population is increasing (SAMHSA, 2018). Even with these increases, Asian adults and youth have the lowest estimates of mental health service utilization compared to other racial/ethnic groups (Center for Behavioral Health Statistics and Quality, 2021). Research shows that Asians face several barriers to getting mental health treatment. These barriers include cognitive barriers (knowledge and conceptions about mental illness), affective barriers (shame or stigma of mental illness), value orientation barriers (beliefs about right/wrong), and physical barriers (location or cost; Leong & Kalibatseya, 2007). No one barrier prevents Asians from seeking mental health help; instead, these barriers all influence one another and create

overlapping systems of discrimination and challenges known as intersectionality (Simpson et al., 1989).

Although some research exists documenting the mental health struggles of Asians and the barriers that they face, much of the information is dated. Researchers who study the Asian population also face challenges. Research has highlighted the funding discrepancy and push for research on other minority groups instead of Asians (Đoàn et al., 2019; Ginther et al., 2011; Hur et al., 2017; Yee, 2021). These discrepancies are related to positive stereotypical views (the model minority) about Asians that harm the population (Lee et al., 2009; Yee, 2021)

A total of 102 Asians completed the adapted Day's Mental Illness Stigma Scale (Day et al., 2007) and the Mental Help Seeking Intention Scale (Hammer & Spiker, 2018). First, participants' overall factor scores on the ADMISS (Interpersonal anxiety, relationship disruption, family disruption, visibility, treatability, professional efficacy, and recovery) were analyzed to determine if there were differences based on participants' generational status. Research has indicated that those from later generations have become more accultured and therefore have less barriers to treatment and are more willing to seek and use mental health services than earlier generations (Abe-Kim et al., 2007), suggesting that higher scores (less mental health help seeking) could be expected from those in earlier generations, such as immigrants or first-generation Asians. Participants were divided into three categories based on their generational status: immigrants, first-generation, and second-generation.

Results revealed that there were differences among these groups' scores on three of the seven factor scores of the ADMISS (Interpersonal Anxiety, Family Disruption, and Relationship Disruption). Post hoc tests showed that participants who identified as immigrants scored significantly lower on the total Family Disruption factor score than those who identified as

second-generation Asians. This may be due to misconceptions about what constitutes a mental illness from a cultural perspective or the fear of openly talking about mental illness among the immigrant population. It is possible the immigrant population was exposed to different cultural beliefs surrounding mental illness and therefore are unable to identify signs of mental illness or do not believe that they exist. Additionally, immigrants also scored significantly higher on the total Relationship Disruption factor score than those who identified as first-generation Asians. This may be due to stigma and stereotypes surrounding mental illness. Perhaps, the first-generation Asians have become accultured at a faster rate than their immigrant parents and exposure to a culture that is attempting to normalize mental illness has influenced their views about mental illness in others.

For the second research prediction, participants' overall factor scores on the ADMISS were analyzed to determine if there was a relationship between the scores and participants' degree of belief in Asian values. It is suggested that one's concept of mental illness and treatment is informed by culture (Leong & Lau, 2001), thus higher scores could be expected from those whose degree of belief in Asian values is higher. Results revealed that there were weak positive correlations between all the factor scores of the ADMISS and the participants' degree of belief in Asian values; however, only two of the factor scores were statistically significant (Relationship Disruption and Visibility). These results appeared to follow the trend that was predicted; however, a relationship cannot be fully recognized except for the Relationship Disruption and Visibility factor scores. Research on Asian beliefs about mental illness might inform these findings. For example, in Asian culture, mental illness can be expressed in diverse ways. Those who practice Buddhism may believe symptoms of mental illness are indicators of spiritual possession (Nguyen et al., 2012), whereas those who believe in

traditional Chinese medicine believe mental illness is a manifestation of physical issues within different organs (Hampton et al., 2007; Kleinman et al., 2011) and, therefore, may present with different physical symptoms of mental illness but not recognize that those symptoms are signs of mental illness. These different beliefs may explain why a relationship was identified in the Visibility factor score because the questions asked about one's perception of mental illness in others. As for the Relationship Disruption factor scores, research indicates that Asian culture is heavily influenced by Confucian thought, and an important aspect of Confucian thought surrounds social and familial harmony (Hwang, 2012). Disharmony in relationships can lead to failure, shame, and stigma; therefore, individuals go to great lengths to avoid causing disruption to relationships. Mental illness would be a big disruption to a relationship and individuals may go to extreme measures to avoid creating disharmony, including hiding mental illness (Chong et al., 2007), avoiding treatment, or going to informal services, not provided by mental health professionals (Jang et al., 2007). These Asian beliefs may be responsible for the relationship between Relationship Disruption and Belief in Asian Values because those who have a greater degree of belief in Asian values may want to avoid relationships with anyone with mental illnesses because it may cause disruption to their system and bring shame or stigma.

For the third research prediction, participants' overall MHSIS scores were analyzed to determine if there was a relationship between the scores and the participants' self-report of how much they are bothered about speaking English with an accent. Results indicated there was a weak positive relationship between overall MHSIS scores and how bothered participants were with their accent; however, the relationship was not statistically significant. This may be due to the individual's perception of an accent, or the length of time participants have spent in the United States. Perhaps participants who have spent longer times in the United States have

become accustomed to their accent and no longer notice it or no longer feel ashamed of it. For the second part of this research question, participants' overall MHSIS scores were analyzed to determine if there was a relationship between the scores and the participants' overall Family Disruption factor score on the ADMISS. Results indicated that there was a weak negative correlation between these scores that was statistically significant. Although the relationship is weak, this is aligned with existing literature regarding Asian familial relationships and beliefs surrounding mental illness. As discussed above, Confucian thought places great emphasis on the family unit and the harmony surrounding the family (Hwang, 2012). Individuals who are influenced by Confucian thought may be hesitant to seek help for any mental illness because of the shame and stigma it may bring to their family (Chong et al., 2007).

For the fourth research prediction, two different analyses were conducted. First, participants' overall MHSIS scores were analyzed to determine if there was a relationship between the scores and the participants' self-reported degree of stigma/discrimination that they have faced. Results indicated that there was a weak negative correlation between participants' degree of stigma/discrimination exposure and their overall MHSIS scores, which was statistically significant. As the degree of stigma/discrimination exposure increases, the intent to seek mental help scores decreased, which is aligned with the literature (Spencer & Chen, 2004; Lee et al., 2009). Those who experience discrimination/stigma are likely to be hesitant to seek professional help because of fear of not getting appropriate help. Instead, they suffer with their illness than seek professional help. For the second part of the research question, the relationship between participants' overall Family Disruption factor score and the participants' response to seeking treatment from informal services that are not mental health professionals was examined. Results showed there was a weak negative relationship between participants overall Family Disruption

scores and their response to seeking treatment from informal services that are not mental health professionals, which was not statistically significant. In addition to factors that impact mental health services discussed above, e.g., stigma, responses might have been influenced by the participants' conceptions about mental illness and their beliefs about who is considered a mental health professional. As discussed earlier, mental illness takes on different manifestations based on cultural beliefs. An individual practicing Buddhism may see mental illness as bad karma and seek out a spiritual leader for help. In this example, the individual may see the spiritual leader as a mental health expert, whereas the definition used in this study referred to mental health experts as psychiatrists and psychologists.

Overall, results indicated that there were some statistically significant differences among the stigma scores of participants, their generational status, and their beliefs in Asian values. These findings indicate that some aspects of Asian beliefs may be carried through generations and impact individuals' perceptions about mental illness. Other results indicated that there were some significant relationships between participants' intentions to seek mental health help and distinct factors such as familial disruption and exposure to stigma and discrimination. In general, although the relationships found in this study were weak, they tend to align with the current literature and as predicted suggest that those who tend to have stronger connections to their Asian culture and beliefs exhibit more negative attitudes towards mental illness and tend to not seek help for their mental illness. Given this trend, additional analysis was conducted on four items from the Demographic Information Questionnaire that tapped Asian heritage, Western Values, Asian values, and Asian identity of participants. Bivariate correlations were conducted to determine if relationships existed between participants' cultural self-identity and their beliefs in Asian values and practicing/maintaining their Asian heritage. Table 7 highlights these

correlations. Overall, there existed weak to moderate relationships between the participants' identity as Asian and their belief in Asian values and practicing/maintaining their Asian heritage, which were all statistically significant. This indicates that those who are self-identifying themselves as more Asian have stronger belief in Asian values and are more likely to want to carry on their Asian heritage. Participants with these stronger ties to their Asian beliefs likely hold views about mental health that are more closely tied to their traditional beliefs, which may be more stigmatizing towards mental illness.

Limitations and Future Directions

This study attempted to assess the self-reported stigma surrounding mental health and intention to seek mental health help of Asian Americans. Although some of the findings reinforce the current literature, there are some limitations that may inform future research on the topic. Firstly, the topic of the study could have influenced participation, the number of responses received. Stigma still exists around mental illness and mental health help seeking and some individuals likely felt discomfort about sharing their views and opinions related to the topics. Thus, although the survey was anonymous, some participants may have hesitated to participate or engaged in social desirability bias while filling out the survey. Social desirability refers to participants' tendency to respond in a more favorable manner and underreport socially undesirable attitudes and behaviors (Feinberg, 1967).

Secondly, an attempt was made to compare different generations of Asians to determine how the level of acculturation is related to mental health stigma and intention to seek treatment. However, the total number of participants who identified as immigrants and 1st generation was drastically larger than the numbers of individuals who identified as 2nd, 3rd, and 4th generation.

Thus, comparisons could not be made as intended. It would be helpful for future studies to obtain near equal numbers of each of the generational groups to make more adequate comparisons.

Thirdly, one of the biggest issues with self-administered questionnaires (not in person) is poor response rate (Coughlan et al., 2009). This combined with the limited number of participants for some categories and controversial topic (mental illness) might have influenced the results of the current study. Further, the length of the survey and the Likert scale response format might have contributed to low response. Of the 141 total responses, 39 were incomplete. However, many of the incomplete responses were around 91% complete and this may have been because the length of the survey did not allow some individuals to complete it in one sitting. Further, since 7-point Likert scales were used, an answer such as "Somewhat agree" may be interpreted differently by different individuals. For future studies, decreasing the number of options on the Likert scale, providing an example, or choosing a different scale may address this issue. Additionally, to shorten the length of the original DMISS (28 questions) some questions were removed and merged with the MHSIS (3 questions). It is possible this adaptation might have affected the psychometric properties of the scale.

Finally, there were four questions in the Demographic Information that tapped participants' heritage, Western values, Asian values, and Asian identity to make sense of the role of culture and belief systems in understanding the causes of mental illness, mental health help-seeking, and treatment options. Results suggested most participants self-identified themselves as strongly Asian and having a belief in Asian values and heritage that they want to carry on, which may be related to their view of mental illness and help seeking. Thus, future studies may benefit from directly asking participants to indicate their religious belief system to better understand if a strong traditional system, such as Confucianism, influences what mental illness is and its

treatment. As discussed earlier, Asians come from many different ethnic/cultural backgrounds, and having participants indicate their philosophical beliefs may provide useful information.

Implications and Conclusion

To adequately address the mental health needs of the fastest growing segment of our society, Asian Americans (U.S. Census Bureau, 2020), more research is needed. Although some research exists, most are inconclusive highlighting the need for more research to explore the complex factors surrounding the perception of mental health and related treatment among Asians in the US, as well as the barriers they experience when they do seek services, e.g., language barriers and cost.

In addition to adding to the ongoing conversation regarding mental health in the Asian communities, the primary investigator of the current study also suggests the need for research involving Asian students in the K-12 school setting. The model minority stereotype still exists and influences the actions of all individuals, including Asians. School staff may accept these stereotypes and assume that Asian students have no social/emotional issues, denying them treatment. Further, given parental perceptions regarding mental health, it is unclear if Asian parents seek mental health services for their children. For example, in a small study, Liu and colleagues (2020) reported that Asian immigrant parents did not acknowledge suicidality and thought social anxiety was related to personality or cultural differences. Thus, continuing school staff development on the mental health of Asian students as well as supporting parents in the best interest of children is indicated.

In conclusion, this study highlights the need for continued research on issues that influence the perception of mental health and treatment seeking of Asian Americans and Asians in the US.

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Appendix A: Informed Consent

Consent to Participate in a Study

Asian American Perceptions on Mental Health Help-Seeking

Thank you for your willingness to participate in a graduate thesis research study being conducted by Austin Dye, a graduate student in the Specialist in School Psychology Program at Eastern Illinois University. The research aims to assess the perception of mental health and mental health service seeking of Asian Americans and to inform mental health services for school children of Asian descent. Mental illness can be stress induced and our community has been under stress for 2+ years, not just from COVID but also from related racism and prejudice. This research project has been approved by the Eastern Illinois University Institutional Review Board, which assures the protection of the rights and welfare of research participants.

Participation in this study involves completing an electronic survey, which will take about 20 minutes to complete. Participation is entirely voluntary, and you can stop participation at any point without penalty. This study is also confidential, meaning no personally identifying information will be collected and only aggregate data will be reported.

Thinking about stressful events can distress some individuals. If so, we encourage you to seek support from Community Mental Health centers, Physicians, Counselors, or Therapists. Long-term stress can lead to physical problems, such as heart disease, and mental problems, such as anxiety or depression.

By completing this survey, you are giving consent to participate in the study (please check 'AGREE' below). If you decline to participate, please click on 'EXIT' below, and the survey will close.

If you have questions or concerns, you may contact me, Austin Dye at ajdye2@eiu.edu, my thesis supervisor, Dr. Assege HaileMariam at ahailemariam@eiu.edu, or the EIU Institutional Review Board at eiuirb@www.eiu.edu.

If you have any questions or concerns about the treatment of human participants in this study, you may call or write:

Institutional Review Board
Eastern Illinois University
600 Lincoln Ave.
Charleston, IL 61920
Telephone: (217) 581-8576

E-mail: eiuirb@eiu.edu

You will be given the opportunity to discuss any questions about your rights as a research subject with a member of the IRB. The IRB is an independent committee composed of members of the University community, as well as lay members of the community not connected with EIU. The IRB has reviewed and approved this study.

Thank you for your participation and for contributing to knowledge in the field, and for helping me meet the thesis requirement of my program! I appreciate your help!

Sincerely,

Austin Dye

○ AGREE to Participate

EXIT

Appendix B: Demographic Questionnaire Form

Please tell us a little about yourself (no identifying information is required or collected). Please check a response that **BEST** applies to you.

1. What is your sex?
    a. Male _____
    b. Female _____
    c. Other/chose not to answer _____

2. How old are you?
    a. 18-25 years _____
    b. 26-35 years _____
    c. 36-45 years _____
    d. 46-55 years _____
    e. 56-65 years _____
    f. 66 years or older _____

3. Do you have origins (roots) in any of the following areas? Please check all that apply.

Cambodia	_____	Malaysia	_____
China	_____	Pakistan	_____
India	_____	Philippines	_____
Japan	_____	Thailand	_____
Korea	_____	Vietnam	_____

    Other (Please write-in)_____

4. How long have you lived in the US?
    a. I was born in the U.S. _____
    b. 1-5 years _____
    c. 6-10 years _____
    d. 11-15 years _____
    e. 16-20 years _____
    f. 21-25 years _____
    g. More than 25 years _____

Appendix B. Contd.

5. Which of these most applies to you? I am…
    a. An immigrant (I was born in Asia or country other than U.S.) _____
    b. First generation born (I was born in U.S., either parent was born in Asia or country other than U.S.) _____
    c. Second generation born (I was born in U.S., both parents were born in U.S, and all grandparents born in Asia or country other than U.S.) _____
    d. Third generation (I was born in U.S., both parents were born in U.S, and at least one grandparent born in Asia or country other than U.S. and one grandparent born in U.S. _____
    e. Fourth generation born in the U.S. (I was born in U.S., both parents were born in U.S., and all grandparents also born in U.S.) _____
    f. Don't know which fits best since I lack some information _____

6. What is your educational experience?
    a. Traditional education ____
    b. Less than high school ____
    c. High school graduate ____
    d. BA/BS Degree ____
    e. Master's Degree ____
    f. Doctoral Degree ____
    g. Other, please write: _____

7. What language can you speak?
    a. ___My original Asian language_____ (Please specify)
    b. ___Mostly my original Asian language, and some English
    c. ___My original Asian language and English about equally well (bilingual)
    d. ___Mostly English
    e. ___Only English

8. What language do you prefer?
    a. ___My original Asian language
    b. ___Mostly my Asian language, some English
    c. ___My original Asian language and English about equally well (bilingual)
    d. ___Mostly English
    e. ___English only

Appendix B. Contd.

9. Do you
    a. ___Read only your Asian language?
    b. ___Read your Asian language better than English?
    c. ___Read both your Asian language and English equally well?
    d. ___Read English better than your Asian language?
    e. ___Read only English?

10. Do you
    a. ___Write only your Asian language?
    b. ___Write your Asian language better than English?
    c. ___Write both your Asian language and English equally well?
    d. ___Write English better than your Asian language?
    e. ___Write only English?

11. If you have an accent when speaking English, to what extent does it bother you?
    a. ___It does not bother me
    b. ___It bothers me a little bit
    c. ___It bothers me a lot
    d. ___I do not have an accent

12. How would you rate yourself, i.e., your cultural identity?
    a. Very Asian
    b. Mostly Asian
    c. Bicultural
    d. Mostly Westernized
    e. Very Westernized

For the following items, please circle **One** that most applies to you.

13. Rate yourself on how much you believe in Asian values (e.g. about marriage, families, education, work, etc.)

1	2	3	4
(Do not believe)	(Somewhat believe in Asian values)	(Believe in Asian values)	(Strongly believe in Asian values)

Appendix B. Contd.

14. Rate yourself on how much you believe in American (Western) values

1	2	3	4
(Do not believe)	(Somewhat believe in Western values)	(Believe in Western values)	(Strongly believe in Western values)

15. How important is it for you to maintain (practice and pass to the next generation) the values of your Asian heritage?

1	2	3	4
(Not important at all)	(Somewhat important)	(Important)	(Very Important)

16. Cost of mental health services prevents me from seeking care

1	2	3	4	5	6	7
(Completely disagree)	(Disagree)	(Somewhat Disagree)	(Neither Agree or Disagree)	(Somewhat Agree)	(Agree)	(Completely Agree)

17. How often have you experienced discrimination related to your race?

1	2	3	4
(Never)	(Sometimes)	(Often)	(Always)

18. How concerned are you about your safety since the COVID-19 pandemic?

1	2	3	4
(Not at all concerned)	(Somewhat concerned)	(Concerned)	(Very concerned)

Appendix C

Adapted Day's Mental Illness Scale

We are trying to learn how mental illness is understood and treated. Please indicate the extent to which you agree or disagree with the statements listed below using the following scale:

1	2	3	4	5	6	7
Completely disagree	*Disagree*	*Somewhat disagree*	*Neither agree or disagree*	*Somewhat agree*	*Agree*	*Completely agree*

For example, for the statement: Mental illness scares me, you would check "1, Completely Disagree" if the statement is not true about you.

Items	1 Completely disagree	2 Disagree	3 Somewhat Disagree	4 Neither Agree or Disagree	5 Somewhat Agree	6 Agree	7 Completely Agree
1. There are effective medications for mental illness that allow people to return to normal and productive lives.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
2. If I had mental health problems, I would seek help from a psychologist or a psychiatrist.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
3. *A close relationship with someone with a mental*	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)

Appendix C. Contd.

illness would be like living on an emotional roller coaster.							
4. *I have always felt pressure from my parents to be successful for pride and family.*	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
5. If I had a mental health concern, I would plan to seek help from a mental health professional.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
6. *I tend to feel anxious and nervous when I am around someone with a mental illness.*	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
7. *It is easy for me to recognize the symptoms of mental illnesses.*	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)

Appendix C. Contd.

8. *Once someone develops a mental illness, he or she will never be able to fully recover from it.*	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
9. *Mental illness is caused by family failure (disharmony) and brings shame.*	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
10. When I am distressed, I often feel dizzy, tired, and not hungry.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
11. If my child shows mental illness, I will definitely seek help from a psychologist or psychiatrist.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
12. I would trust the concerns of the school system for my child's	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)

Appendix C. Contd.

mental health.							
13. I put my family's wellbeing over my own.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
14. In school, I could not tell anyone when I was down or anxious	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
15. There are no effective treatments for mental illnesses.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
16. Mental illnesses prevent people from having normal relationships with others.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
17. Teachers expected me to be an A student.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
18. I don't think that I can really relax and be myself when I'm around someone with a	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)

Appendix C. Contd.

mental illness.							
19. If I had a mental health concern, I would try to seek help from a mental health professional.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
20. I probably wouldn't know that someone has a mental illness unless I was told.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
21. People with mental illnesses will remain ill for the rest of their lives.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
22. Stereotypes about my ethnicity, e.g., my accent, stop me from seeking help for mental illness.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
23. If my child experiences mental illness, I would seek help ONLY	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)

Appendix C. Contd.

from a priest or traditional healer.							
24. I hide my mental health issues to make my family happy.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
25. I would trust the school system to provide mental health services for my child.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
26. My parents would not understand my stress.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)
27. If I had a mental health concern, I would intend to seek help from a mental health professional.	1 (Completely disagree)	2 (Disagree)	3 (Somewhat Disagree)	4 (Neither Agree or Disagree)	5 (Somewhat agree)	6 (Agree)	7 (Completely agree)

Appendix D: Debriefing Form

Thank you for participating in this study. I am very appreciative of your participation as it is helping towards the completion of my graduate degree, and the information you have provided will go a long way in contributing to the knowledge base regarding mental health. As an Asian American myself, I wanted to understand the nature of stress and mental health issues in the Asian community (particularly after COVID related prejudice and racism) and how the Asian community deals with it.

Again, I thank you for your participation in this study. If you know of any friends or acquaintances who may be willing to participate in this study, please share the survey link with them. We request that you do not discuss the study with them until after they have had the opportunity to complete the survey. Prior knowledge of the survey can invalidate the results. We greatly appreciate your cooperation.

If you have any questions regarding this study, please feel free to contact the researcher (email: ajdye2@eiu.edu) or Dr. Haile Mariam (email: ahailemariam@eiu.edu).

Thinking about stressful events can distress some individuals. If so, we encourage you to seek support from Community Mental Health centers, Physicians, Counselors, or Therapists. Long-term stress can lead to physical problems, such as heart disease, and mental problems, such as anxiety or depression.

Thank you again for your participation.

Appendix E: Invitation to Participate Email to Organizations

Dear [Organization Name, President Name, Store Manager],

I am currently training to be a school psychologist at Eastern Illinois University. For my thesis, I am seeking the participation of Asians and Asian Americans, which includes "any person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam." Participants will be completing a survey regarding their perceptions of mental health and mental health help-seeking. I am writing to ask for your permission to send this survey to your [members, staff, etc.].

All information will be collected anonymously, and participation is completely voluntary. The survey will take about 15-20 minutes to complete. The link to the survey is below. Please forward the link to other Asians and Asian Americans, especially those from the older generation. I would greatly appreciate it!
https://eiu.co1.qualtrics.com/jfe/form/SV_ete9jRKCoayTrU2
Thank you for your time and consideration! I look forward to hearing from you!

Sincerely,
Austin Dye
School Psychology Graduate Student
Eastern Illinois University

Appendix F: Recruitment Flyer

EASTERN ILLINOIS UNIVERSITY

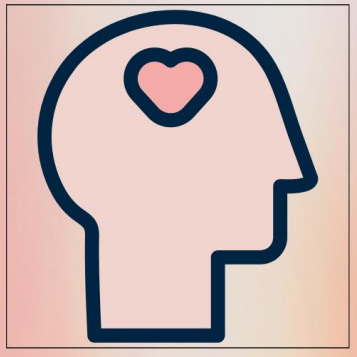
VOLUNTEERS NEEDED FOR RESEARCH STUDY ON ASIANS MENTAL HEALTH

You May Qualify If You

- Are 18 years or older
- Are of Asian descent

Potential Benefits

- Gaining perspectives about mental health
- Advancing knowledge about health among the Asian population



How To Participate

- Simply scan the QR code below with your phone camera!
- Type [SURVEY LINK] into your phone browser

For more information, you can contact the primary researchers Austin Dye (ajdye2@eiu.edu) or Dr. Haile Mariam (ahailemariam@eiu.edu)

Table 1.

Participant Demographics Information

		n	%
Sex			
	Female	74	72.5
	Male	28	27.5
Age			
	18-25 years	44	43.1
	26-35 years	12	11.8
	36-45 years	29	28.4
	46-55 years	13	12.7
	56-65 years	1	1.0
	66 years or older	3	2.9
Ethnic Origins			
	Armenia	1	1.0
	Bangladesh	1	1.0
	China	29	28.4
	India	23	22.5
	Japan	1	1.0
	Korea	3	2.9
	Laos	8	7.8
	Pakistan	4	3.9
	The Philippines	24	23.5
	Taiwan	2	2.0
	Thailand	2	2.0
	Vietnam	3	2.9
Length of Time in U.S.			
	Born in the U.S.	67	65.7
	1-5 years	1	1.0
	6-10 years	1	1.0

Table 1 Contd.

		n	%
	11-15 years	3	2.9
	16-20 years	6	5.9
	21-25 years	9	8.8
	More than 25 years	15	14.7
Generational Status			
	Immigrant	29	28.4
	1st Generation	59	57.8
	2nd Generation	9	8.8
	3rd Generation	3	2.9
	4th Generation	1	1
	Not sure	1	1
Educational Experience			
	Traditional Education	5	4.9
	Less than H.S.	2	2.0
	H.S. Graduate	32	31.4
	Associate degree	4	3.9
	B.A./B.S.	26	25.5
	Master's Degree	19	18.6
	Doctoral Degree	14	13.7

Table 2.

Seven Factors of the Adapted DMISS (Grouped by Generational Status)

		M	SD
Treatability			
	Immigrant	7.86	2.00
	1st Generation	7.27	1.60
	2nd Generation	6.78	1.56
Professional Efficacy			
	Immigrant	11.62	2.43
	1st Generation	11.68	1.83
	2nd Generation	11.00	2.92
Relationship Disruption			
	Immigrant	9.41	2.53
	1st Generation	7.29	2.31
	2nd Generation	7.78	2.17
Family Disruption			
	Immigrant	20.51	4.61
	1st Generation	22.68	4.12
	2nd Generation	25.00	5.85
Interpersonal Anxiety			
	Immigrant	6.59	2.60
	1st Generation	5.42	2.52
	2nd Generation	4.44	1.74
Visibility			
	Immigrant	8.28	1.49
	1st Generation	8.34	1.50
	2nd Generation	7.89	1.45
Recovery			
	Immigrant	5.76	2.63
	1st Generation	4.90	2.01
	2nd Generation	5.33	2.18

Table 3.

One-Way ANOVA Results of the Factors of the Adapted DMISS (Grouped by Generational Status)

	F	*p*
Interpersonal Anxiety	3.348	.039*
Family Disruption	4.026	.018*
Relationship Disruption	7.872	.001*
Treatability	1.797	.171
Professional Efficacy	.397	.674
Visibility	.354	.703
Recovery	1.474	.234

*Mean difference between groups is significant at the 0.05 level

Table 4.

Multiple Comparisons of Significant Group Differences of the Factors of the Adapted DMISS

Dependent Variable	*(A) Generation*	*(B) Generation*	*Mean Difference (A-B)*	*p*
Interpersonal Anxiety	*Immigrant*	1st Generation	1.16	.104
		2nd Generation	2.14	.067
	1st Generation	Immigrant	-1.16	.104
		2nd Generation	.98	.516
	2nd Generation	Immigrant	-2.14	.067
		1st Generation	-.98	.516
Family Disruption	*Immigrant*	1st Generation	-2.16	.086
		2nd Generation	-4.48*	.026
	1st Generation	Immigrant	2.16	.086
		2nd Generation	-2.32	.314
	2nd Generation	Immigrant	4.48*	.026
		1st Generation	2.32	.314
Relationship Disruption	*Immigrant*	1st Generation	2.13*	.000
		2nd Generation	1.64	.171
	1st Generation	Immigrant	-2.13*	.000
		2nd Generation	-.490	.832
	2nd Generation	Immigrant	-1.64	.171
		1st Generation	.490	.832

*Mean difference between groups is significant at the 0.05 level

Table 5.

Relationship Between ADMISS Factor Scores and Degree of Belief in Asian Values

ADMISS Factor	*Spearman's ρ*	*p*
Treatability	.082	.422
Professional Efficacy	.135	.186
Relationship Disruption	.275*	.006
Interpersonal Anxiety	.119	.247
Family Disruption	.127	.216
Visibility	.244*	.016
Recovery	.047	.649

*= Statistically significant at the 0.01 level

Table 6.

MHSIS Scores (Grouped by Generational Status)

		M	SD
Total MHSIS			
	Immigrant	5.67	1.35
	1st Generation	5.25	1.50
	2nd Generation	4.89	2.00

Table 7.

Relationship Between Participants' Cultural Identity and Belief in Asian/Western Values

	Spearman's ρ	*p*
Belief in Asian Values	-.452*	.000
Belief in Western Values	.124	.213
Importance of Asian Heritage	-.453*	.00

*= Statistically significant at the 0.01 level