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Mental health literacy of Koreans and Korean Americans

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Dissertation

MENTAL HEALTH LITERACY OF KOREANS AND KOREAN AMERICANS

by

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DEDICATION

To marginalized and underserved populations including Korean and Korean American emerging and young adults who are navigating independence, challenges of adulthood, cultural expectations, their identities, and physical and mental health. To my friends. To my younger self who gradually learned the importance of mental health.

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MENTAL HEALTH LITERACY OF KOREANS AND KOREAN AMERICANS

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ABSTRACT

Despite high rates of suicide and mental health concerns (Duldulao, Takeuchi, & Hong, 2009; Kisch, Leino, & Wilverman, 2005; Lee, Park, Lee, Oh, Choi, & Oh, 2018; World Health Organization, 2019), many Asian Americans including Koreans and Korean Americans do not seek mental health services (Lam & Zane, 2004; Lee, Hanner, Cho, Han, & Kim, 2008; Markus & Kitayama, 1991; Sue, Cheng, Saad, & Chu, 2012). Especially for Koreans and Korean Americans, stigma (Masuda & Latzman, 2011) as well as cultural values (e.g., Cheng, Leong, & Geist, 1993; Cheong & Snowden, 1990; Kim & Omizo, 2003; Tracey, Leong, & Glidden, 1986) can prevent them from seeking appropriate services. The current study compares Korean, Korean American, and non-Korean emerging and young adults' mental health literacy (Jorm, Korten, Jacomb, Christensen, Rodgers, & Pollitt, 1997), specifically mental health knowledge, confidence in finding appropriate mental health services, and attitudes towards mental disorders and treatment. A pilot study was conducted to tailor the Mental Health Literacy Scale (O'Connor & Casey, 2015) to answer the main research questions and examine internal consistency and validity. Analysis of variance (ANOVA) was used to assess the differences among the sociocultural groups (i.e., Koreans, Korean Americans, and non-Asians) and investigate individual and contextual influences (e.g., age, gender,

citizenship). The results demonstrated that (1) non-Asians have significantly higher mental health knowledge scores, higher self-efficacy, and less negative attitudes towards mental disorders compared to Koreans and Korean Americans and (2) there were no significant differences in the scores between Koreans and Korean Americans. The discussion section describes the importance of enhancing mental health literacy and increasing help seeking behavior for Koreans and Korean Americans and suggests cultural factors to consider in creating culturally appropriate outreach programs.

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CHAPTER I INTRODUCTION

Mental disorders, such as depression, have significant impact on individuals' daily functioning (American Psychiatric Association [APA], 2013). Without appropriate treatments or support, some individuals may experience debilitating day-to-day symptoms that interfere with work/school and lead to serious consequences including death by suicide (e.g., APA, 2013, Chan, Natekar, Einarson, & Koren, 2014; Substance Abuse and Mental Health Services Administration [SAMHSA], 2015; 10 Leading Causes of Death, 2015). Therefore, it is crucial that individuals with mental health concerns seek appropriate services to prevent risk, reduce symptoms, and enhance their psychological wellbeing. Unfortunately, many individuals do not typically seek mental health services, especially racial/ethnic minorities including Asian Americans (SAMHSA, 2012, 2014; U.S. DHHS, 2001). For example, in 2015, the second leading cause of death for Asian Americans was suicide; the rate of suicide for Asian Americans was significantly higher (e.g., 30.4% for ages between 15 and 24) than the rate for all other racial/ethnic groups in the U.S. (18.6% for the same age group; 10 Leading Causes of Death, 2015). Despite the high rates of suicide among Asian Americans, many do not seek mental health services (Lam & Zane, 2004; Lee, Hanner, Cho, Han, & Kim, 2008; Markus & Kitayama, 1991; Sue, Cheng, Saad, & Chu, 2012).

It is imperative to examine ways to encourage appropriate help seeking and provide culturally sensitive resources for all individuals. Yet, there is limited research on racial/ethnic minorities, specific ethnic groups' mental health, their cultures, and reasons behind low help seeking behaviors, thus limiting our ability to provide culturally

appropriate outreach programs or mental health services. Of the research that does exist, most focuses on broad racial groups, such as Asian Americans, White, African Americans, or Hispanics (Bauer, Chen, & Algeria, 2012; Gee, Ro, Gavin, & Takeuchi, 2008; SAMHSA, 2012, 2014, 2015; Sue et al., 2012; Wei, Hong, Takeuchi, & Mossakowski, 2012), even though each racial category consists of numerous ethnic populations with vast cultural differences. Because there is such within group variation, understanding one specific ethnic group can provide a better sense of their mental health, needs, and culturally sensitive outreach programs or services that would lead to increased help seeking.

Population of Interest

The specific populations of interest for this study are Korean American and Korean emerging and young adults (ages 18 through 34) living in the United States. The emerging and young adult group was chosen for the current study due to common challenges that come with independence. During this developmental stage, individuals typically become independent and learn to manage their physical and mental health care on their own. They are aging out of services for children (e.g., pediatrics) and may no longer be dependent on their parents' health insurance (Munson et al., 2012; Osgood, Foster, & Courtney, 2010). Thus, decisions about mental health help seeking are now the responsibility of the individual, making this an important age group to understand. Furthermore, there are large Korean American and Korean populations in the United States. Korean Americans were the fifth largest Asian American population (i.e., 1.8 million) in 2014 (US Census Bureau, 2016). In addition, there were approximately

64,000 South Korean international students, which was 6.5% of all international students in the United States in 2014 and 2015 (Institute of International Education, 2015).

Despite the large numbers, there is limited research on the prevalence of mental disorders and on culturally sensitive treatments for them. Thus, this study will fill an important gap in service use research.

Mental Health and Factors that Prevent Help Seeking

The existing research illustrates high levels of mental health concerns in Korean Americans and Koreans. Korean immigrants in the U.S. report the highest number of depression symptoms compared to other Asian American ethnic groups. For example, in a study with Chinese, Philippines, Japanese, and South Korean immigrants who are 18 years or older, South Koreans reported higher rates of depressive symptoms compare to the other ethnic groups (Kuo, 1984). Some other studies had similar findings (e.g., Min, Moon, & Lubben, 2005; Yeh, 2003). In 2011, over 27% of the Koreans in South Korea reported having at least one mental disorder in their lifetime (Cho et al., 2015). Although these high numbers indicate a need for mental health services, low service use was found among Asian American populations (Sue et al., 2012). Identifying factors that inhibit help seeking may illuminate ways to encourage using mental health services.

What Prevents Help Seeking? Common factors in the general population that inhibit help seeking for mental health concerns are social stigma, fear of treatment, fear of discussing emotions, worrying about effectiveness and risks, and reluctance for self-disclosure (Vogel, Wester, & Larson, 2007). For example, individuals who are thinking about seeking mental health services might worry about what others think about having a

psychological problem. For some, sharing their personal information with someone they do not know may feel uncomfortable. Stigma around mental health may be objectifying, labeling, and dehumanizing for those who are struggling with psychological and emotional distress (Masuda & Latzman, 2011). Therefore, many individuals have concerns about seeing a therapist, especially when they do not have a good understanding of confidentiality and ethical principles which were created there to protect clients (American Psychological Association, 2017).

For Korean Americans and Koreans, there may be additional concerns that inhibit seeking help from mental health resources. Review of existing literature revealed no known research on specific Korean values, however, research on values in Asian cultures broadly suggests some challenges for Koreans and Korean Americans. Some Asian cultures value emotional self-discipline by inhibiting emotional expressions (Leong, 1986). That is, individuals with such values may avoid discussing emotions with others and believe expressing emotions shows weakness. In some Asian cultures, asking for help from someone outside the family is viewed as a “loss of face” and, as a result, people may feel ashamed to talk about any concerns (Cheong & Snowden, 1990; Tracey, Leong, & Glidden, 1986). These examples demonstrate that Korean Americans and Koreans may have difficulty expressing emotions and seeking help.

In addition, English language proficiency, generational status (e.g., first generation American or 1.5 generation American), and acculturation may influence the likelihood of seeking help from mental health professionals. Le Meyer and colleagues (2009) found that American-born Asian Americans were more likely to use mental health

services compared to immigrant Asian Americans. Furthermore, third-generation Asian Americans were more likely to use mental health services than their first-generation counterparts, and second-generations were less likely to use alternative resources (e.g., acupuncture, herbal therapy) than their first-generation counterparts (Spencer, Chen, Gee, Fabian, & Takeuchi, 2010). Among those who sought services, Asian Americans were more likely to stay in treatment and less likely to drop out when their mental health professionals were Asian American as well (Flaskerud & Liu, 1991). Especially immigrants and/or first-generation Americans whose English is not fluent may feel reluctant to seek mental health services due to communication difficulties in English. They may be more likely to ask for advice from families and friends than from a therapist (Narikiyo & Kameoka, 1992). These are only a few examples of issues that may prevent Korean American and Korean emerging and young adults from seeking mental health services. More research is needed to better understand their barriers for help seeking.

Mental Health Literacy (MHL)

Mental Health Literacy (MHL) is defined as knowledge of mental disorders that can help detect, manage, and prevent problems and can lead to improving one's health as well as others' (Jorm, Korten, Jacomb, Christensen, Rodgers, & Pollitt, 1997). Despite the fact that the public has much knowledge about physical health (e.g., healthy eating habits, exercising, preventing sexually transmitted infections), the information on mental health is not as widespread. Without mental health knowledge, individuals may be challenged to identify symptoms of mental disorders, seek professional help, and find relevant resources (Jorm, 2012). It is essential to note that mental health knowledge alone

is often not enough. Even when individuals know about mental health concerns, they may not seek appropriate resources for various reasons such as a lack of time, motivation, and fear. In order to provide a connection between the knowledge and potential action for mental health, MHL outlines four important components.

The components of MHL are: (1) information on acquiring and maintaining mental health, (2) knowledge of mental disorders and appropriate treatment, (3) reducing stigma of mental disorders, and (4) enhancing appropriate and effective help seeking (Jorm, 2012; Kutcher, Wei, & Coniglio, 2016). The MHL model highlights the importance of enhancing mental health knowledge as well as encouraging help seeking. In this study, I will examine the second component of the MHL model (i.e., knowledge of mental health and treatment) within the population of Korean and Korean American emerging and young adults living in the United States. The second component includes mental health knowledge (i.e., how much they know about mental disorders and treatments), self-efficacy (i.e., a belief in one's capacity to seek appropriate mental health resources; Bandura, 1997), and attitudes towards mental disorders and treatments (i.e., thoughts on individuals with mental disorders and on those who seek mental health services; Jorm, 2012; O'Connor & Casey, 2015). Examining the knowledge, self-efficacy, and attitudes can help identify what Korean and Korean American emerging and young adults know and what types of psychoeducation is needed. This information will be beneficial for future outreach programs and mental health services to provide targeted psychoeducation to encourage discussions on mental health among those populations. Ongoing discussions about mental health and treatment, in the long run, may help reduce

the stigma within Korean and Korean American communities and encourage seeking help from mental health professionals. Therefore, the contribution of this dissertation is its examination of Korean and Korean American emerging and young adults' knowledge, self-efficacy, and attitudes towards mental disorders and treatments as well as the identification of a need for psychoeducation for this group, who are often marginalized and underserved (Sue et al., 2012) in the field of mental health.

Problem Statement

In sum, a significant number of Asian American young adults, including Korean and Korean Americans, struggle with mental health concerns yet do not typically seek help from appropriate services. Research has identified some of the contributing factors for low help seeking, such as stigma, cultural values, and lack of information on mental health/disorders. Unfortunately, no known research has examined specific Asian American ethnic groups' mental health knowledge, self-efficacy, and attitude. The mental health knowledge, self-efficacy, and attitude of specific groups are important to know so that we can provide appropriate and targeted psychoeducation on mental health for those groups, reduce stigma, and identify ways to increase appropriate help seeking.

Purpose of the Study

The purpose of the current study is to examine (1) the level of knowledge Korean and Korean Americans have about mental health, (2) the level of confidence in finding appropriate mental health resources, and (3) their attitudes towards mental disorders and treatments. Specifically, this study will compare those sociocultural groups to the general population (i.e., non-Asian) in the U.S. and examine potential contextual influences, such

as age, gender, how long an individual has lived in the U.S., and generational status (e.g., first or 1.5 generation).

Research Questions

The research questions and hypotheses are:

1. Does the accuracy of the information on mental disorders and treatments differ among these sociocultural groups: non-Asian, Korean American, and Korean emerging and young adults?
 - a. Hypothesis A: Non-Asian emerging and young adults know more about mental disorders and treatments compared to their Korean American and Korean counterparts.
 - b. Hypothesis B: Korean American emerging and young adults know more about mental disorders and treatments compared to their Korean counterparts.
2. Does the level of confidence in finding appropriate mental health resources differ among these sociocultural groups?
 - a. Hypothesis A: Non-Asian emerging and young adults have more confidence in seeking appropriate mental health resources compared to their Korean American and Korean counterparts.
 - b. Hypothesis B: Korean American emerging and young adults have more confidence in seeking appropriate mental health resources compared to their Korean counterparts.

3. Do attitudes towards mental disorders and treatments differ amongst these sociocultural groups?
 - a. Hypothesis A: Non-Asian emerging and young adults have less negative attitudes compared to their Korean American and Korean counterparts.
 - b. Hypothesis B: Korean American emerging and young adults have less negative attitudes compared to their Korean counterparts.
4. Are individual and contextual factors, such as age, gender, generational status, and level of education, significantly related to mental health knowledge, self-efficacy, and attitudes?
 - a. Hypothesis A: There will be differences in the knowledge, self-efficacy, and attitudes based on gender, generational status, and how long an individual has lived in the United States.
 - b. Hypothesis B: There will be no significant differences based on age.
5. Does the level of the knowledge of mental disorders and treatments differ based on whether they (1) have been in mental health treatment or not, (2) know someone with a mental disorder, (3) know someone who has been in mental health treatment, and (4) whether the effect differs based on the group membership (i.e., Korean, Korean American, non-Asian emerging and young adults).
 - a. Hypothesis A: Individuals who have been in mental health treatment know more about mental disorders and treatments than those who have not been in treatment.

- b. Hypothesis B: Those who know someone with a mental disorder know more about mental disorders and treatments than those who do not know anyone with a mental disorder.
 - c. Hypothesis C: Those who know someone who has been in mental health treatment know more about mental disorders and treatments than those who do not know anyone who has been in treatment.
 - d. Hypothesis D: The relationship between these three predictors and the level of mental health knowledge will vary by group membership such that the relationship will be strongest amongst non-Asians, followed by Korean Americans, and finally Korean emerging and young adults.
6. Does the level of confidence in finding appropriate mental health resources differ based on whether they (1) have been in mental health treatment or not, (2) know someone with a mental disorder, (3) know someone who has been in mental health treatment, and (4) whether the effect differs based on the group membership (i.e., Korean, Korean American, non-Asian emerging and young adults).
- a. Hypothesis A: Individuals who have been in mental health treatment have more confidence in seeking appropriate mental health resources than those who have not been in treatment.
 - b. Hypothesis B: Those who know someone with a mental disorder have more confidence in seeking appropriate mental health resources than those who do not know anyone with a mental disorder.

- c. Hypothesis C: Those who know someone who has been in mental health treatment have more confidence in seeking appropriate mental health resources than those who do not know anyone who has been in treatment.
 - d. Hypothesis D: The relationship between these three predictors and the level of self-efficacy will vary by group membership such that the relationship will be strongest amongst non-Asians, followed by Korean Americans, and finally Korean emerging and young adults.
7. Do attitudes towards mental disorders and treatments differ based on whether they (1) have been in mental health treatment or not, (2) know someone with a mental disorder, (3) know someone who has been in mental health treatment, and (4) whether the effect differs based on the group membership (i.e., Korean, Korean American, non-Asian emerging and young adults).
- a. Hypothesis A: Individuals who have been in mental health treatment have less negative attitudes compared to those who have not been in treatment.
 - b. Hypothesis B: Those who know someone with a mental disorder have less negative attitudes compared to those who do not know anyone with a mental disorder.
 - c. Hypothesis C: Those who know someone who has been in mental health treatment have less negative attitudes compared to those who do not know anyone who has been in treatment.
 - d. Hypothesis D: The relationship between these three predictors and the attitudes towards mental health will vary by group membership such that

the relationship will be least negative amongst non-Asians, followed by Korean Americans, and finally Korean emerging and young adults.

In the next two chapters, I will explore the important literature relevant for the current study and the methods employed. Chapter Two examines the literature on mental health of Asian Americans, low help seeking, contextual influences (e.g., acculturation as a common stressor for Korean American and Korean young adults), and mental health literacy. Chapter Three provides information on the population of interest, recruitment procedures, study instruments, and proposed statistical analyses for examining differences in mental health knowledge, self-efficacy, and attitudes.

CHAPTER II LITERATURE REVIEW

Introduction

Underutilization of mental health services among racial/ethnic minority groups is prominent in the U.S.; among adults, 17.1% of Caucasians, 15.6% of American Indians and Alaska Natives, 8.6% of Black, 7.3% of Hispanics, and 4.9% of Asians sought mental health services between 2008 and 2012 (SAMHSA, 2015). However, few studies have sought to understand racial/ethnic populations' challenges in seeking those services (Sue et al., 2012). In the United States, where diversity of the general population has been growing, it is essential to explore potential differences among racial/ethnic minorities' mental health and identify ways to increase both awareness of mental health issues and resources devoted to promoting their wellbeing.

Population of Interest

Koreans and Korean Americans compose a large portion of the racial/ethnic minorities in the United States. Approximately 1.8 million Korean Americans lived in the U.S. in 2014, making them the fifth largest Asian American population (US Census Bureau, 2016). Approximately 38% of Korean Americans were born in the U.S., and 62% were foreign born (USCB, 2016). Importantly, this group is predominantly comprised of individuals from South Korea, as a miniscule number of North Korean immigrants/refugees have been reported to reside in the U.S. (~186 refugees; Shim, 2015). Given this, throughout the present paper the term "Korean Americans" is used to represent those individuals of South Korean descent, more specifically Korean American emerging and young adults. In addition to Korean Americans living permanently in the

U.S., the Institute of International Education (2015) stated that there were approximately 64,000 South Korean international students (6.5% of all the international students) in the U.S. in 2014 and 2015. For this literature review, both of these populations (i.e., Korean American and South Korean emerging and young adults in the U.S.) will be examined. That is, although they may have been born in two different countries and have varying levels of acculturation, these individuals are presumed to have comparable cultural values as evidenced by similar traditional norms, such as respect for elders (Hyun, 2001); however, this supposition is still in need of empirical investigation on specific cultural/ethnic values in emerging/young adults.

Lack of Research on Korean Americans and Koreans

It is important to underscore the fact that the current body of research on mental health service utilization lacks information on subpopulations, including Korean Americans and Koreans. Rather, most of the national data on differences in mental health concerns examine broad racial groups, such as Asian Americans, African Americans, Hispanics, and Caucasians (CDC, 2015a; CDC, 2015b; OMH, 2014; SAMHSA, 2014). Alternatively, some reports have provided information on broad subgroups, such as Southeast Asian refugees experiencing post-traumatic stress disorder (PTSD) due to trauma before and after their immigration to the U.S. (Office of Minority Health, 2014). Most research on Asian Americans only includes a few of the ethnic groups from Asia despite the existence of many Asian ethnic identities and cultural differences (e.g., Chang, Chen, & Alegria, 2014). Thus, what is currently known about Asian Americans in research has been drawn from broad conclusions and may not apply to specific

subpopulations. That is, despite some broad cultural similarities, significant differences in Asian subpopulations' values, norms, and environments may lead to varied cultural influence on their development (e.g., Guan, Park, & Lee, 2009; Kim, Edwards, & Shapiro, 2015; Lee et al., 2013; Yi & Park, 2003). Research on Korean Americans or South Koreans is minimal, and more is needed to understand their cultural values and to develop culturally appropriate services.

Mental Health and Prevalence of Mental Disorders among Koreans Living in the U.S.

Prior to examining culturally appropriate mental health services, it is important to understand mental health and disorders. Mental health has significant, albeit often invisible, impacts on daily functioning (American Psychiatric Association, 2013). Mental disorders can cause clinically significant disruption in thoughts, emotions, and/or behaviors and can be related to dysfunction in an individual's social, personal, and/or occupational domains as well as other important aspects of their lives (American Psychiatric Association, 2013). Severity, progression, and outcome of mental disorders are not determined by diagnosis but by the level of distress and dysfunction related to the disorders (Anthony & Liberman, 1992; Sanderson & Andrews, 2002; Sartorius, 2009). For instance, social anxiety, which may only seem to interfere with social interactions, can be debilitating if individuals decide to stay home to avoid any human encounters. On the other hand, individuals with schizophrenia can learn to cope with symptoms (e.g., auditory and visual hallucinations), and have jobs and family (Ralph & Corrigan, 2005). Untreated mental disorders can have a particularly detrimental impact. Pregnant women

with untreated depression are at risk of having postpartum depression, engaging in risky behaviors (e.g., smoking, using illegal substances, and drinking alcohol) and dying by suicide (Chan et al., 2014). There may be violence towards oneself and/or others due to untreated mental disorders (Knopf, 2014). These examples illustrate the importance of seeking mental health services to prevent negative consequences and receive support in reducing symptoms and enhancing daily functioning. Unfortunately, many individuals with mental disorders often do not seek help; this is especially true for individuals from racial/ethnic minority backgrounds (SAMHSA, 2012, 2014; U.S. DHHS, 2001).

Despite concerns with the representativeness of information gathered from broad-based studies of Asians, information on the prevalence of mental disorders among these broadly defined sub-populations in the U.S. may provide a beneficial starting point. For example, in these past studies, a significant number of Asian Americans have been found to report experiencing mental disorders. According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 2014), 13.1% of Asian Americans who were 18 years or older reported a past-year mental disorder, and 3.1% reported having serious suicidal thoughts. The national average for past-year mental illness was 18.1%, and by racial categories, 16.3% for African Americans, 21.2% for American Indians and Alaska Natives, and 15.6% for Hispanics/Latinos. Fewer Asian Americans appeared to have reported a past-year mental disorder compared to other racial/ethnic groups. Further, among Asian Americans ages 12 and older, 4.1% reported using illegal drugs, 14.5% had binge alcohol use, and 4.5% reported having substance dependence or abuse (SAMHSA, 2014). Likewise, the Centers for Disease Control and Prevention (CDC; 2015b) stated

1.9% of Asian American adults reported having serious psychological distress in the past 30 days in 2013 and 2014. Suicide was the second leading cause of death for Asian and Pacific Islanders (ages 15 and 34) between 2005 and 2015 in the United States (10 Leading Causes of Death, 2015). In 2015 alone, suicide was 30.4% of all deaths in the age group for ages between 15 and 24, and 20% for ages between 25 and 34. These rates of suicide are significantly higher than the numbers (18.6%, 14% respectively by age group) for all races combined in the United States (10 Leading Causes of Death, 2015). Together, these findings suggest that a substantial number of Asian Americans suffer from various mental disorders and psychological distress.

Unfortunately, as noted above, there is limited information on the prevalence of mental disorders among specific ethnic groups, such as Korean Americans and Koreans in the U.S. However, the few studies that have been conducted with this specific subpopulation suggest mental health needs consistent with that reported for the larger racial group. For example, according to Kuo (1984), a sample of 112 Chinese, 128 Philippine, 129 Japanese, and 105 South Korean immigrants ages 18 and older reported experiencing higher rates of depressive symptoms compared to Caucasians. In addition, Korean immigrants reported the highest symptoms of depression compared to other Asian groups (Kuo, 1984). Similarly, other studies found that Korean immigrants indicated higher levels of depressive symptoms than other racial/ethnic groups (e.g., Min, Moon, & Lubben, 2005; Yeh, 2003). A more recent study found that 27.6% of Koreans in South Korea had at least one lifetime mental disorder as indicated in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV; Cho et al., 2015). Taken together, these

findings suggest a prevalence of mental disorders in Korean Americans and Koreans that indicates a need for mental health services.

Low Help Seeking

Despite mental health concerns and significant stressors, countless studies highlight low help seeking behavior in Asian Americans in the United States (Lam & Zane, 2004; Lee, Hanner, Cho, Han, & Kim, 2008; Markus & Kitayama, 1991; Sue et al., 2012). Specifically, regardless of age, gender, and geographic locations, Asian Americans have been found to be less likely to seek professional mental health services compared to Caucasians (SAMHSA, 2012, 2014; U.S. DHHS, 2001). For example, recent work has shown that only 34.1% of Asian Americans with a diagnosable mental disorder sought mental health services compared to 41% of the general population with mental disorders (Abe-Kim et al., 2007; Wang et al., 2005). SAMHSA (2014) found that 13.3% of Asian Americans reported having a mental disorder, yet only 6.8% reported receiving mental health treatment. In another study, Park et al. (2013) found that, in a sample of 475 Korean Americans adults (18 years or older), 23% reported having depressive symptoms while only 8.5% reported using mental health services. Overall, these findings highlight that low rates of professional help seeking are evident in Asian Americans, including among Korean Americans. Exploring contributing factors to those low rates may help identify ways to reduce barriers to receiving mental health services.

Attitudes towards Mental Disorders and Treatment

Broadly studied, several factors have been reported to inhibit professional help seeking for mental health concerns, including social stigma, fear of treatment, fear of

emotions, anticipated effectiveness and risks, and self-disclosure (Vogel, Wester, & Larson, 2007). For Koreans and Korean Americans, a lack of Asian or Korean psychologists may impact their willingness to seek and stay in treatment (Lee, Chan, Ditchman, & Feigon, 2014).

Social stigma in help seeking for mental health concerns is defined as negative stereotypes/attitudes toward mental disorders and treatments (Ahmedani, 2011). Individuals with the stigmatized condition can be perceived as inferior. Social stigma is a systemic issue and can be significant barriers to treatment (Ahmedani, 2011; Deane & Chamberlain, 1994). Individuals with mental health concerns are frequently labeled with stigmas, such as being insecure, dependent, unsociable, awkward, weak, and disturbed due to a lack of emotional control (King, Newton, Osterlund, & Baber, 1973; Oppenheimer & Miller, 1988; Sibicky & Dovidio, 1986). Significant stigma has been associated with mental health concerns among Asian Americans in particular. Many Asian Americans perceive that emotional distress is a result of personality weakness, lack of self-control, and negative thoughts and that emotional self-control is a virtue (Kung, 2004; Lee et al., 2009a; Leong & Lau, 2001; Yi & Tidwell, 2005). Stigma associated with mental health concerns negatively impacts not only the individuals but also their families because Asian American families may perceive those concerns as family disgrace (Lin & Cheung, 1999; Okazaki, 2000). Further, one study found that Asian American college students who were less able to tolerate stigma were less likely to seek help (Ting & Hwang, 2009). These findings underscore how much stigma impedes Asian Americans from seeking mental health services.

Fear of treatment refers to feeling anxious due to adverse expectations around seeking mental health services (Kushner & Sher, 1989; Vogel et al., 2007). Some may worry about how mental health professionals perceive their clients and problems, and about mental health professionals making them feel obligated to be in treatment. Some studies have found that those who do not seek mental health services reported the greatest fear of treatment (Kushner & Sher, 1989; Pipes, Schwarz, & Crouch, 1985) and that the fear led to avoidance or delay in help seeking (Amato & Bradshaw, 1985). Although there is a lack of research on the treatment fear among Koreans or Korean American emerging/young adults specifically, stigma and worries around others' negative attitudes towards mental health concerns may imply that they have fear of being judged by mental health professionals. Without having an experience of being in therapy and not seeing visible engagement in treatment in families and communities, Koreans and Korean American emerging/young adults may lack knowledge and have inaccurate expectations, such as mental health professionals having the sole power over treatment instead of clients. These sorts of misconceptions may then result in fear of treatment; a supposition in need of empirical investigation.

Fear of emotions may arise due to concerns around discussing painful emotions and experiences; this may be especially difficult for individuals who do not disclose their emotions easily (Komiya, Good, & Sherrod, 2000). Vogel and Wester (2003) found that amongst college students, discomfort about self-disclosure is associated with negative attitudes towards help seeking and decreased intentions of going to counseling. Compared to non-Asian American college students, their Asian American counterparts

were less likely to endorse emotions that are socially unacceptable (e.g., anger, disappointment, nervousness, anxiety, depression, hostility, and envy) and were more likely to be concerned about others' perceptions of their subjective experience (Johnson, 2007). These findings may reflect that Asian American college students are less likely to express emotions that seem socially unacceptable because they are worried about other people's perceptions. As an example of a specific emotion, Mauss and colleagues (2010) found that Asian Americans were less likely to report and display intense expressions of anger compared to European Americans, even though the two groups had similar physiological responses to anger. These studies demonstrate that Asian Americans may have negative attitudes towards emotional experiences and potentially inhibit their emotional expressions even when strong emotions (e.g., anger) are present. Specific to Koreans and Korean Americans, these findings are tied to their belief that emotional self-control is a virtue according to Confucius beliefs (Yi & Tidwell, 2005). That is, Koreans and Korean Americans may have a tendency towards emotional reservation and stoicism and may fear expressing emotions, especially with mental health professionals who are not family members or friends.

Some individuals may not seek help due to the anticipated utility and risks – or perceptions of the potential usefulness and dangers of seeking services (Vogel & Wester, 2003; Vogel et al., 2007). Bayer and Peay (1997) found that individuals were less likely to seek mental health services when they reported feeling uncertain about benefits. Limited research has examined Koreans and Korean Americans' knowledge of benefits/risks of therapy. The stigma of mental health concerns may be restricting enough

to inhibit Koreans and Korean Americans from learning about mental disorders and from even considering benefits of psychotherapy. For example, the majority of Korean Americans viewed Alzheimer's Disease as untreatable insanity, which can impede early detection and intervention (Lee, Lee, & Diwan, 2009b). Further, another study found that Korean American older adults with lower levels of acculturation and those with more depressive symptoms had less overall information on depression (Jang, Gum, & Chiriboga, 2011). Once Korean and Korean American emerging/young adults have better understanding of mental health/disorders, they may have more questions or concerns regarding potential usefulness and dangers of seeking services. Therefore, it is important to provide comprehensive information on what therapy means, benefits, confidentiality, and its limits in order to make an informed decision about seeking mental health services. This way, Korean and Korean American emerging/young adults can have accurate information as they are examining the anticipated utility and risks of seeking treatment.

Another factor that is critical and may need to be examined to increase help seeking is self-disclosure. Self-disclosure in therapy may be distressing for those who do not typically share personal information. This aspect of therapy may encourage or discourage people from seeking professional help (Vogel & Wester, 2003; Vogel et al., 2007). For instance, in one study, individuals who were less likely to disclose their information reported having less positive attitudes towards help seeking (Kelly & Achter, 1995). When the participants felt less comfortable about disclosing negative information, they were more likely to have negative attitude and decreased intent of help seeking (Vogel & Wester, 2005; Vogel et al., 2005), such that individuals who reported greater

discomfort in sharing personal information were five times less likely to seek help (Diala et al., 2000). As discussed earlier, Koreans and Korean Americans may have difficulty with self-disclosure due to the stigma of mental illness and help seeking. Consequently, they may have negative attitudes towards psychotherapy due to a focus on self-disclosure and may avoid seeking professional help.

When racial minority clients want to seek mental health treatment, they may be looking for mental health professionals from a similar racial/cultural background. Unfortunately, there are fewer racial minority psychologists, and those clients may not end up in treatment because they are unable to find providers (Lee et al., 2014). It is also found that racial minority clients are more likely to stay in treatment if they have a therapist from a similar background (Lee et al., 2014). When clients find a mental health professional from a different background, they may believe that their therapist does not understand their experience/culture, may have difficulty disclosing important information, and may stop treatment as a result.

Mental health services, such as group or individual therapy, require disclosing personal information and expressing emotions. These inhibiting factors – social stigma, fear of treatment, fear of emotions, anticipated effectiveness and risks, and self-disclosure – may prevent anyone from seeking the services regardless of cultural backgrounds. In addition, difficulty finding a mental health professional from a similar background can cause an additional hurdle. Without understanding what therapy is, including its benefits, risks, and/or social stigma, help seeking can be especially intimidating for Koreans and Korean American emerging/young adults whose cultural values have taught them to be

emotionally reserved. Therefore, it is essential to examine Korean cultural values to identify ways to reduce the impact of those inhibiting factors and to encourage appropriate help seeking.

Potential Contributing Cultural Factors

A number of factors have been suggested to increase risk for mental health difficulties among racial/ethnic minority groups living in the U.S. in general, and Koreans specifically. Among these, acculturation may be a common contributor which increases stress in Korean American and Korean emerging/young adults.

Acculturation. Acculturation refers to a process of psychological and cultural changes as individuals are exposed to a new culture (Berry, Phinny, Sam, & Vedder, 2006; Shin & Lach, 2014). Research has shown that acculturation is associated with immigrant populations' physical and mental health (e.g., Buscemi, Williams, Tappen, & Blais, 2012; Shin & Lach, 2014), such as higher rates of diabetes and obesity, and barriers to accessing health services. Individuals who move to the United States often experience additional stress as they manage typical daily hassles along with issues accompanying acculturation to a new country (Shin, Han, & Kim, 2007). Adjusting to a new lifestyle and work/academic environment, learning English and new customs, understanding and using different nonverbal language, and meeting people from different cultural backgrounds are just a few examples of experiences that could contribute to acculturative stress. Even those who are American-born and second or third generation may experience acculturation gaps with their parents due to generational differences and bi- or multicultural identity development (Kim & Park, 2011; Lau et al., 2005; Lee, Choe,

Kim, & Ngo, 2000). Hence, acculturation is imperative to examine as a stressor, as it can contribute to mental health concerns and may act as a hindrance to treatment seeking.

Acculturative stress can have a significant impact on Korean American and Korean emerging/young adults residing in the U.S. For example, some studies have shown positive correlations between acculturative stress and symptoms of depression in Korean immigrants and in Korean international students in the U.S. (Choi, 1997; Lee, Koeske, & Sales, 2004). Due to the Confucius beliefs (e.g., respect for parents/elders, social harmony) in Korean culture, parental pressure and conforming to the collective cultural values may contribute to the acculturative stress (Choi, 1997; Hyun, 2001). For example, Korean Americans may have parents who immigrated from South Korea and instill Korean culture and values on their children. As a result, Korean American emerging/young adults may be struggling to navigate both their parents' Korean culture and the American culture outside of home. Similarly, Korean emerging/young adults who moved to the U.S. for education and/or immigration, may experience cultural clashes between their Korean culture and less familiar American culture. They may also feel obligated to meet certain expectations from their families in Korea while they are starting a life in the U.S. (Choi, 1997; Hyun, 2001). It is common for Korean parents to remind their children that parents sacrifice for their children's academic performance which directly impacts the family's honor (Dundes, Cho, & Kwak, 2009). This can add the additional pressure onto the pressure already experienced from studying in a new culture and language. Lee and Padilla (2014) found that Korean students who identified as international students in the U.S. indicated higher levels of acculturative stress compared

to Korean Americans who were American citizens or immigrants. These are some examples of unique acculturation stress which Korean American and Korean emerging/young adults may struggle with and which may have a negative influence on their mental health.

Cultural Values and Norms. As eluded to above, Koreans' and Korean Americans' cultural values and norms can be inconsistent with and prevent help seeking (Diala et al., 2000). For example, some cultures value avoiding thinking about problems as the best way to deal with them (Cheng, Leong, & Geist, 1993). In a sample of 151 college students, Asian college students reported greater symptoms of mental health disorders compared to Caucasian counterparts, yet Asian students were more likely to seek help for academic and career related issues than for mental health (Cheng et al., 1993). Asian students might be seeking help for academic issues because that is more acceptable to them and allows them to avoid thinking about their person problems. Some Asian cultures also value self-discipline and repressing emotions (Leong, 1986). Seeking help outside of family and friends is considered as shame or "loss of face" in some Asian cultures (Cheong & Snowden, 1990; Tracey et al., 1986). This, too, may be a factor that influences mental health seeking behaviors. Indeed, compared to those who reported less adherence to Asian cultural values, Asian American college students (25.6% Korean Americans) who reported greater adherence were less likely to seek professional help after controlling for age, gender, generational status, and prior counseling experience (Kim & Omizo, 2003). In this study, Asian cultural values included restraining strong negative emotions (e.g., withholding pain, anger, and suffering) and conforming to family

and societal norms. Since violation of these values can also lead to feelings of shame and hurting one's family reputation (Kim & Omizo, 2003), individuals may choose to remain silent about their concerns.

English Language Proficiency and Help Seeking. Depending on where they were born (e.g., United States vs. South Korea) and/or grew up, Asian Americans have various levels of English proficiency and acculturation. Therefore, it is important to explore how generational status and English proficiency impact mental health service utilization. Le Meyer and colleagues (2009) examined generational status and level of English language proficiency and found that Asian Americans who had a probable disorder and were third or later generation sought professional services significantly more often (62.6%) than second (28.8%) or first-generation Asian Americans (30.4%). In addition, Asian Americans with low English proficiency were less likely to use mental health services and more likely to use alternative resources. Alternative resources included seeking treatment/information from religious/spiritual advisors, healers, doctors of oriental medicine, chiropractors, and spiritualists. The rate of mental health service use was twice as much for U.S-born Asian Americans than for immigrant Asian Americans (Le Meyer et al., 2009). Another study demonstrated similar findings: (1) third-generation Asian Americans were three times more likely to use mental health services compared to first-generations, and (2) second-generations were less likely to use alternative resources compared to first-generations (Spencer et al., 2010). These findings suggest that generational status, language proficiency, and/or familiarity with the alternative resources may impact Korean Americans and Koreans' willingness to seek

professional mental health services. These factors must be considered in an effort to increase appropriate help seeking behaviors in Korean and Korean American emerging/young adults.

For Asian Americans, the stereotypes of being seen as a “perpetual foreigner” and assumed to have having low English language proficiency may lead to increased distress and perceived discriminatory treatment (Zhang, Hong, Takeuchi, & Mossakowski, 2012). Spencer and colleagues (2010) found that perceived discrimination and low English proficiency in Asian Americans were correlated with increased use of informal/alternative resources, such as asking for help from religious leaders, friends, family members, and indigenous healer. Therapy involves articulating problems and emotional difficulties, which may be more difficult for individuals who are learning English as a foreign language (Le Meyer et al., 2009). Furthermore, first generation Korean Americans may be less likely to seek services because they are not familiar with the healthcare system in the U.S. Language proficiency may also limit understanding of the nuances involved in seeking and receiving mental health care. Therefore, generational status and English language proficiency may contribute to low rates of help seeking behavior in Koreans and Korean Americans.

Use of Alternative Resources for Mental Health Concerns. Another potential factor that prevents Korean Americans and Koreans from seeking mental health services is the use of alternative resources. As noted above, Asian Americans may seek services from a broader range of providers — for instance, Le Meyer et al. (2009) reported that, among those with diagnosable disorders, 28% used mental health services, 16% used

primary care, and 11% used alternative treatments for their mental health symptoms. A national psychiatric epidemiological study found that Asian Americans were more likely to use complementary and alternative medicines than psychiatric services (Choi & Kim, 2010). Among those with a probable DSM-IV diagnosis, 45.2% reported using alternative medicines alone (e.g., acupuncture, biofeedback, energy healing, herbal therapy, homeopathy, and prayer/spiritual practice), 26.1% reported using alternative medicine and mental health services, and 28.7% used only mental health services (Choi & Kim, 2010). In a study comparing Japanese Americans to European Americans, researchers found that the former group was more likely to ask for advice from their family and friends than to talk with a therapist (Narikiyo & Kameoka, 1992). Even Asian Americans with suicidal ideation or attempts have been reported to seek nonprofessional sources or medical help rather than mental health services (Chu, Hsieh, & Tokars, 2011). Although having other available support is valuable, primary care services, alternative treatments, friends, and family may not be sufficient, particularly since symptoms of mental disorders are often invisible and difficult to understand. These places are also unlikely to employ evidence-based practices that have been specifically designed to treat mental health issues. Unfortunately, these alternative resources may replace mental health services for Korean and Korean American emerging/young adults.

Though there is less research examining alternative resources' impact on help-seeking behaviors, additional cultural factors may also play a role. These include: lack of knowledge of mental health concerns (e.g., Jang et al., 2011; Lee et al., 2009a), different understanding of health and treatment from American culture, services that are not

culturally appropriate, and a lack of mental health professionals who speak the same language as their clients (Le Meyer et al., 2009; U.S. DHHS, 2001). These cultural factors may also be essential to consider in reducing barriers to professional mental health services and assisting Korean Americans' and Koreans' decision to seek help.

In summary, although much research has highlighted the importance of increasing Asian Americans' help seeking behavior and culturally appropriate services and has identified many potential barriers to help seeking, low utilization rates of mental health services remains (SAMHSA, 2012, 2014; Sue et al., 2012; U.S. DHHS, 2001). In addition, most research has examined Asian Americans as a group, even though there are vast ethnic and cultural differences that may necessitate distinct culturally appropriate recommendations for each ethnic group (Holland & Palaniappan, 2012).

Increasing Mental Health Awareness and Help Seeking

As described herein, there are many factors (e.g., stigma) which may be preventing Korean and Korean American emerging/young adults from acquiring appropriate resources for mental health concerns. Cultural norms or values may not easily be changed within a short period of time. Acculturative stress may always exist due to differences in cultures. However, acknowledging these factors and incorporating them into interventions and/or prevention programs while also addressing barriers that may be more readily altered (e.g., having a language interpreter or programs in Korean/English) may serve to enhance help-seeking behavior. Korean and Korean American emerging/young adults, specifically, may benefit from outreach/prevention programs that provide information on mental health, disorders, and relevant resources. The programs

must be designed to be culturally sensitive, reduce stigma, and allow discussions so as to enhance the individual's understanding of mental health and treatment. Such effort, in the long run, may encourage help seeking from professional mental health services.

In order to create culturally appropriate outreach and prevention programs, research is needed to explore Korean American and Korean emerging/young adults' mental health knowledge, their confidence in seeking appropriate mental health resources, and their attitudes towards mental disorders and treatments. No known research has examined this topic. Therefore, the current study will explore this topic so as to provide essential information for potential outreach and prevention programs that can encourage discussions on mental health.

Mental Health Literacy (MHL)

For physical health, research has been translated into practical forms, such as prevention programs, early intervention services, treatments, and the media options. As a result, the public can have access to appropriate information to help make informed decisions. For example, sex education is provided at some schools to promote safe sex and reduce sexually transmitted infections. The public has general knowledge of healthy eating habits and specific illnesses, such as cancer and heart attack. Unfortunately, not enough information on mental health concerns is available to the public in various settings, including schools or jobs. As a result, people have difficulty identifying specific mental health issues, delay or avoid seeking professional help, and are uncertain about necessary resources (Jorm, 2012). Drawing from this information, Jorm and colleagues (1997) examined mental health literacy (MHL) to increase mental health awareness and

spread the knowledge of appropriate resources.

What does Mental Health Literacy mean? MHL is defined as knowledge (1) related to mental disorders in order to enhance their detection, management, and/or prevention, and (2) that can lead to benefiting one's own health as well as others' (Jorm et al., 1997). It is essential to highlight the second part of this definition because knowledge alone is often insufficient. Individuals may have an understanding that regular exercise is beneficial for their physical health, yet not everyone engages in exercising for a range of reasons, such as a lack of time, motivation, and/or access to a gym. Similarly, people may not apply what they know about mental health. Individuals may need additional support to apply appropriate coping skills or seek necessary help. Therefore, MHL focuses on connecting knowledge to the potential action for mental health.

The vital components of MHL are (1) information on acquiring and maintaining mental health, (2) knowledge of mental disorders and appropriate treatment, (3) reducing stigma of mental disorders, and (4) enhancing appropriate and effective help seeking (Jorm, 2012; Kutcher, Wei, & Coniglio, 2016). MHL is a framework that can be used to identify ways to increase mental health awareness and appropriate help seeking. The current study will examine the second component of the MHL model (i.e., knowledge of mental health and treatment) within the population of Korean and Korean American emerging and young adults living in the United States. The second component includes mental health knowledge, self-efficacy, and attitudes (Jorm, 2012; O'Connor & Casey, 2015). Examining the knowledge, self-efficacy, and attitudes can help identify what Korean and Korean American emerging and young adults know and what types of

psychoeducation is needed. Self-efficacy can also show how confident they feel in seeking appropriate treatments. The information on the knowledge, self-efficacy, and attitudes will be beneficial for future outreach programs and mental health services to provide targeted psychoeducation to encourage discussions on mental health among those populations. Ongoing discussions about mental health and treatment, in the long run, may help reduce the stigma within Korean and Korean American communities and encourage seeking help from mental health professionals.

Mental Health Knowledge of Different Populations. There is a growing research on mental health knowledge of various populations in different parts of the world. Australians ages 15 to 25 years were better able to recognize depression, posttraumatic stress disorder (PTSD), and psychosis compared to social anxiety (Yap, Reavley, & Jorm, 2012). In a similar study, almost 75% of Australians who were 15 years or older were able to recognize depression, approximately one third were able to recognize schizophrenia and PTSD, and only 9.2% were able to label social phobia (Reavley & Jorm, 2011). In a study in the United Kingdom, participants (i.e., 46.1% of White, 40.4% of Asian, 7.9% of mixed race, and 5.6% Black) between the ages of 18 and 62 were better able to correctly label depression (72.5% of the participants) and schizophrenia (65.8%) compared to borderline personality disorder (2.3%; Furnham, Lee, & Kolzeev, 2015). In a qualitative study, many older African Americans (age 60 and older) in the United States were aware of Alzheimer's and depression, whereas some could only mention common stressors, such as loneliness and death of a family member (Stansbury, Peterson, & Beecher, 2013). These studies indicate that some mental

disorders, such as depression, are more known than others. This may be due to common stressors within a developmental stage and the media's portrayal of mental disorders and treatments (e.g., commercials on psychiatric medications).

A few studies examined mental health knowledge in Korean Americans. Less than half (42.6%) of older Korean American participants (60 years and older) were able to correctly answer questions related to depression in late life (Jang et al., 2011). In addition, those with lower levels of depression had lower scores on knowledge of depression; and those with more severe depressive symptoms had lower scores as well (Jang et al., 2011). Another study examined Korean Americans' knowledge of Alzheimer's disease and found that they perceived the disease as insanity (Lee et al., 2009). Furthermore, memory loss as a result of the disease was considered an aging process (Lee et al., 2009). This may lead to a delay in recognition and treatment of the disease. These studies provide Korean Americans' mental health knowledge of specific disorders. The current study examines knowledge of mental disorders and treatments broadly. This can help identify what Korean and Korean American emerging and young adults know and do not know about mental health.

Self-Efficacy. Albert Bandura (1997) defined self-efficacy as "beliefs in one's capabilities to organize and execute the courses of action required to manage prospective situations" (p.2). Self-efficacy in the context of the current study refers to individuals' belief in their capacity to seek appropriate mental health resources. People are more likely to engage in tasks in which they feel confident. On the other hand, feeling less confident can lead to avoidance (Bandura, 1997). Therefore, it is important to investigate

confidence in seeking appropriate mental health resources in addition to mental health knowledge. Even when individuals understand mental disorders, they may feel blocked by a lack of confidence in finding relevant resources. The current study examines Korean American and Korean emerging and young adults' confidence in seeking appropriate mental health resources. Findings may underscore a need to enhancing the confidence to encourage appropriate help seeking.

Attitudes towards Mental Disorders and Treatments. Attitudes towards mental disorders and treatments are influenced by social stigma (Ahmedani, 2011; Vogel et al., 2007). In the United States, racial/ethnic minorities, including Black, Asian Americans, and Hispanics, are less likely to perceive that they need mental health treatment compared to Caucasians (Breslau et al., 2017). Those differences in perceived need are comparable to the differences in the rate of mental health service utilization (Breslau et al., 2017). For Asian Americans, stigma of mental disorders and cultural values, such as emotional self-control and conformity to social norms, create significant social and systemic barriers from seeking professional help (Nguyen & Bornheimer, 2014; Sue et al., 2012; Wong et al., 2010b). For example, memory loss from Alzheimer's disease is considered as an aging process that Korean Americans often delay treating even though treatment can decelerate the progression of the disease (Lee et al., 2009). Having negative or false attitudes towards mental disorders can lead to detrimental consequences. Therefore, it is essential to understand how Korean and Korean American emerging/young adults perceive mental disorders and treatments and identify ways to change their attitudes.

Mental Health Literacy Scale (MHLS; O'Connor & Casey, 2015)

Studying mental health literacy in any population requires a sound instrument that captures the nature of the construct. The MHLS was developed by O'Connor and Casey (2015) as a scale-based measure of mental health literacy (MHL). The MHLS items were derived from the definition of MHL, which includes recognition, knowledge, and attitude (Jorm, 1997; O'Connor & Casey, 2015). Recognition refers to an ability to recognize mental disorders. Knowledge includes knowing how to seek relevant information, risk factors, cause of mental disorders, typical recommended treatments, and available professional services. Attitude refers to attitudes that can help recognize and seek appropriate support (Jorm, 1997; O'Connor, Casey, & Clough, 2014; O'Connor & Casey, 2015). The MHLS consists of 35 items that participants rate on a 4 or 5-point Likert scale (e.g., 1 – very unlikely, 2 – unlikely, 3 – likely, and 4 – very likely), yielding a maximum score of 140 and minimum score of 35. Individuals who know more about mental health/disorders will have higher scores compared to those who do not know as much.

The MHLS showed a good test-retest reliability ($r(69)=.797$). The content validity was examined via triangulation. The MHLS was significantly higher for individuals who had a mental disorder ($p < .001$), for those who had seen a mental health professional ($p < .001$), and for those who had a family member or friend with a mental disorder ($p < .001$), compared to those who did not. The MHLS was higher for professionals in the field of mental health compared to those in the community ($p < .001$). To assess the construct validity, the MHLS scores were compared to the General Help-Seeking Questionnaire (GHSQ; Wilson, Deane, Ciarrochi, & Rickwood, 2005). The MHLS had a

significant positive correlation with the GHSQ, which indicates that individuals whose mental health literacy is higher are more likely to seek help from formal ($p=.005$) and informal services ($p<.001$), and overall ($p<.001$). The MHLS had no correlation with the Kessler Psychological Distress Scale 10 (K10; Kessler et al., 2002), which demonstrates that the level of distress is not correlated with MHL (O'Connor & Casey, 2015).

Mental Health Literacy: Scale Revision

Close examination of the original MHLS reveals several limitations that detract from its usefulness. Thus, in the pilot study of this dissertation, five main revisions were made (Mental Health Literacy Scale – Revised; MHLS-R) and the new version of the scale was assessed for validity and reliability. First, the Likert scale used in the original scale was not appropriate for some of the questions included in it. The questions asked whether participants know certain facts about mental disorders or not. However, the Likert scale (e.g., very unlikely, unlikely, likely, and very likely) appears to be asking about someone's opinion. In addition, the answers are mostly "very likely" or "likely," and the scale only had few reverse score items. This means a person can answer the same way for many of the questions and receive a higher score, even if they do not know much about mental health. Therefore, the Likert scale was removed from the knowledge subscale of the MHLS. Second, in the MHLS – R each question in the knowledge subscale was rewritten with symptoms of a specific mental disorder, and the choices for the answer became three mental disorders (e.g., generalized anxiety disorder, social anxiety disorder, depression), "I do not know," and "not a disorder." The MHLS-R includes a total of nine questions that ask about specific disorders, one of which has "not

a disorder” as an answer.

Third, the original MHLS included two ambiguous questions that were deleted in the revision. For example, the original scale asked “to what extent do you think it is likely that in general in Australia, women are more likely to experience a mental illness of any kind compared to men?” This question can be interpreted in different ways. Some participants might think they are answering if there was a higher rate of depression in women compared to men. Some might consider the fact that men are less likely to be socialized to express emotions that they may not seek help, which may appear as lower rates of depression. Another question from the original study asks about cognitive behavior therapy, which many people would not be aware of unless you are a mental health professional.

Fourth, the MHLS included country-specific language and mental disorder names that are not current. For example, the survey asks about what happens in Australia, which needs to be changed to the United States. Also, the word, dysthymia needs to change to persistent depressive disorder to align with the DSM-V (American Psychiatric Associations, 2013), which is the most recent version. To keep the language consistent throughout the scale, the phrase, “mental disorder,” was used instead of “mental illness.”

Lastly, the scoring of the MHLS was changed because one score that represents mental health literacy does not capture the different constructs the scale measures. For the revision, the scale was divided into three subscales, which were mental health knowledge, self-efficacy, and attitudes toward mental health. This provided different scores for each construct. For the mental health knowledge subscale, each correct answer

led to 3 points, “I don’t know” was 0 point, and each incorrect answer led to -1 point. This provided a more accurate score for knowledge because negative points can compensate for answers participants guessed. This is a common procedure to measure the knowledge and to eliminate the probability of getting a higher score due to guessing on standardized tests, such as the Scholastic Aptitude Test Subject Tests; College Board, 2018). For the self-efficacy and perception/attitude subscales, 0 point was for neutral answers (e.g., “neither agree or disagree”), negative points for answers indicated lower self-efficacy and more negative perception/attitude, and positive points for answers that indicated higher self-efficacy and less negative perception/attitude. This scoring system helped interpreting survey results in a way that is aligned with the purpose of the study.

The revisions mentioned above were made to address problems in the original MHLS. In addition, three questions were added to respond to the findings in the research literature. O’Connor and Casey (2015) found that the Mental Health Literacy Scale had positive correlations with (1) having a mental disorder, (2) having been in treatment, (3) having a family member or a friend with a mental disorder, and (4) having a family member or a friend in treatment. These findings indicate that those factors may be confounding variables for the current study. Thus, three questions were added to examine these potential confounding variables. The options that participants could indicate on the demographic questionnaire were: (1) I have been in mental health treatment, (2) I know someone with a mental disorder, (3) I know someone who has been in mental health treatment. These questions were also helpful in examining participants’ familiarity or knowledge of mental health and treatments.

Before assessing the main research questions (i.e., the main study) for this dissertation, a pilot study was conducted to examine validity and internal consistency of the MHLS-R. Revising the original scale, MHLS, to the MHLS-R was important because the revised version (1) measures mental health knowledge more accurately than the MHLS, (2) has the language that is aligned with the DSM-V (e.g., changing from dysthymia to persistent depressive disorder), and (3) is more applicable to the audience in the United States because the MHLS was created in Australia (O'Connor & Casey, 2015). The pilot study's research questions and hypotheses are:

1. Do the knowledge scores of the MHLS-R differ among these groups: (1) Individuals who are in the field of mental health (i.e., graduate students in mental health programs and mental health professionals) vs. those who are not, (2) individuals who have been in mental health treatment vs. those who have not, (3) individuals who know someone with a mental disorder vs. those who do not, and (4) individuals who know someone that has been in mental health treatment vs. those who do not?
 - a. Hypothesis A: Individuals who are in the field of mental health have higher knowledge scores than those who are not.
 - b. Hypothesis B: Individuals who have been in mental health treatment have higher knowledge scores than those who have not.
 - c. Hypothesis C: Individuals who know someone with a mental disorder have higher knowledge scores than those who do not.

- d. Hypothesis D: Individuals who know someone that has been in mental health treatment have higher knowledge scores than those who do not.
2. Do the self-efficacy scores of the MHLS-R differ among these groups: (1) Individuals who are in the field of mental health (i.e., graduate students in mental health programs and mental health professionals) vs. those who are not, (2) individuals who have been in mental health treatment vs. those who have not, (3) individuals who know someone with a mental disorder vs. those who do not, and (4) individuals who know someone that has been in mental health treatment vs. those who do not?
 - a. Hypothesis A: Individuals who are in the field of mental health have higher self-efficacy scores than those who are not.
 - b. Hypothesis B: Individuals who have been in mental health treatment have higher self-efficacy scores than those who have not.
 - c. Hypothesis C: Individuals who know someone with a mental disorder have higher self-efficacy scores than those who do not.
 - d. Hypothesis D: Individuals who know someone that has been in mental health treatment have higher self-efficacy scores than those who do not.
3. Do the attitude scores of the MHLS-R differ among these groups: (1) Individuals who are in the field of mental health (i.e., graduate students in mental health programs and mental health professionals) vs. those who are not, (2) individuals who have been in mental health treatment vs. those who

have not, (3) individuals who know someone with a mental disorder vs. those who do not, and (4) individuals who know someone that has been in mental health treatment vs. those who do not?

- a. Hypothesis A: Individuals who are in the field of mental health have higher attitude scores than those who are not.
 - b. Hypothesis B: Individuals who have been in mental health treatment have higher attitude scores than those who have not.
 - c. Hypothesis C: Individuals who know someone with a mental disorder have higher attitude scores than those who do not.
 - d. Hypothesis D: Individuals who know someone that has been in mental health treatment have higher knowledge scores than those who do not.
4. Do relationships exist between or among the questions in each subscale (i.e., knowledge, self-efficacy, and attitude) of the MHLS-R?
- a. Hypothesis A: The questions in the knowledge subscale are correlated to each other.
 - b. Hypothesis B: The questions in the self-efficacy subscale are correlated to each other.
 - c. Hypothesis C: The questions in the attitude subscale are correlated to each other.

Mental health literacy is a useful framework to understand knowledge of mental disorders and treatments, identify ways to reduce stigma, and enhance appropriate help seeking (Jorm, 2012; Kutcher et al., 2016). The current study on mental health literacy on

Korean and Korean American emerging and young adults examined mental health knowledge, self-efficacy, and attitudes towards mental disorders and treatments. This study can provide essential information for outreach programs and mental health services to ensure that those populations have necessary knowledge and confidence to identify mental disorders and seek appropriate services.

Summary of Current Literature

The current body of research has highlighted significant mental health concerns and low help seeking for Asians, including Koreans and Korean American emerging and young adults, in the United States (SAMHSA, 2012, 2014; Sue et al., 2012; U.S. DHHS, 2001). Despite alarmingly high rates of mental health concerns, especially depression and suicide, Asian Americans have been found to be less likely to seek professional mental health services compared to Caucasians (Lee et al., 2008; Sue et al., 2012). A number of potential factors have been proposed to contribute to low help seeking among these populations (e.g., social stigma, cultural values of emotional self-control and norm-conformity that contradict help-seeking behavior, and seeking alternative resources), though little empirical work has been done to fully explore the influence of these factors or potential mechanisms for addressing them.

Although social stigma or cultural values may not be changed easily, the current study can first explore to see how much Korean American and Korean emerging and young adults know about mental health/disorders and treatments compared to the general population in the U.S. This can outline what types of information on mental health would be useful to enhance mental health literacy. Investigating confidence in seeking

appropriate mental health resources can identify ways to increase self-efficacy. The current study will also examine those populations' attitudes towards mental disorders and treatments. I suspect that Korean and Korean American emerging/young adults have more negative attitudes towards mental disorders and treatments. Lastly, I will examine which individual and contextual factors significantly related to the knowledge, self-efficacy, and attitudes subscales. I hypothesize that mental health literacy would depend on the generational status, how long an individual has lived in the U.S., and/or other cultural factors and that age would not have a significant relationship with mental health knowledge, self-efficacy, or attitudes towards mental health. Gender may play a role in help seeking as men are less likely to seek help for mental health concerns compared to women (Wendt & Shafer, 2015). Findings may provide important knowledge in (1) underscoring a need to provide psychoeducation on mental health/disorders and treatments for Korean American and Korean emerging/young adults and (2) examining what kind of psychoeducation is needed to enhance mental health literacy. In future studies, the current study's findings may provide essential information for outreach programs, psychoeducation groups, and mental health services in Korean American and Korean communities to initiate discussions on mental health and the importance of treatment in hope to increase seeking help from mental health services and reduce stigma.

Purpose of the Study

The purpose of the current study is to examine (1) the level of knowledge Korean and Korean Americans have about mental health, (2) the level of confidence in finding appropriate mental health resources, and (3) their attitudes towards mental disorders and

treatments. Specifically, this study will compare those sociocultural groups to the non-Asian population in the U.S. and examine potential individual and contextual influences, such as age, gender, how long an individual has lived in the U.S., and generational status (e.g., first or 1.5 generation).

CHAPTER III PILOT STUDY AND METHODS FOR MAIN STUDY

This chapter will describe the pilot study and the research design for the main study, which examined mental health literacy of Korean, Korean American, and non-Asian emerging and young adults. This chapter is divided into two main sections: the pilot study and the methods section of the main study. The pilot study section consists of procedures, participants, measures, results, and discussion. The methods section of the main study consists of procedures, participants, and measures.

The purpose of the main study is to examine (1) the level of knowledge Korean and Korean Americans have about mental health, (2) the level of confidence in finding appropriate mental health resources, and (3) their attitudes towards mental disorders and treatments. Specifically, this study will compare those sociocultural groups to the non-Asian population in the U.S. and examine potential individual and contextual influences, such as age, gender, how long an individual has lived in the U.S., and generational status (e.g., first or 1.5 generation).

Pilot Study: Methods

Prior to examining the main research questions, a pilot study was conducted to examine the validity and internal consistency of Mental Health Literacy Scale – Revised (MHLS-R). The original scale, Mental Health Literacy Scale (MHLS; O’Connor & Casey, 2015), has limitations, such as some questions appear to be asking for an opinion when their purpose is to examine participants’ knowledge. Revising the original scale, MHLS, to the MHLS-R was important because the revised version (1) measures mental health knowledge more accurately than the MHLS, (2) has the language that is aligned

with the DSM-V (e.g., changing from dysthymia to persistent depressive disorder), and (3) is more applicable to the audience in the United States because the MHLS was created in Australia (O'Connor & Casey, 2015). Individuals who are in the field of mental health would typically know more about mental health than those who are not. Therefore, the MHLS-R's knowledge scores for those two groups were assessed to see if the MHLS-R can accurately differentiate individuals who know more about mental health. The internal consistency of the self-efficacy and attitude/beliefs subscales of MHLS-R were examined by factor analysis.

The purpose of the pilot was to evaluate the validity and internal consistency of the MHLS-R before it was used to answer the main research questions for this dissertation. This chapter has three sections: (1) procedures, (2) participants, (3) measures, and (4) results.

Procedures

The pilot was approved by the Institutional Review Board (IRB) at Boston University. Data were collected via an online survey using Boston University's Qualtrics system. The surveys were distributed through various universities' listservs, in university/college classes, on social media (e.g., Facebook, LinkedIn, Twitter), and other professional listservs, such as the listserv for Massachusetts Psychological Association – included so as to reach professionals in the mental health field.

The eligibility criteria were as follows: (1) individuals who were 18 years or older, and (2) were able to read and understand English. The target populations were individuals who were graduate students and professionals in the field of mental health

and those who were not in the field. Having individuals with professional training in mental health helped compare the differences in the level of mental health literacy between those who have more knowledge of mental health and those who do not.

Participants

A total of 266 participants started the survey for the pilot study. Complete data was available for 177 participants. Of the 177 participants, 20.9% were male, 78.5% were female, and 0.6% identified as nonbinary. The ages ranged between 18 and 73. Approximately 5% of participants identified as Hispanic or Latino/a/x, 12% as Asian, 2% as Black or African American, 70% White, 9% biracial, 1% multiracial, and 1% as other. Approximately 52.5% of the participants were single, 41.8% were married, living together, or in a domestic partnership, 0.6% were widowed, 2.3% were divorced, and 2.8% identified as other. About half of the sample (48.6%) had been in mental health treatment, whereas 51.4% had not. Approximately three quarters (74.6%) of the participants knew someone with a mental disorder, while 25.4% did not. About a half of the sample (53.1%) reported that their family was middle class growing up, 23.7% reported lower middle class or below, and 23.3% reported upper middle class or above. Approximately 4.5% had a high school diploma or equivalent, 11.3% some college education, 2.8% had a 2-year college degree, 27.7% a 4-year college degree, 39.5% had master's degree, 10.2% had doctoral degree, and 4% had other. Of 177 participants, 13.6% were college students studying psychology. Approximately 24% were graduate students studying mental health related subjects and/or mental health professionals.

Measures

Participants were asked to complete a survey which consisted of the demographic questionnaire and a revised version of the MHLS (i.e., MHLS-R).

Demographic Questionnaire

A demographic questionnaire (see Appendix A) was developed for this study to examine individual factors (e.g., age, gender, education level) that may influence mental health literacy. The questionnaire collected information on participants' age, gender, race/ethnicity, marital/family status (e.g., married, single), highest level of education, socioeconomic status of the family when growing up, job, and experience related to mental health (e.g., in treatment, as a mental health professional). Whereas parental socioeconomic status while growing up was requested, it is important to note that this variable must be examined and understood cautiously. It is challenging to compare the socioeconomic status of families from different parts of the U.S., which have different contextual situations and realities (e.g., city vs. rural area). Furthermore, participants might not have an accurate sense of their parents' income depending on how much the parents talked about it. The survey inquired about their attitudes (i.e., When you were growing up, which best describes your family's economic class?) to investigate the influence socioeconomic status on the mental health literacy.

Mental Health Literacy Scale – Revised (MHLS-R)

The MHLS, which was designed to examine people's mental health knowledge, self-efficacy in finding appropriate mental health resources, and attitude towards mental health and treatment (O'Connor & Casey, 2015), was revised in the pilot study to address

some of the original scale's limitations. The revised version of the scale – MHLS-R (see Appendix B) – was assessed for validity and internal consistency in the pilot study before answering the research questions for the main study.

The MHLS-R consists of 39 questions, including 13 questions to examine the knowledge of mental health and treatment, 5 questions to assess self-efficacy around finding appropriate mental health resources, 16 questions regarding the attitude towards mental health/treatment, and 5 open-ended questions. The open-ended questions explore people's opinions about mental health and treatment but are not examined as part of this dissertation (see Appendix 1). The knowledge subscale questions mainly list symptoms and ask participants to identify which mental disorder best accounts for the symptoms. For example, one question asks, "Someone experiences a low mood for two or more weeks, has a loss of pleasure or interest in their normal activities, experiences changes in their appetite and sleep, and may have thoughts of death with/without a specific plan. Which best describes this condition?" The answer choices are: (1) major depressive disorder, (2) persistent depressive disorder, (3) bipolar disorder, (4) I am not sure, and (5) not a disorder. This subscale also has some questions about confidentiality and what would or would not be helpful for mental health. For example, one question asks, "Mental health professionals are bound by confidentiality; however, there are certain conditions under which this does not apply. To what extent do you think it is likely that the following is a condition that would allow a mental health professional to break confidentiality: if your problem is not life-threatening and they want to assist others to better support you." The answer choices are: (1) unlikely and (2) likely.

The self-efficacy subscale presents the participant with a list of statements regarding their confidence in seeking mental health treatment. For example, one question says, “I have access to resources (e.g., primary care physician, internet, friends) that I can use to seek information about mental disorders.” The answer choices are: (1) strongly disagree, (2) disagree, (3) neither agree or disagree, (4) agree, and (5) strongly agree.

The attitude subscale presents a list of statements and questions about what people think about mental disorders or treatment. For example, one question states, “people with mental disorders could snap out of it if they wanted or tried hard enough.” The answer choices are (1) strongly disagree, (2) disagree, (3) neither agree or disagree, (4) agree, and (5) strongly disagree. Another question states, “How willing would you be to spend an evening socializing with someone with a mental disorder?” The answer choices are (1) definitely unwilling, (2) probably unwilling, (3) neither willing or unwilling, (4) probably willing, and (5) definitely willing.

In developing the MHLS-R, three questions were added to the original MHLS to respond to O’Connor and Casey’s (2015) research findings, which indicated that the MHLS had positive correlations with (1) having a mental disorder, (2) having been in treatment, (3) having a family member or a friend with a mental disorder, and (4) having a family member or a friend in treatment. These may be confounding variables for the current study as well. Therefore, the three questions were added: (1) I have seen a therapist one or more times, or have received some other mental health services, (2) Has an immediate or extended family member been diagnosed with a mental disorder or been in mental health treatment, and (3) Has a significant other, close friend, classmate, or a

co-worker been diagnosed with a mental disorder or been in mental health treatment?

The MHLS-R is scored by subscale (i.e., knowledge, self-efficacy, and attitude) in order to provide different scores for each construct. The knowledge subscale uses a common procedure for standardized tests (e.g., the Scholastic Aptitude Test Subject tests; College Board, 2018) to measure the knowledge and eliminate the probability of getting a better score due to guessing. For the questions that ask to identify mental disorders, participants get 3 points for each correct answer, 0 points for “I don’t know,” and -1 point for an incorrect answer. The purpose of this subscale is to measure how much people know about mental health. As people may get a question correct by guessing, an incorrect answer will lead to a deduction, a third of the full point value, to compensate for the correctly guessed answers. This can help the final score reflect what participants actually know about mental health. The other questions that have two answer choices receive 1 point for the correct answer and 0 for the incorrect answer.

The self-efficacy and attitude subscales have similar scoring system. For the self-efficacy subscale, participants receive positive scores when they indicate more confidence and receive negative scores when they indicate less confidence. That is, they receive 2 points for Strongly Agree, 1 point for Agree, 0 points for Neither Agree or Disagree, -1 point for Disagree, and -2 points for Strongly Disagree. Some of the attitude questions are presented in a negative form. As a result, participants receive 2 points for Strongly Disagree, 1 point for Disagree, 0 points for Neither Agree or Disagree, -1 point for Agree, and -2 points for Strongly Agree. That is, strongly disagreeing indicates a positive attitude, thus receiving positive points. Part of the attitude questions ask about

how willing participants would be to interact with individuals with mental disorder. They receive 2 points for Definitely Willing, 1 point for Probably Willing, 0 point for Neither Willing or Unwilling, -1 point for Probably Unwilling, -2 points for Definitely Unwilling. This scoring system helps interpret the survey results in a way that is aligned with the purpose of the study.

Pilot Study: Results

The following section will report the results of the descriptive and preliminary analyses and the factor analyses for Study1. All analyses were conducted using SPSS Version 25.0 (IBM, 2017). Results will be reported for each of the three subscales of the MHLS-R: mental health knowledge, self-efficacy, and attitude towards mental disorders and treatments. Under Descriptive and Preliminary Statistics, I will first present the means and standard deviations of the three subscales of the revised scale, independent samples *t*-test, and the validity of the knowledge section. Under Exploratory Factor Analysis, I will demonstrate the internal consistency of the self-efficacy and attitude subscales.

Descriptive and Preliminary Statistics

Means and standard deviations were calculated for each subscale of the MHLS-R. Descriptive results were calculated for both the total group and for sub-groups formed by the following participant characteristics: (1) professional experience in mental health, (2) personal history of mental health treatment, (3) family member and/or friend with a mental disorder, and (4) family member and/or friend who has been in mental health treatment. Results are also summarized in Tables 1-3. Cohen's *d* was used to examine the

effect size between the two comparison groups (Cohen, 1992). For Cohen's d , $d = .2$ is a small effect, $d = .5$ is a medium effect, and $d = .8$ is a large effect (Cohen, 1992).

Knowledge. Examination of the means in the mental health knowledge subscale (see Table 1) demonstrated that individuals who are graduate students in the mental health field and/or mental health professionals had a higher mean ($M = 24.6$, $SD = 5.4$) compared to those who are not in the field ($M = 18.7$, $SD = 7.0$). This difference was significant, $t(176) = -5.0$, $p < .001$, $d = .94$. When comparing individuals who reported to have been in treatment or not, the mean score for those who have been in treatment was higher ($M = 21.9$, $SD = 6.5$) than those who have not ($M = 18.4$, $SD = 7.2$). This difference was significant, $t(176) = -3.3$, $p = .001$, $d = .51$. Individuals who knows someone with a mental disorder had a higher knowledge score ($M = 21.4$, $SD = 6.5$) than those who did not know anyone with a mental disorder ($M = 16.3$, $SD = 7.4$). This difference was significant, $t(176) = -4.4$, $p < .001$, $d = .73$. Individuals who knows someone that has been in mental health treatment had a higher average score ($M = 21.6$, $SD = 6.4$) than those who did not know ($M = 16.6$, $SD = 7.6$). This difference was significant $t(176) = -4.5$, $p < .001$, $d = .71$. Taken as a whole, these results support the validity of the knowledge subscale of the MHLS-R.

Table 1
Independent Samples t-test for the Knowledge subscale

	<i>M</i>	<i>SD</i>	<i>t-ratio</i>	<i>p</i>	<i>d</i>
Mental Health Professionals (<i>n</i> = 43)	24.6	5.4	-5.0	< .001	.94
Non-Mental Health Professionals (<i>n</i> = 135)	18.7	7.0			
History of Treatment (<i>n</i> = 87)	21.9	6.5	-3.3	.001	.51
No History of Treatment (<i>n</i> = 91)	18.4	7.2			
Family/Friend's History of Mental Disorders (<i>n</i> = 132)	21.4	6.5	-4.4	< .001	.73
No Family/Friend's History of Mental Disorders (<i>n</i> = 46)	16.3	7.4			
Family/Friend's History of Mental Health Treatment (<i>n</i> = 125)	21.6	6.4	-4.5	< .001	.71
No Family/Friend's History of Mental Health Treatment (<i>n</i> = 53)	16.6	7.6			

Self-efficacy. The *t*-test for the self-efficacy scores showed (see Table 2) that graduate students in mental health related field and/or mental health professionals had a higher mean ($M = 8.2, SD = 2.3$), relative to those who are not in the field had a lower mean ($M = 5.6, SD = 3.1$). This difference was significant, $t(176) = -5.0, p < .001, d = .95$. Individuals who have been in treatment had a higher self-efficacy mean score ($M = 6.9, SD = 3.3$) compared to those who have not ($M = 5.6, SD = 2.9$). This difference was significant, $t(176) = -2.8, p = .006, d = .42$. The mean self-efficacy score for those who know someone with a mental disorder was higher ($M = 6.7, SD = 2.7$) than those who do not ($M = 4.7, SD = 3.8$). This difference was significant, $t(176) = -3.9, p < .001, d = .61$. The mean self-efficacy score for those who know someone that has been in mental health treatment was higher ($M = 6.8, SD = 2.7$) than those who do not ($M = 4.6, SD = 3.5$). This difference was significant, $t(176) = -4.6, p < .001, d = .70$. These results support the validity of the self-efficacy subscale of the MHLS-R.

Table 2
Independent Samples t-test for the Self-Efficacy Subscale

	<i>M</i>	<i>SD</i>	<i>t-ratio</i>	<i>p</i>	<i>d</i>
Mental Health Professionals (<i>n</i> = 43)	8.2	2.3	-5.0	< .001	.95
Non-Mental Health Professionals (<i>n</i> = 135)	5.6	3.1			
History of Treatment (<i>n</i> = 87)	6.9	3.3	-2.8	.006	.42
No History of Treatment (<i>n</i> = 91)	5.6	2.9			
Family/Friend's History of Mental Disorders (<i>n</i> = 132)	6.7	2.7	-3.9	< .001	.61
No Family/Friend's History of Mental Disorders (<i>n</i> = 46)	4.7	3.8			
Family/Friend's History of Mental Health Treatment (<i>n</i> = 125)	6.8	2.7	-4.6	< .001	.70
No Family/Friend's History of Mental Health Treatment (<i>n</i> = 53)	4.6	3.5			

Attitude towards Mental Disorders and Treatments. Examination of the means in the attitude subscale (see Table 3) demonstrated that Graduate students and mental health professionals had a higher mean ($M = 23.6, SD = 6.2$) compared to those who are not in the mental health field ($M = 19.9, SD = 8.4$). The difference was significant, $t(176) = -2.7, p = .007, d = .51$. The mean attitude score for individuals who have been in mental health treatment had a higher average score ($M = 22.9, SD = 7.4$) compared to those who have not ($M = 18.7, SD = 8.1$). The difference was significant, $t(176) = -3.6, p < .001, d = .54$. The mean attitude score for individuals who know someone with a mental disorder had a higher average score ($M = 22.2, SD = 7.1$) compared those who do not ($M = 16.7, SD = 9.2$). The difference was significant, $t(176) = -4.2, p < .001, d = .67$. The mean attitude score for those who know someone that has been in mental health treatment had a higher average score ($M = 23.0, SD = 6.6$) compared to those who do not ($M = 15.46, SD = 8.8$). The difference was significant, $t(176) = -6.4, p < .001, d = .98$. These results support the validity of the attitude subscale of the MHLS-R.

Table 3
Independent Samples t-test for the Attitude Subscale

	<i>M</i>	<i>SD</i>	<i>t-ratio</i>	<i>p</i>	<i>d</i>
Mental Health Professionals (<i>n</i> = 43)	23.6	6.2	-2.7	.007	.51
Non-Mental Health Professionals (<i>n</i> = 135)	19.9	8.4			
History of Treatment (<i>n</i> = 87)	22.9	7.4	-3.6	< .001	.54
No History of Treatment (<i>n</i> = 91)	18.7	8.1			
Family/Friend's History of Mental Disorders (<i>n</i> = 132)	22.2	7.1	-4.2	< .001	.67
No Family/Friend's History of Mental Disorders (<i>n</i> = 46)	16.7	9.2			
Family/Friend's History of Mental Health Treatment (<i>n</i> = 125)	23.0	6.6	-6.4	< .001	.98
No Family/Friend's History of Mental Health Treatment (<i>n</i> = 53)	15.5	8.8			

Factor Analysis

Factor analysis was used to examine the internal consistency of the questions for the self-efficacy and attitudes subscales. As the knowledge subscales examined whether a person knows certain information or not (i.e., symptoms of mental disorders and treatment), it does not require factor analysis or a measure of internal consistency. That is, this subscale assesses the breadth of knowledge. On the other hand, the self-efficacy and attitudes subscales require a measure of an internal consistency to determine whether the questions in each subscale are measuring a similar construct.

Self-efficacy. The self-efficacy questions (e.g., I know where to seek information about mental disorders) examine how confident people feel about identifying appropriate mental health resources. The exploratory factor analysis was conducted using a principal component factor analysis to examine factor structure. Only one factor had eigenvalue greater than 1, and the single factor was accounted for 57.2% of the variance. Item loadings on this factor ranged from .58 to .84 (see Table 4). Internal reliability was examined by using Cronbach's α ; an α of .78 was obtained indicating moderate reliability. No substantive change was greater than .03 if any of the items were deleted. This indicates that all the questions consistently measure the same construct and that scores from each item can be added together to provide a measure for self-efficacy.

Table 4
Item content and factor loadings for the MHLS-R: Self-Efficacy Subscale

	1
I have access to resources (e.g., primary care physician, internet, friends) that I can use to seek information about mental disorders.	.843
I know how to use the computer or phone to seek information about mental disorders.	.816
I know where to seek information about mental disorders.	.780
I am willing to seek information about mental disorders in face-to-face appointments (e.g., seeing the primary care physician).	.737
I am comfortable talking to my family and friends about mental health concerns.	.575

Attitudes. The 16 attitudes questions of the MHLS-R assess what people think of mental disorders and treatment in various contexts (e.g., social settings, work, family relationships). An example of the attitudes question is “How willing would you be to make friends with someone with a mental disorder?” The exploratory factor analysis was conducted using a principal component factor analysis to examine factor structure. The exploratory factor analysis suggests these items hang together in 2 factors, with 7 questions in one factor (loadings from .66 to .90) and 5 in the other factor (loadings from .58 to .77; see Table 5). The analysis also indicated that there were 4 items with weak factor loadings and/or cross loadings. These items were not forced into one of the two obtained factors but will be examined individually during analysis. The internal reliability of the two obtained factors was examined by using Cronbach’s α . The Cronbach’s α for factor 1 was .93 and for factor 2 was .81, indicating moderate to high reliability. The α if item deleted procedure indicated no substantive improvement in the α if any of the items were removed or) change by removing any of the items. This indicates that the questions in each factor consistently measure the same constructs and that scores from each item can be added together to provide two separate scores for the attitude/perception questions.

Table 5
Item content and factor loadings for the MHLS-R: Attitudes Subscale

	1	2
How willing would you be to have someone with a mental disorder marry into your family?	.897	
How willing would you be to make friends with someone with a mental disorder?	.879	
How willing would you be to move next door to someone with a mental disorder?	.859	
How willing would you be to have someone with a mental disorder start working closely with you on a job?	.844	
How willing would you be to employ someone if you knew they had a mental disorder?	.798	
How willing would you be to spend an evening socializing with someone with a mental disorder?	.770	
How willing would you be to vote for a politician if you knew they had suffered a mental disorder?	.659	
A mental disorder is a sign of character weakness.		.770
A mental disorder is not a real medical illness.		.765
People with a mental disorder could snap out of it if they wanted or tried hard enough.		.742
All people with a mental disorder are dangerous.		.585
It is best to avoid people with a mental disorder so that you don't develop similar problems.		.584

Pilot Study: Discussion

Research Question 1: Validity of the Knowledge Subscale

The first research question for the pilot was: do the knowledge scores of the MHLS-R differ among these groups: (1) Individuals who are in the field of mental health (i.e., graduate students in mental health programs and mental health professionals) vs. those who are not, (2) individuals who have been in mental health treatment vs. those who have not, (3) individuals who know someone with a mental disorder vs. those who do not, and (4) individuals who know someone that has been in mental health treatment vs. those who do not? The hypotheses were (1) individuals who are in the field of mental health have higher knowledge scores than those who are not, (2) individuals who have been in mental health treatment have higher knowledge scores than those who have not, (3) individuals who know someone with a mental disorder have higher knowledge scores than those who do not, and (4) individuals who know someone that has been in mental health treatment have higher knowledge scores than those who do not.

As noted in the results section, all hypotheses were supported. In relation to hypothesis 1, Mental health professionals received a significantly higher mean score in the knowledge subscale than those who are not. That is, mental health professionals know more about mental disorders, such as symptoms of various disorders, and treatment issues, such as confidentiality and factors that may impact mood. Given the nature of the training required to become a mental health professional, they learn the fundamental information on disorders and treatments to understand what individuals with mental disorders experience, such as symptoms and risk/protective factors, and what type of

treatment would be appropriate for them. This explains that mental health professionals, including psychologists, psychiatrist, social workers, and graduate students who are training to be mental health professionals, would receive a higher knowledge score than those who are not mental health professionals.

The knowledge of mental disorders and treatment is a fundamental component of mental health literacy (Jorm, 2012). The knowledge subscale results indicated that (1) individuals who reported to have been in treatment had a significantly higher score than those who have not, (2) individuals who reported knowing someone with a mental disorder had a significantly higher score than those who did not, and (3) individuals who reported knowing someone that has been in mental health treatment had a significantly higher score than those who do not. These findings were consistent with the original study (O'Connor & Casey, 2015) even after the revisions were made for the MHLS-R. This suggests that being in treatment or knowing someone struggling with mental health concerns increases the likelihood of being exposed to mental disorders and/or treatments. This, in turn, may increase mental health knowledge by becoming more familiar with symptoms of various mental disorders, confidentiality and its limits, and/or what behaviors may impact the mood.

The significant differences in the knowledge scores of the groups mentioned above indicate that the knowledge subscale is valid as it is able to differentiate individuals who are more familiar with mental health or have higher mental health knowledge, including mental health professionals and individuals who have been in treatment. Therefore, the knowledge subscale could be used to answer one of the main

study's research questions, which is "does the accuracy of the information on mental disorders and treatments differ among these sociocultural groups: non-Asian, Korean American, and Korean emerging and young adults?" The knowledge subscale could help distinguish which of the three group has the highest or the lowest level of knowledge and help examine if the differences in the scores are significant.

Research Question 2: Validity of the Self-Efficacy Subscale

The second research question for the pilot study was: do the self-efficacy scores of the MHLS-R differ among these groups: (1) Individuals who are in the field of mental health (i.e., graduate students in mental health programs and mental health professionals) vs. those who are not, (2) individuals who have been in mental health treatment vs. those who have not, (3) individuals who know someone with a mental disorder vs. those who do not, and (4) individuals who know someone that has been in mental health treatment vs. those who do not? The hypotheses were (1) individuals who are in the field of mental health have higher self-efficacy scores than those who are not, (2) individuals who have been in mental health treatment have higher self-efficacy scores than those who have not, (3) individuals who know someone with a mental disorder have higher self-efficacy scores than those who do not, and (4) individuals who know someone that has been in mental health treatment have higher self-efficacy scores than those who do not.

As outlined in the results section, all of the hypotheses were supported. Similar to the knowledge subscale, the self-efficacy subscale demonstrated that (1) individuals who reported to be mental health professionals demonstrated higher self-efficacy in finding mental health resources compared to those who were not mental health professionals, (2)

individuals who reported to have been in mental health treatment demonstrated higher self-efficacy in finding mental health resources compared to those who reported to not have been in treatment, (3) individuals who reported knowing someone with a mental disorder demonstrated higher self-efficacy in finding mental health resources compared to those who reported to not know anyone with a mental disorder, and (4) individuals who reported knowing someone that has been in mental health treatment demonstrated higher self-efficacy in finding mental health resources compare to those who reported to not know anyone in mental health treatment. These results are consistent with the original scale, MHLS (O'Connor & Casey, 2015).

According to social cognitive theory (Bandura, 2001), self-efficacy means individuals' beliefs about their capacity to approach and complete a given task. When an individual has high self-efficacy, they may believe that they can encounter a problem and be able to recover from failures. On the other hand, those with low self-efficacy may believe that they will not be able to solve the problem and avoid it if possible (Bandura, 2001). Mental health professionals reported to have higher self-efficacy in finding mental health related resources compared to those who were not mental health professionals. Similar to the knowledge section, mental health professionals may be more familiar with the system of the mental health field, such as the insurance and/or referral process. They may work with insurance coordinators who assist in referrals and insurance claims. Some professionals may choose to work with insurance themselves and be more knowledgeable about it. Consequently, they would have more knowledge in finding mental health resources through their professional experience and would feel that they would be able to

find mental health resources when necessary. On the other hand, individuals who are not mental health professionals are less likely to know about how insurance or referral process work that they may feel less confident in finding mental health resources, may avoid searching for them, and/or may give up more easily when they encounter any difficulty in the process of identifying appropriate resources.

Similarly, individuals, who have been in therapy, know someone with a mental disorder, or know someone who has been in mental health treatment, are more likely to know about mental health resources and have higher self-efficacy. Those who have been in therapy may already be familiar with logistics of mental health resources, such as the referral process, insurance coverage, what to expect in therapy, and/or the range of the copay. This would lead to higher self-efficacy compared to those who have never been in mental health treatment. Individuals who have family or friends with a mental disorder or who know someone who has been in mental health treatment may have been exposed to situations where mental disorders and/or treatment were discussed. Depending on how close they are to people with mental health concerns, they may have helped people get treatment or searched for resources to provide support. As a result, they may have more knowledge of mental health and related resources, which would lead to higher efficacy in finding appropriate resources.

The significant differences in the self-efficacy scores of the groups mentioned above indicate that the self-efficacy subscale is valid. The subscale is able to differentiate individuals who have more confidence in finding mental health resources from those who have less confidence. That is, individuals, including mental health professionals and those

who have been in treatment, may be more familiar with mental health resources as their experiences expose them to available resources compared to their counterparts.

Therefore, the self-efficacy subscale could be used to answer one of the main study's research questions, which is "does the level of confidence in finding appropriate mental health resources differ among these sociocultural groups: non-Asian, Korean American, and Korean emerging and young adults?" The self-efficacy subscale could help distinguish which of the three group has the highest or the lowest level of efficacy and help examine if the differences in the scores are significant.

Research Question 3: Validity of the Attitudes Subscale

The third research question for the pilot study was: do the attitude scores of the MHLS-R differ among these groups: (1) Individuals who are in the field of mental health (i.e., graduate students in mental health programs and mental health professionals) vs. those who are not, (2) individuals who have been in mental health treatment vs. those who have not, (3) individuals who know someone with a mental disorder vs. those who do not, and (4) individuals who know someone that has been in mental health treatment vs. those who do not? The hypotheses were (1) individuals who are in the field of mental health have higher attitude scores than those who are not, (2) individuals who have been in mental health treatment have higher attitude scores than those who have not, (3) individuals who know someone with a mental disorder have higher attitude scores than those who do not, and (4) individuals who know someone that has been in mental health treatment have higher knowledge scores than those who do not.

As outlined in the results section, the hypotheses were supported and the results

were consistent with the original scale, MHLS (O'Connor & Casey, 2015). The attitude subscale analysis showed that (1) individuals who reported to be mental health professionals demonstrated more positive attitude towards mental disorders and treatments compared to those who did not, (2) individuals who reported to have been in mental health treatment demonstrated more positive attitude towards mental disorders and treatments compared to those who reported to not have been in treatment, (3) individuals who reported knowing someone with a mental disorder demonstrated more positive attitude towards mental disorders and treatments compared to those who did not, and (4) individuals who reported knowing someone that has been in mental health treatment had more positive attitude towards mental disorders and treatments compare to those who did not.

Attitudes towards mental disorders and treatments is influenced by various individual and contextual factors, including mental health knowledge, knowing someone with mental disorder, cultural stigma/stereotypes, how the media portrays mental disorders, and familiarity with mental health resources (Corrigan, Markowitz, & Watson, 2004; Kobau et al., 2012; Wahl, 2003). In the knowledge subscale, mental health professionals, individuals who have been in treatment, those who know someone with mental disorder, and those who know someone that has been in mental health treatment had significantly higher knowledge score than their counterparts. Similarly, mental health professionals, individuals who have been in treatment, those who know someone with mental disorder, and those who has been in treatment reported to have more positive attitude towards mental disorders and treatments. Individuals who have more knowledge

of mental disorders and treatment may have a better understanding of the impact of mental disorders and treatment on daily functioning.

The significant differences in the attitude scores of the groups mentioned above indicate that the attitude subscale is valid. The subscale is able to differentiate individuals who have more positive attitude towards mental health compared to those who have more negative attitudes. That is, individuals, including mental health professionals and those who have been in treatment, who are familiar with mental disorders and the importance of treatment may have a better understanding of the impact of mental health and may lead to having less stigma and more supportive attitudes towards those who have mental disorders. Therefore, the attitude subscale could be used to answer one of the main study's research questions, which is "Do attitudes towards mental disorders and treatments differ amongst these sociocultural groups: non-Asian, Korean American, and Korean emerging and young adults?" The attitude subscale could help distinguish which of the three group has more positive or negative attitudes towards mental health and help examine if the differences in the scores are significant.

Research Question 4: Internal Consistency of the Self-Efficacy and Attitudes

Subscales

The fourth research question for the pilot was: do relationships exist between or among the questions in each subscale (i.e., knowledge, self-efficacy, and attitude) of the MHLS-R? This research question was to examine the internal consistency of the self-efficacy and attitude subscales. The internal consistency of the knowledge subscale was not examined. This subscale measures whether a person knows certain information about

mental disorders or treatment. Due to the fact that the subscale assesses the breadth of knowledge, such as any school examination, it does not require a measure of internal consistency. However, the internal consistency of the self-efficacy and attitude subscales needed to be examined because the items need to be written in a way that an individual responds to them in a similar manner across a subscale. This will indicate that the subscale is measuring and providing a score for a construct, such as self-efficacy or attitude, instead of multiple constructs which would need different sets of scores and different interpretations.

Self-Efficacy Subscale. Exploratory factor analysis was used to examine the internal consistency of the self-efficacy subscale. Self-efficacy is defined as individuals' beliefs about their capacity to approach and complete a given task (Bandura, 2001). With high self-efficacy, people may believe that they are able to face a given task and complete it, whereas people with low self-efficacy may believe the opposite. Some of the questions within the self-efficacy subscale were, "I know where to seek information about mental disorders," "I am willing to seek information about mental disorders in face to face appointments (e.g., seeing the primary care physician)," and "I have access to resources (e.g., primary care physician, internet, friends) that I can use to seek information about mental disorders." Exploratory factor analysis demonstrated that all five questions within the subscale had good internal consistency. That is, participants responded to the questions in a similar manner suggesting they measure the same construct. This is consistent with the original MHLS (O'Connor & Casey, 2015). However, the difference is that the MHLS only examined overall internal consistency of the scale, whereas the

current pilot study examined each construct separately, such as the self-efficacy and attitude subscales. Therefore, the five items within the self-efficacy subscale can be used to measure one construct for the main study.

Attitudes Subscale. Exploratory factor analysis was used to examine the internal consistency of the attitudes subscale. The attitude subscale consists of 16 items. Examples of questions are “people with a mental disorder could snap out of it if they wanted or tried hard enough,” “all people with a mental disorder are dangerous,” “if I had a mental disorder, I would not seek help from a mental health professional,” and “how willing would you be to spend an evening socializing with someone with a mental disorder?” The analysis suggested two factors with 7 questions in one factor and 5 in the other. There were four items that did not clearly align with one factor over another. The two factors had moderate to high reliability. As mentioned above, the good internal consistency is consistent with the findings in the original MHLS study (O’Connor & Casey, 2015), yet it is important to note that the current pilot study examined different constructs within the attitude scale separately.

One factor consisted of items that asked about the willingness of interacting with people with mental disorders in various contexts, such as social settings, work, and within family. The other factor consisted of items that asked about attitudes towards mental health, such as thoughts related to stigma around mental health. The two factors suggest that the attitude subscale needs to be divided into two subscales in order to examine two separate constructs for the main study. This can lead to a better understanding of non-Asian, Korean American, and Korean emerging and young adults’ willingness to interact

with individuals with mental disorders and their attitude towards mental health and related stigma. The four items that were not included in the two factors may need to be examined separately as they did not have good internal consistency with the other factors.

Conclusion

Examining the validity and internal consistency was an important initial step before conducting the main study. The original MHLS had some limitations which led to some revisions, such as updating names of mental disorders according to the DSM-V (American Psychiatric Associations, 2013), clarifying ambiguous questions, and phrasing differences between the United States and Australia where the original scale was created. Therefore, the MHLS was revised to create the MHLS-R to answer the research questions for the main study.

The findings of the pilot study indicated that the three constructs (i.e., knowledge, self-efficacy, and attitude) of the MHLS-R were valid and that the MHLS-R need to be divided into four subscales as well as the four items that may need to be examined separately. The MHLS-R consists of the knowledge, self-efficacy, attitude, and willingness to interact with people with mental disorders. For the main study, the four constructs were examined to understand the differences in mental health literacy among non-Asian, Korean American, and Korean emerging and young adults.

Main Study: Methods

This chapter will explain the main study, which examined Korean American and Korean emerging/young adults' mental health knowledge, self-efficacy, and attitudes through MHLS-R. The chapter has three sections: (1) participants and procedures, (2)

measures, and (3) results. The purpose of the current study is to examine (1) the level of knowledge Korean and Korean Americans have about mental health, (2) the level of confidence in finding appropriate mental health resources, and (3) their attitudes towards mental disorders and treatments. Specifically, this study will compare those sociocultural groups to the general population in the U.S. and examine potential contextual influences, such as age, gender, how long an individual has lived in the U.S., and generational status (e.g., first or 1.5 generation).

Procedures

The main study was approved by the Institutional Review Board at Boston University. Data were collected via an online survey using Boston University's Qualtrics system and were distributed through various universities' listservs, social media (e.g., Facebook, Instagram, LinkedIn), and other cultural communities (e.g., Korean churches, student associations) in the United States. In order to recruit the comparison group (i.e., individuals who live in the United States but are not Asians), the survey was posted on various social media, and on listservs of college and graduate student groups (e.g., classes, student associations, churches) in the Greater Boston area.

The eligibility criteria were individuals (1) whose age is in between 18 and 34, (2) who can read and understand English and/or Korean, and (3) live in the United States. The target populations were Korean and Korean American emerging and young adults, who were compared to other people living in the United States, excluding Asians more broadly. Asian, other than Korean and Korean Americans, were excluded from the study because Asian may have similar values and cultures that contribute to the stigma of

mental health and treatment (e.g., Cheng, Leong, & Geist, 1993; Cheong & Snowden, 1990; Kim & Omizo, 2003; Tracey et al., 1986) and may become a confounding variable that can skew the MHLS-R results for the comparison group (i.e., non-Asians). The Korean group consisted of individuals whose citizenship indicated Korea and who live in the United States. The Korean American group consisted of individuals whose citizenship indicated United States and who identified their ethnic identity as Korean or Korean American. The comparison group was individuals whose citizenship was from anywhere except Asian countries (e.g., India, Pakistan, China) and who have lived in the United States. The comparison group and will be described as non-Asians.

The research team for the study consisted of myself as the lab leader and three graduate-level Korean research assistants who are fluent in Korean and English. Korean is the first language of everyone in the research team. The research assistants were either enrolled in or graduated from an applied developmental and educational psychology graduate program at a Boston area university.

It is important to note that the MHLS-R was translated into Korean for individuals, especially native Korean speakers, who were more fluent in Korean than in English. The MHLS-R were translated into Korean by the three research assistants, and I verified the translation. To ensure that the MHLS-R would be comprehensible for individuals whose Korean proficiency level is at the middle/high school level, we sought further verification by asking for feedback from other Koreans who live and speak Korean and are professionals in various fields (e.g., professors).

Participants

Of the 377 participants who started the survey, 278 participants started the English version of the MHLS-R, and 99 participants started the Korean version. Among the 278 participants who started the English version, approximately 171 (62%) completed the survey, and 117 (42%) completed and met the criteria. Among the 99 participants who started the Korean version, approximately 52 (52%) completed the survey, and 37 (37%) completed and met the criteria for the survey. Thus, a total of 154 participants completed the survey and met the criteria for this study (see Table 6). Approximately 70% were women, and 30% were men. The ages ranged between 18 and 34.

Approximately 4% of participants identified as Hispanic or Latino/a/x, 65% as Asian or Asian American, 2% as Black or African American, 25% as White, 3% biracial or multiracial, and 1% Native Hawaiian or Pacific Islander. About a third of the sample (66%) were single, 32% were married, living together, or in domestic partnership, 2% were divorced, and 1% was other. Approximately 21% of the participants reported that their family was lower middle class or below growing up, 57% was middle class, and 22% was upper middle class or above. Regarding the education level, 1% reported having high school diploma or equivalent, 12% reported having some college experience but no degree, 33% had a 4-year degree, 33% had a master's degree, 22% had a doctoral degree, and 1% indicated "other." Of 153 participants, 36% has been in mental health treatment, 62% knows someone with a mental disorder, and 64% knows someone who has been in mental health treatment. On the generational level question, 21% identified as first generation (i.e., I was born in another country and came to the U. S. as an adult), 26% as

1.5 generation (i.e., I was born in another country and came to the U.S. as a child or adolescent), 21% as second generation (i.e., I was born in the U.S. and my parents were born in another country), 1% as third generation (i.e., I was born in the U.S. and my grandparents were born in other country), 18% as fourth generation (i.e., I was born in the U.S., parents and grandparents also born in the U.S.), and 10% as “other.”

Approximately 33% had Korean citizenship and identified as Korean (i.e., Korean group), 33% had American citizenship and identified as Korean American (i.e., Korean American group), and 35% did not identify as Asian or Asian American and lived in the United States (i.e., Non-Asian group). See Table 7 for detailed information on how these numbers are distributed within each sociocultural group (i.e., Koreans, Korean Americans, non-Asians). The aforementioned numbers were rounded to the nearest whole number and may not add up to 100% exactly.

Table 6

Distribution of Participants who completed the English or Korean version of the MHLS-R

	English Version	Korean Version
Participants who started the MHLS-R	278	99
Participants who completed the MHLS-R	171 (62%)	52 (52%)
Participants who completed and met the criteria for the study	117 (42%)	37 (37%)

Table 7
Demographic Information for Each Sociocultural Group

		Koreans (<i>n</i> = 50)	Korean Americans (<i>n</i> = 50)	Non-Asians (<i>n</i> = 54)
Gender	Women	30 (60%)	33 (66%)	45 (83.3%)
	Men	20 (40%)	17 (34%)	9 (16.7%)
Marital Status	Single	35 (70%)	38 (76%)	28 (52.9%)
	Married/living together	15 (30%)	11 (22%)	23 (42.6%)
	Divorced	0 (0%)	1 (2%)	2 (3.7%)
	Other	0 (0%)	0 (0%)	1 (1.9%)
SES	Lower middle class or below	6 (12%)	9 (18%)	17 (31.5%)
	Middle class	31 (62%)	34 (68%)	23 (42.6%)
	Upper middle class or above	13 (26%)	7 (14%)	14 (25.9%)
Education	High school diploma	0 (0%)	0 (0%)	1 (1.9%)
	Some college experience	8 (16%)	8 (16%)	2 (3.7%)
	2-year degree	0 (0%)	0 (0%)	0 (0%)
	4-year degree	16 (32%)	19 (38%)	15 (27.8%)
	Master's degree	20 (40%)	7 (14%)	23 (42.6%)
	Doctoral degree	6 (12%)	16 (32%)	12 (22.2%)
	Other	0 (0%)	0 (0%)	1 (1.9%)

Treatment Experience*	Been in mental health treatment	10 (20%)	14 (28%)	31 (57.4%)
	Know someone with a mental disorder	19 (38%)	33 (66%)	44 (81.5%)
	Know someone who has been in treatment	24 (48%)	32 (64%)	43 (79.6%)
Generational Level	First generation	29 (58%)	2 (4%)	2 (3.7%)
	1.5 generation	15 (30%)	20 (40%)	5 (9.3%)
	Second generation	1 (2%)	27 (54%)	5 (9.3%)
	Third generation	0 (0%)	0 (0%)	2 (3.7%)
	Fourth generation	0 (0%)	0 (0%)	28 (51.9%)
	Other	3 (6%)	1 (2%)	12 (22.2%)
Korean or English Version	Korean version	29 (58%)	8 (16%)	0 (0%)
	English version	21 (42%)	42 (84%)	54 (100%)

*For Treatment Experience, participants could indicate more than one choice. Therefore, the numbers within one column (e.g., Koreans) may not add up to 100%.

Measures

Participants were asked to complete a survey that consists of the demographic questionnaire and the Mental Health Literacy Scale – Revised (MHLS-R), which were the same as the pilot.

Demographic Questionnaire

Similar to the pilot study, a demographic questionnaire was used in this study. The questions inquired about participants' age, gender, race/ethnicity, marital/family status (e.g., married, single), highest level of education, socioeconomic status, job, and experience related to mental health (e.g., in treatment, mental health professional) as well as other information related to Korean and Korean American contexts. The additional questions included citizenship status, generational status, country of birth, whether they identify as Korean American or Korean, countries in which they have lived, and the duration of residence in each country. The citizenship question alone may distinguish participants' legal citizenship status but does not fully explain participants' or their family's level of acculturation. Generational status, countries they lived in, and the duration of residence in each country may help examine how long an individual has lived in the United States. Following Miller et al. (2011), the generational status was measured as: (1) first generation (i.e., I was born in another country and came to the U.S. as an adult), (2) 1.5 generation (i.e., I was born in another country and came to the U.S. as a child or adolescent), (3) second generation (i.e., I was born in the U.S., and my parents were born in another country), (4) third generation (i.e., I was born in the U.S., and my grandparents were born in other country), (5) fourth generation (i.e., I was born

in the U.S., parents and grandparents also born in the U.S.), and (6) other¹ (see Appendix C). This question helped identify Korean Americans and Korean emerging and young adults as two separate groups and their level of acculturation.

Mental Health Literacy Scale – Revised (MHLS-R)

The MHLS-R was used to measure the knowledge of mental health and treatments, self-efficacy, and attitudes towards mental disorders. The questions in the MHLS-R remained the same as the pilot study. The MHLS-R measures the knowledge of mental health and treatments, self-efficacy, and attitude towards mental disorders. According to the results from the pilot, the MHLS-R has 4 separate scores to measure appropriate constructs from each subscale. The first score is for the knowledge subscale, and the second score is for the self-efficacy subscale. The attitude section was divided into two subscales: (1) attitudes towards mental health and treatment (ATMH), and (2) willingness to interact with individuals with mental disorders (WII). In the main study, Cronbach's α of .76 was obtained for the self-efficacy subscale; an α of .73 was obtained for ATMH, and that of .94 was obtained for WII, indicating moderate to high reliability.

¹ Exact items are used for instrumental purposes.

CHAPTER IV RESULTS

The following section will explain the results of the descriptive analysis, ANOVA, individual/contextual variables using ANOVA, and moderation analysis (i.e., two-way ANOVA) for the main study. All analyses were conducted using SPSS Version 25.0 (IBM, 2017). Results will be reported for the average scores of the four subscales of the MHLS-R (i.e., mental health knowledge, self-efficacy, attitude towards mental disorders and treatments, and willingness to interact with individuals with mental disorders) for the three sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults). Under Descriptive Analysis and ANOVA, I will first demonstrate the means, standard deviations, ANOVA, and post hoc comparisons using Bonferroni. Individual and Contextual Variables, an exploration of the relationship between the subscale scores and individual/contextual factors (e.g., age, gender, marital/family status, highest level of education) for each group (i.e., Koreans, Korean Americans, and non-Asians) will be presented. For the Moderation Analysis, the results of two-way ANOVA will be outlined.

Descriptive Analysis and ANOVA

Means and standard deviations were calculated for each subscale of the MHLS-R. A one-way between subjects ANOVA was conducted to examine differences among the mean scores of the knowledge, self-efficacy, and attitude (i.e., ATMH, WII) subscales for Koreans, Korean Americans, and non-Asians. Cohen's d was used to examine the effect size between the two comparison groups (Cohen, 1992). For Cohen's d , $d = .2$ is a small effect, $d = .5$ is a medium effect, and $d = .8$ is a large effect (Cohen, 1992). Results are

also summarized in Table 8.

Knowledge. Examination of the means in the mental health knowledge subscale indicated that non-Asians reported the highest mean ($M = 21.5, SD = 7.7$), followed by Korean Americans ($M = 17.9, SD = 7.1$), and finally Koreans ($M = 15.8, SD = 6.8$). There was a significant difference among the scores at the $p < .05$ level, [$F(2, 151) = 8.2, p < .001$]. Post hoc comparisons using the Bonferroni correction indicated a significant difference between the Korean and non-Asian groups ($p < .001, d = .8$) and between the Korean American and non-Asian groups ($p = .04, d = .5$). On the other hand, the mean scores between the Korean and Korean American groups did not differ. These results suggest that Korean emerging and young adults reported knowing less about mental health and treatment compared to their non-Asian counterparts.

Self-Efficacy. For the self-efficacy scores, the non-Asian group reported the highest mean ($M = 6.8, SD = 3.2$), followed by the Korean American group ($M = 4.6, SD = 2.9$), and finally the Korean group ($M = 3.8, SD = 2.9$). There was a significant difference among these scores at the $p < .05$ level [$F(2, 151) = 13.9, p < .001$]. Post hoc comparisons using the Bonferroni correction demonstrated significant differences between (1) Koreans and non-Asians ($p < .001, d = 1.0$) and (2) Korean Americans and non-Asians ($p = .001, d = .7$). On the other hand, the mean scores between the Korean and Korean American groups did not differ. Taken together, these results indicate that non-Asian emerging and young adults reported having a higher level of self-efficacy in finding mental health resources compared to their Korean and Korean American counterparts.

Attitudes towards Mental Health. According to the pilot study, the Attitude subscale was comprised of two subscales, which were (1) attitude towards mental health and treatment (ATMH), and (2) willingness to interact with individuals with mental disorders (WII). For the ATMH, non-Asians reported the highest mean ($M = 8.5$, $SD = 2.4$), followed by Korean Americans ($M = 6.7$, $SD = 2.6$), and finally Koreans ($M = 5.7$, $SD = 3.3$). There was a significant difference among these scores at the $p < .05$ level [$F(2, 151) = 14.1$, $p < .001$]. Post hoc comparisons using the Bonferroni correction demonstrated significant differences between (1) Koreans and non-Asians ($p < .001$, $d = 1.0$), and (2) Korean Americans and non-Asians ($p = .004$, $d = .7$). There was no significant difference between Koreans and Korean Americans. These results indicate that non-Asian emerging and young adults reported more positive attitudes towards mental health compared to both Korean American and Korean emerging and young adults.

The willingness to interact with individuals with mental disorders (WII) had similar findings. For this subscale, non-Asians reported the highest mean ($M = 7.1$, $SD = 5.1$), followed by Korean Americans ($M = .8$, $SD = 6.3$), and finally Koreans ($M = -.8$, $SD = 5.4$). There was a significant difference among these scores at the $p < .05$ level [$F(2, 151) = 29.1$, $p < .001$]. Post hoc comparisons using the Bonferroni correction demonstrated significant differences between (1) Koreans and non-Asians ($p < .001$, $d = 1.5$), and (2) Korean Americans and non-Asians ($p < .001$, $d = 1.1$). There was no significant difference between Koreans and Korean Americans. Taken together, these results suggest that non-Asian emerging and young adults reported greater willingness to

interact with individuals with mental disorders compared to their Korean and Korean American counterparts.

Table 8
 ANOVA for the Knowledge, Self-Efficacy, ATMH, and WII Subscales

		<i>M</i>	<i>SD</i>	<i>F-ratio</i>	<i>p</i>
Knowledge	Non-Asians (<i>n</i> = 54)	21.5	7.7	8.2	< .001
	Korean Americans (<i>n</i> = 50)	17.9	7.1		
	Koreans (<i>n</i> = 50)	15.8	6.8		
Self-Efficacy	Non-Asians (<i>n</i> = 54)	6.8	3.2	13.9	< .001
	Korean Americans (<i>n</i> = 50)	4.6	2.9		
	Koreans (<i>n</i> = 50)	3.8	2.9		
ATMH	Non-Asians (<i>n</i> = 54)	8.5	2.4	14.1	< .001
	Korean Americans (<i>n</i> = 50)	6.7	2.6		
	Koreans (<i>n</i> = 50)	5.7	3.3		
WII	Non-Asians (<i>n</i> = 54)	7.1	5.1	29.1	< .001
	Korean Americans (<i>n</i> = 50)	.76	6.3		
	Koreans (<i>n</i> = 50)	-.78	5.4		

According to the pilot, there are four items in the attitude subscale that were not indicated as belonging to either of the two subscales. The items are (1) If I had a mental disorder, I would not tell anyone, (2) Seeing a mental health professional means you are not strong enough to manage your own problems, (3) If I had a mental disorder, I would not seek help from a mental health professional, and (4) I believe treatment for a mental disorder, provided by a mental health professional, would not be effective. Those items were examined separately. The items are negatively worded thus if participants disagreed, they received a positive score; if they agreed, they received a negative score.

For the first item (i.e., If I had a mental disorder, I would not tell anyone), non-Asians reported the highest mean ($M = .7, SD = 1.0$), followed by Korean Americans ($M = .6, SD = 1.0$), and finally Koreans ($M = .2, SD = 1.0$). At the $p < .05$ level, there was no significant difference among these scores [$F(2, 150) = 2.9, p = .06$]. These results indicate there is no meaningful difference among Korean, Korean American, and non-Asian emerging and young adults regarding the likelihood to tell someone that they have a mental disorder.

For the second item (i.e., Seeing a mental health professional means you are not strong enough to manage your own problems), non-Asians reported the highest mean ($M = 1.7, SD = .6$), followed by Korean Americans ($M = 1.2, SD = 1.1$), and finally Koreans ($M = .5, SD = 1.3$). There was a significant difference among these scores at the $p < .05$ level, [$F(2, 151) = 15.3, p < .001$]. Post hoc comparisons using the Bonferroni correction demonstrated significant differences between (1) Koreans and Korean Americans ($p = .008, d = .6$), (2) Koreans and non-Asians ($p < .001, d = 1.1$), and (3) Korean

Americans and non-Asians ($p = .048, d = .6$). These results indicate that non-Asians are least likely to disagree with the following statement, “seeing a mental health professional means you are not strong enough to manage your own problems,” compared to Koreans and Korean Americans. Korean Americans are less likely to disagree compared to Koreans.

For the third item (i.e., If I had a mental disorder, I would not seek help from a mental health professional), there was no significant difference among the Korean ($M = 1.16, SD = .8$), Korean American ($M = 1.1, SD = .9$), and non-Asian groups ($M = 1.5, SD = .7$). This suggests that regardless of which group one was in, they were equally likely to seek out help.

For the fourth item (i.e., I believe treatment for a mental disorder, provided by a mental health professional, would not be effective), non-Asians reported the highest mean ($M = 1.5, SD = .7$), followed by Korean Americans ($M = 1.2, SD = .8$), and finally Koreans ($M = 1.0, SD = .8$). There was a significant difference among these scores at the $p < .05$ level, [$F(2, 151) = 5.7, p = .004$]. Post hoc comparisons using the Bonferroni correction demonstrated significant a difference between Koreans and non-Asians ($p = .004, d = .7$). There was no significant difference between Koreans and Korean Americans or between Korean Americans and non-Asians. These results indicate that non-Asians were more likely to disagree with the statement, “I believe treatment for a mental disorder, provided by a mental health professional, would not be effective.”

Individual and Contextual Variables

In addition to the information on citizenship, race, and ethnicity, other

demographic information was acquired including participants' age, gender, marital/family status (e.g., married, single), level of education, socioeconomic status (i.e., when you were growing up, which best describes your family's economic class?), generational status, and how long an individual has lived in the United States. In the analysis, how long an individual has lived in the United States was indicated as a percentage, which is the number of years living in the United States over the age, in order to keep the measurement consistent across the participants regardless of their age. Hypotheses were (1) there will be differences in the knowledge, self-efficacy, and attitudes based on gender, generational status, and how long an individual has lived in the United States, and (2) there will be no significant differences based on age. Multifactorial ANOVA was used to examine the individual and contextual factors mentioned above (i.e., age, gender, marital/family status, level of education, socioeconomic status, generational status, how long an individual has lived in the United States). Backward elimination was used to identify significant relationships between the individual/contextual variables and each subscale.

Knowledge Subscale. The knowledge subscale measures how much people know about mental disorders and treatment. Multifactorial ANOVA indicated that there were no significant relationships between the individual/contextual variables and knowledge subscale for Koreans and Korean Americans. On the other hand, for non-Asians, marital/family status ($p = .03$), level of education ($p = .01$), and how long an individual has lived in the United States ($p = .004$) were significantly related to the knowledge subscale, with $R^2 = .5$. This indicates that (1) non-Asians who are married ($M = 24.8$, SD

= 6.6) had higher knowledge scores than those who are single ($M = 19.5$, $SD = 7.5$), (2) non-Asians who have higher level of education (e.g., doctoral degree: $M = 25.6$, $SD = 6.8$) had higher knowledge score than those who had lower level of education (e.g., some college: $M = 19.0$, $SD = 4.2$), and (3) non-Asians who lived in the United States for a longer period of time had higher knowledge score than those who lived in the U.S. for a shorter period ($r = .3$). When all the sociocultural groups (i.e., Koreans, Korean Americans, non-Asians) were combined, the level of education ($p = .006$) and how long an individual has lived in the United States ($p = .03$) were significantly related to knowledge subscale scores with the sociocultural groups ($p = .06$), with $R^2 = .2$. This suggests that (1) individuals with higher level of education (e.g., doctoral degree: $M = 21.2$, $SD = 7.8$) had higher knowledge score than those with lower level of education (e.g., some college: $M = 17.6$, $SD = 5.2$) and (2) those who lived in the U.S. for a longer period of time had higher knowledge score than those who lived in the U.S. for a shorter period ($r = .4$). Among the sociocultural groups (i.e., Koreans, Korean Americans, non-Asians), there were the different proportions of people who are married or in domestic partnership and those who are single. The differences in the proportions led to the marital status no longer being significant for the whole group, $X^2(2) = 6.1$, $p = .048$. Therefore, the marital status is a confounding variable for the knowledge subscale.

Self-Efficacy Subscale. The self-efficacy subscale measures how confident people feel about finding mental health resources. According to multifactorial ANOVA, gender ($p = .004$) and the sociocultural groups (i.e., Korean, Korean American, non-Asian; $p = .004$) were significantly related (see Figure 1). A chi-square test demonstrated

that there were different proportions of gender in each group, $X^2(2) = 7.35, p = .025$. Independent samples *t*-tests were conducted to examine gender differences in self-efficacy scores for Koreans, Korean Americans, and non-Asian groups separately. For Koreans, there was no significant difference at $p < .05$ level, [$t(48) = 1.3, p = .5$]. For Korean Americans, there was no significant difference at $p < .05$ level, [$t(48) = 1.6, p = .1$]. For non-Asians, there was a significant difference at $p < .05$ level, [$t(52) = 2.1, p = .04$]. When the data for Koreans and Korean Americans were combined, there was a significant difference at $p < .05$ level, [$t(98) = 2.1, p = .037$]. The results of the independent samples *t*-tests show that for (1) non-Asians and (2) Koreans and Korean Americans combined, women reported higher self-efficacy than men. Figure 1 demonstrates a parallel pattern. That is, generally self-efficacy scores are (1) the highest for non-Asians, following Korean Americans, and finally Koreans, and (2) higher for women compared to men.

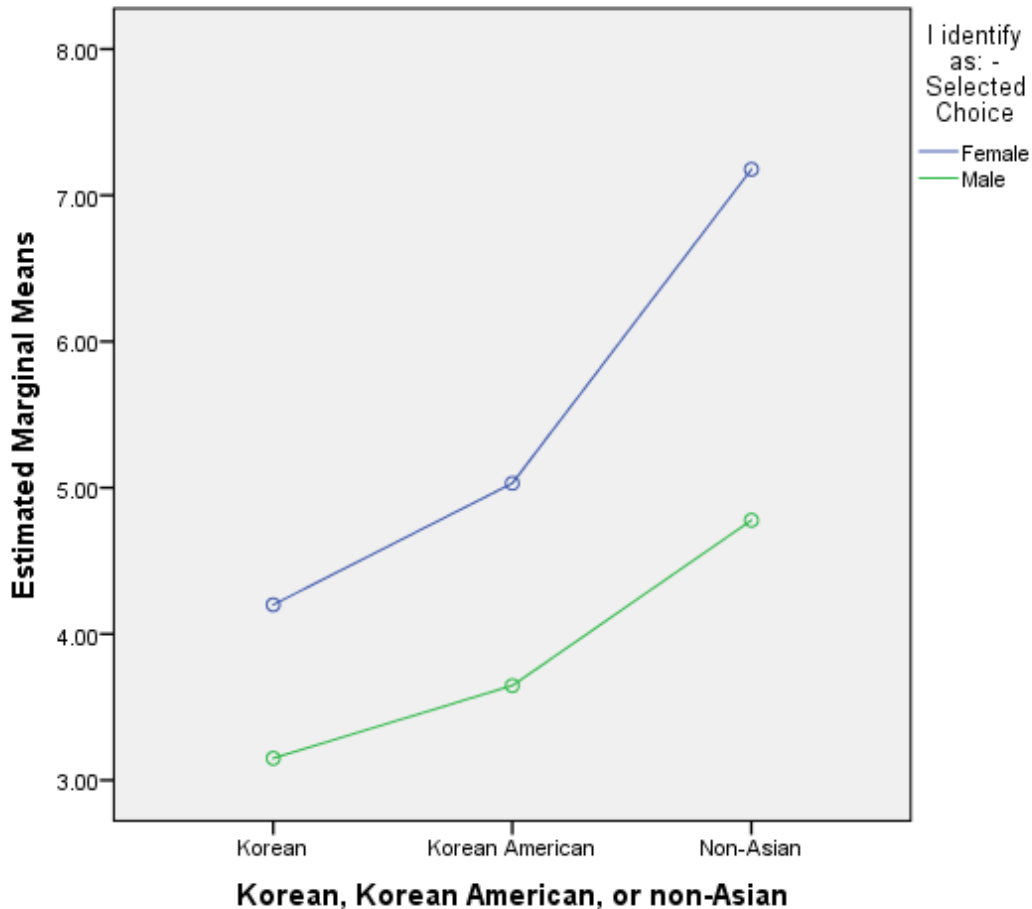


Figure 1. The mean score for the self-efficacy subscale.

Attitudes Subscale: ATMH. The subscale, ATMH, measures attitude towards mental health and treatment. Multifactorial ANOVA demonstrated that for all the sociocultural groups combined, gender ($p = .03$), generational status ($p < .001$), and socioeconomic status ($p = .009$) were significantly related to the ATMH subscale, with $R^2 = .3$. This suggests that (1) women ($M = 7.6, SD = 2.8$) had less negative attitudes towards mental disorders and treatment than men ($M = 5.8, SD = 3.2$), (2) individuals who are from higher generational status (e.g., fourth generation: $M = 8.6, SD = 2.2$) had less negative attitude towards mental disorders and treatment compared to those who are

from lower generational status (e.g., first generation: $M = 4.9$, $SD = 3.2$), and (3) individuals who indicated that their family was from lower middle class or below ($M = 8.3$, $SD = 2.3$) had less negative attitudes compared to those who reported that their family was from upper middle class or above ($M = 6.4$, $SD = 3.8$). For Koreans, socioeconomic status ($p = .04$), level of education ($p = .03$), generational status ($p = .04$), and age ($p = .002$) were significantly related, with $R^2 = .5$. This indicates that (1) Koreans who indicated that their family was from lower middle class or below ($M = 8.0$, $SD = 2.5$) had less negative attitudes towards mental health compared to those who reported that their family was from upper middle class or above ($M = 4.6$, $SD = 4.2$), (2) Koreans who had higher levels of education (e.g., doctoral degree: $M = 5.0$, $SD = 2.8$) had less negative attitudes compared to those who had lower levels of education (e.g., some college: $M = 4.6$, $SD = 3.8$), (3) 1.5 generation Koreans ($M = 6.8$, $SD = 3.2$) reported less negative attitudes towards mental health than first generation Koreans ($M = 4.8$, $SD = 3.2$), and (4) older Koreans had less negative attitudes compared to their younger counterparts ($r = .3$). For Korean Americans, none of the variables were significant. For non-Asians, gender ($p = .01$) and generational status ($p = .04$) were significantly related, with $R^2 = .3$. This indicates that (1) non-Asians women ($M = 8.8$, $SD = 2.0$) had less negative attitudes towards mental health compared to non-Asian men ($M = 7.0$, $SD = 3.4$) and (2) non-Asians who are from higher generational status (e.g., fourth generation: $M = 8.6$, $SD = 2.2$) had less negative attitudes towards mental health compared to those who are from lower generational status (e.g., first generation: $M = 7.5$, $SD = 3.5$).

Attitudes Subscale: WII. The subscale, WII, measures willingness to interact with individuals with mental disorders. Multifactorial ANOVA demonstrated that for all the sociocultural groups combined, gender ($p = .03$), socioeconomic status ($p = .007$), generational status ($p < .001$), age ($p = .04$), and how long an individual has lived in the United States ($p = .006$) were significantly related, with $R^2 = .4$. This indicates that (1) women ($M = 3.7, SD = 6.3$) were more willing to interact with individuals with mental disorders compared to men ($M = -.4, SD = 6.3$), (2) individuals who reported that their family was from lower middle class or below ($M = 5.3, SD = 6.2$) were more willing to interact with people with mental disorders than those who reported that their family was from upper middle class or above ($M = .2, SD = 7.5$), (3) individuals who are from higher generational status (e.g., fourth generation: $M = 7.8, SD = 4.7$) were more willing to interact with people with mental disorders compared to those who are from lower generational status (e.g., first generation: $M = -1.1, SD = 5.1$), (4) younger individuals were more willing to interact with people with mental disorders compared to older individuals ($r = -.1$), and (5) individuals who lived in the U.S. for a longer period of time were more willing to interact with people with mental disorders compared to those who lived in the U.S. for a shorter period ($r = .4$). For Koreans, gender ($p = .047$), socioeconomic status ($p = .007$), and age ($p = .01$) were significantly related, with $R^2 = .3$. This suggests that (1) Korean women ($M = .5, SD = 5.4$) were more willing to interact with people with mental disorders than Korean men ($M = -2.8, SD = 4.7$), (2) Koreans who indicated that their family was from lower middle class or below ($M = -.2, SD = 3.5$) were more willing to interact with people with mental disorders compared to those who

reported that their family was from upper middle class or above ($M = -3.8, SD = 5.9$), and (3) younger Koreans were more willing to interact with people with mental disorders than older Koreans ($r = -.2$). For Korean Americans, none of the variables were significant. For non-Asians, generational status ($p = .008$) was significantly related, with $R^2 = .3$. This suggests that non-Asians who are from higher generational status (e.g., fourth generation: $M = 7.8, SD = 4.7$) were more willing to interact with people with mental disorders compared to those who are from lower generational status (e.g., 1.5 generation: $M = 1.6, SD = 5.0$).

Mental Health Literacy and Moderation Effect

In the pilot as well as the original study with MHLS (O'Connor & Casey, 2015), there was a significant difference in the mental health literacy between (1) individuals who have been in mental health treatment and those who have not, (2) individuals who know someone with a mental disorder and those who do not, and (3) individuals who know someone who has been in mental health treatment and those who do not. These factors are also essential to assess for the main study. Furthermore, an examination of the moderation effect of being a Korean, Korean American, or non-Asian emerging/young adult will be explained. Therefore, this section will explain the moderation effect of the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults) on the relationship between people's experience of mental health (i.e., having been in mental health treatment, knowing someone with a mental disorder, knowing someone who has been in mental health treatment) and mental health literacy (i.e., scores for the knowledge, self-efficacy, attitudes subscales). In order to explore the impact of

people's experience of mental health, the data for Korean, Korean American, and non-Asian emerging and young adults were first combined.

Knowledge. An examination of the means in the mental health knowledge subscale indicated that people who reported to have been in mental health treatment had a higher mean score ($M = 21.1, SD = 7.1$) compared to those who reported to not have been in treatment ($M = 15.9, SD = 7.1$). An independent samples t -test was conducted to compare the mean scores. There was a significant difference among the scores, [$t(152) = 4.6, p < .001$]. This result suggests that individuals who have been in mental health treatment know more about mental health and treatment compared to those who have not. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there is a significant difference between people who have been in mental health treatment and those who have not ($p = .001$), and (2) there are significant differences among the three sociocultural groups (i.e., Korean, Korean American, non-Asian emerging and young adults ($p = .01$), and (3) there is no significant interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .07$). This suggests that there is no moderation effect of the sociocultural groups on the relationship between being in mental health treatment and how much individuals know about mental health.

An examination of the means in the mental health knowledge subscale indicated that people who reported knowing someone with a mental disorder had a higher mean score ($M = 20.8, SD = 7.0$) compared to those who did not ($M = 14.7, SD = 7.0$). An independent samples t -test was conducted to compare the mean scores. There was a

significant difference among the scores, [$t(152) = 5.2, p < .001$]. This result suggests that individuals who know someone with a mental disorder know more about mental health and treatment compared to those who do not. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there is a significant difference between people who reported knowing someone who has been in treatment and those who reported to not know anyone in treatment ($p < .001$), (2) there are significant differences among the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults; $p = .04$), and (3) there is no significant interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .8$). This suggests that there is no moderation effect of the sociocultural groups on the relationship between whether or not individuals know someone with a mental disorder and how much individuals know about mental health.

An examination of the means in the mental health knowledge subscale indicated that people who reported knowing someone who has been in mental health treatment had a higher mean score ($M = 20.5, SD = 6.7$) compared to those who did not ($M = 14.9, SD = 7.7$). An independent samples t -test was conducted to compare the mean scores. There was a significant difference among the scores, [$t(152) = 4.7, p < .001$]. This result suggests that individuals who know someone who has been in mental health treatment know more about mental health and treatment compared to those who do not. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there is a significant difference between people who reported knowing someone who has been in mental health treatment and those who did not ($p < .001$), (2) there are

significant differences among the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults; $p = .04$) and (3) there is no significant interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .9$). This suggests that there is no moderation effect of the sociocultural groups on the relationship between whether or not individuals know someone who has been in mental health treatment and how much individuals know about mental health.

Self-Efficacy. An examination of the means in the self-efficacy subscale indicated that people who reported to have been in mental health treatment had a higher mean score ($M = 6.5, SD = 3.0$) compared to those who did not ($M = 4.3, SD = 3.2$). An independent samples t -test was conducted to compare the mean scores. There was a significant difference among the scores, [$t(152) = 4.1, p < .001$], suggesting that individuals who have been in mental health treatment have higher confidence in finding mental health resources compared to those who have not. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there is a significant difference between people who reported to have been in mental health treatment and those who did not ($p = .02$), (2) there are significant differences among the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults; $p < .001$) and (3) there is no significant interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .7$). This suggests that there is no moderation effect of the sociocultural groups on the relationship between having been in mental health treatment and the level of confidence in finding mental

health resources.

An examination of the means in the self-efficacy subscale indicated that people who reported knowing someone with a mental disorder had a higher mean score ($M = 6.2$, $SD = 3.1$) compared to those who reported to not know anyone ($M = 3.2$, $SD = 2.7$). An independent samples t -test was conducted to compare the mean scores. There was a significant difference among the scores, [$t(152) = 6.2$, $p < .001$], suggesting that individuals who know someone with a mental disorder have higher confidence in finding mental health resources compared to those who do not know anyone with a mental disorder. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there is a significant difference between people who reported knowing someone with a mental disorder and those who did not ($p < .001$), (2) there are significant differences among the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults; $p = .02$) and (3) there is no significant interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .7$). This suggests that there is no moderation effect of the sociocultural groups on the relationship between whether or not they know someone with a mental disorder and the level of confidence in finding mental health resources.

An examination of the means in the self-efficacy subscale indicated that people who reported knowing someone who has been in mental health treatment had a higher mean score ($M = 6.1$, $SD = 3.1$) compared to those who reported to not know anyone ($M = 3.3$, $SD = 2.9$). An independent samples t -test was conducted to compare the mean

scores. There was a significant difference among the scores, [$t(152) = 5.3, p < .001$], suggesting that individuals who know someone who has been in mental health treatment have higher confidence in finding mental health resources compared to those who do not know anyone who has been in treatment. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there is a significant difference between people who reported knowing someone who has been in mental health treatment and those who reported to not know anyone in treatment ($p < .001$), (2) there are significant differences among the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults; $p = .01$), and (3) there is no significant interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .2$). This suggests that there is no moderation effect of the sociocultural groups on the relationship between whether or not they know someone who has been in mental health treatment and the level of confidence in finding mental health resources.

Attitudes: ATMH. The attitudes subscale consists of two separate subscales: (1) attitudes towards mental health and treatment (ATMH), and (2) willingness to interact with individuals with mental disorders (WII). An examination of the means in the ATMH subscale indicated that people who reported to have been in mental health treatment had a higher mean score ($M = 8.0, SD = 2.7$) compared to those who did not ($M = 6.5, SD = 3.0$). An independent samples t -test was conducted to compare the mean scores. There was a significant difference among the scores, [$t(152) = 3.0, p = .003$], suggesting that individuals who have been in mental health treatment have less negative attitude towards

mental disorders and treatment compared to those who have not been in treatment. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there are significant differences in the mean ATMH scores among the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults; $p < .001$), (2) there is no significant difference in the mean scores between individuals who have been in treatment and those who have not ($p = .2$), and (3) there is no significant interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .9$).

The second finding indicates a confounding variable. When the impact of treatment history was examined, there was a significant difference in the attitudes towards mental health between individuals who reported to have been in treatment and those who did not. When the sociocultural groups were examined, there were significant differences in the attitudes towards mental health among Koreans, Korean Americans, and non-Asians. However, when the treatment history and sociocultural groups were assessed, the treatment history did not seem to have an effect. Chi-square test confirmed that the percentages of people who have been in treatment are different across the sociocultural groups, $\chi^2(2) = 17.7, p < .001$. There were 10 people out of 50 (20%) Koreans and 14 people out of 50 (28%) Korean Americans who reported to have been in mental health treatment, whereas 31 people out of 54 (57%) non-Asians reported to have been in treatment. As a result, the treatment history is a confounding variable due to different proportions of people who have been in treatment in each group (i.e., Koreans, Korean Americans, non-Asians).

No significant interaction between the two independent variables suggests that there is no moderation effect of the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults) on the relationship between having been in mental health treatment and attitudes towards mental disorders and treatment.

An examination of the means in the ATMH subscale indicated that people who reported knowing someone with a mental disorder had a higher mean score ($M = 7.8$, $SD = 2.6$) compared to those who did not ($M = 5.7$, $SD = 3.2$). An independent samples t -test was conducted to compare the mean scores. There was a significant difference among the scores, [$t(152) = 4.6$, $p < .001$], suggesting that individuals who know someone with a mental disorder have less negative attitude towards mental disorders and treatment compared to those who do not. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there is a significant difference between people who reported knowing someone a mental disorder and those who did not ($p = .02$), (2) there are significant differences among the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults; $p = .003$), and (3) there is no significant interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .9$). This suggests that there is no moderation effect of the sociocultural groups on the relationship between whether or not they know someone with a mental disorder and attitudes towards mental disorders and treatment.

An examination of the means in the ATMH subscale indicated that people who reported knowing someone who has been in mental health treatment had a higher mean

score ($M = 7.9$, $SD = 2.5$) compared to those who did not ($M = 5.5$, $SD = 3.3$). An independent samples t -test was conducted to compare the mean scores. There was a significant difference among the scores, [$t(152) = 5.0$, $p < .001$] suggesting that individuals who know someone who has been in mental health treatment have less negative attitudes towards mental disorders and treatment compared to those who do not. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there is a significant difference between people who reported knowing someone who has been in mental health treatment and those who did not report knowing anyone in treatment ($p < .001$), (2) there are significant differences among the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults; $p = .001$), and (3) there is no significance interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .6$). This suggests that there is no moderation effect of the sociocultural groups on the relationship between whether or not individuals know someone who has been in mental health treatment and attitudes towards mental disorders and treatment.

Attitudes: WII. The last subscale of MHLS-R measures the willingness to interact with individuals with mental disorders (WII). An examination of the means in the WII subscale indicated that people who reported to have been in mental health treatment had a higher mean score ($M = 5.1$, $SD = 5.6$) compared to those who did not ($M = 1.0$, $SD = 6.6$). An independent samples t -test was conducted to compare the mean scores. There was a significant difference among the scores, [$t(152) = 4.0$, $p < .001$], suggesting that individuals who have been in mental health treatment are more willing to interact with

individuals with mental health concerns compared to those who have not been in treatment. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there are significant differences in the mean WII scores among the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults; $p < .001$), (2) there is no significant difference in the mean scores between individuals who have been in treatment and those who have not ($p = .06$), and (3) there is no significant interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .9$). No significant interaction suggests that there is no moderation effect of the sociocultural groups on the relationship between having been in mental health treatment and the willingness to interact with individuals with mental health concerns. The reason behind the lack of significant difference in the mean scores of those who have been in treatment and those who have not is similar to the ATMH subscale. This section had the same set of independent variables (i.e., treatment history and sociocultural groups) which had different percentages of people with treatment history. As a result, the treatment history is a confounding variable for this result as well. See the Attitude: ATMH section for detail.

An examination of the means in the WII subscale indicated that people who reported knowing someone with a mental disorder had a higher mean score ($M = 4.4$, $SD = 6.5$) compared to those who did not ($M = -.8$, $SD = 5.1$). An independent samples t -test was conducted to compare the mean scores. There was a significant difference among the scores, [$t(152) = 5.2$, $p < .001$], suggesting that individuals who know someone with a mental disorder are more willing to interact with individuals with mental health concerns

compared to those who do not. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there was a significant difference between people who reported knowing someone with a mental disorder and those who did not report to know anyone in treatment ($p = .001$), (2) there were significant differences among the three sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults; $p < .001$), and (3) there was no significant interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .9$). This suggests that there was no moderation effect of the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults) on the relationship between whether or not individuals know someone with a mental disorder and the willingness to interact with individuals with mental health concerns.

An examination of the means in the WII subscale indicated that people who reported knowing someone who has been in mental health treatment had a higher mean score ($M = 4.4$, $SD = 6.2$) compared to those who did not ($M = -1.0$, $SD = 5.6$). An independent samples t -test was conducted to compare the mean scores. There was a significant difference among the scores, [$t(152) = 5.4$, $p < .001$], suggesting that individuals who know someone who has been in mental health treatment are more willing to interact with individuals with mental health concerns compared to those who do not know anyone in treatment. A two-way ANOVA was conducted to examine the moderation effect. The results demonstrated that (1) there was a significant difference between people who reported knowing someone who has been in mental health treatment

and those who did not report to know anyone in treatment ($p < .001$), (2) there were significant differences among the three sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults; $p < .001$), and (3) there was no significant interaction between the two independent variables (i.e., mental health treatment and the sociocultural groups; $p = .9$). This suggests that there is no moderation effect of the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults) on the relationship between whether or not individuals know someone who has been in mental health treatment and the willingness to interact with individuals with mental health concerns.

CHAPTER V DISCUSSION

The purpose of the main study is to examine (1) the level of knowledge Koreans and Korean Americans have about mental health, (2) the level of confidence in finding appropriate mental health resources, and (3) their attitudes towards mental disorders and treatments. Specifically, this study compared Koreans and Korean Americans to the non-Asian population in the U.S. and examined potential contextual influences, such as age, gender, how long an individual has lived in the U.S., and generational status (e.g., first or 1.5 generation).

This chapter will provide a summary and discussion of the findings from the main study. First, research questions and hypotheses testing results will be explored. Second, implications of the findings will be provided. Lastly, the current study's limitations and implications for future research studies will be presented.

Research Question 1: Knowledge of Mental Health

The first research question for the main study was: Does the accuracy of the information on mental disorders and treatments differ among these sociocultural groups: non-Asian, Korean American, and Korean emerging and young adults? The hypotheses were (1) non-Asian emerging and young adults know more about mental disorders and treatments compared to their Korean American and Korean counterparts, and (2) Korean American emerging and young adults know more about mental disorders and treatments compared to their Korean counterparts.

The findings indicated that Korean and Korean American emerging and young adults knew significantly less about mental health than their non-Asian counterparts and

that there was no significant difference in the level of knowledge between Korean and Korean American emerging and young adults. Although there is limited research on Korean and Korean American emerging and young adults, the findings are consistent with other studies, which indicated that Asian Americans and/or Korean American immigrants tend to not recognize mental health concerns due to a lack of mental health knowledge and to perceive symptoms of mental disorders as a lack of will power (Jang et al., 2011; Lee et al., 2009a; Park & Bernstein, 2008; Park et al., 2013; Sue et al., 2012). A low level of mental health knowledge among Korean and Korean American emerging and young adults may be related to various factors including stigma around mental health (Vogel et al., 2007) and cultural values/norms (Cheng et al., 1993; Cheong & Snowden, 1990; Leong, 1986; Tracey et al., 1986) which may inhibit them from seeking help and acquiring appropriate information about mental health and related resources.

Stigma related to mental health is a systemic concern that inhibits individuals from seeking help and leads them to believe that mental disorders indicate insecurity, dependency, weakness, and a lack of emotional control (Ahmedani, 2011; Deane & Chamberlain, 2011; King et al., 1973; Oppenheimer & Miller, 1988; Sibicky & Dovidio, 1986). Asian Americans, including Koreans and Korean Americans, believe that experiencing mental disorders means that an individual has a weak personality and does not have any emotional self-control (Kung, 2004; Lee et al., 2009a; Leong & Lau, 2001; Yi & Tidwell, 2005). Inability to tolerate stigma may prevent them from talking about mental health concerns or seeking mental health services (Ting & Hwang, 2009). This would lead to limited opportunities to learn about mental disorders and available

treatments.

Asian cultural values and norms can also prevent talking about mental health concerns, seeking appropriate help, and/or learning about mental health. Some Asian cultures value repressing emotions and self-discipline and consider seeking help outside the family as “loss of face” or shame (Cheong & Snowden, 1990; Leong, 1986; Tracey et al., 1986). As a result, someone with those cultural values may decide to not disclose any information even when they are experiencing symptoms of a mental disorder and may feel that the mental health concern is a lack of self-control and shameful. This would prevent them from asking questions or seeking mental health support, which in turn prohibits opportunities to learn about their symptoms and how those impact daily functioning.

Research Question 2: Self-efficacy

The second research question for the main study was: Does the level of confidence in finding appropriate mental health resources differ among non-Asian, Korean American, and Korean emerging and young adults? The hypotheses were (1) non-Asian emerging and young adults have more confidence in seeking appropriate mental health resources compared to their Korean American and Korean counterparts, and (2) Korean American emerging and young adults have more confidence in seeking appropriate mental health resources compared to their Korean counterparts.

The findings of this study demonstrated that that Korean and Korean American emerging and young adults have significantly less confidence in finding appropriate mental health resources than their non-Asian counterparts and that there was no

significant difference in the level of confidence between Korean and Korean American emerging and young adults. Though there is no known study that examines the relationship between self-efficacy and the sociocultural groups (i.e., Koreans, Korean Americans, and non-Asians), similar differences in the scores are consistent with the knowledge subscale results.

Self-efficacy is defined as individuals' beliefs about their capacity to approach and complete a given task (Bandura, 2001). According to Bandura (1997), the four significant sources of self-efficacy are mastery experiences, vicarious experiences, social persuasions, and physiological and emotional states (e.g., anxiety, mood). One would feel a higher sense of self-efficacy when their action was perceived as successful, whereas they would have a lower sense of self-efficacy when they perceived that they failed. Vicarious experiences can help develop self-efficacy by observing other people's actions and gaining confidence that they can succeed as well. Social persuasions, or other people's perceptions/feedback, can increase or decrease a sense of self-efficacy. Lastly, physiological and emotional states, such as anxiety, can be interpreted as predictors of one's ability and can impact self-efficacy (Bandura, 1997).

Due to stigma and Korean cultural values, Korean and Korean American emerging and young adults may have significantly fewer chances to observe others modeling which mental health resources are available and/or those of having vicarious experiences of seeing people seeking mental health services. Seeking help outside of the family is perceived as a "loss of face," which may prevent them from seeking support (Cheong & Snowden, 1990; Tracey et al., 1986). As a result, Korean and Korean

American emerging and young adults are likely to not have seen their parents or people in their community who have sought treatment or taught them what resources are available for mental health. Without modeling or vicarious experiences, self-efficacy related to finding appropriate mental health resources would be lower than their non-Asian counterparts who may have been more exposed to people in their community seeking services.

Given the mental health stigma, social persuasion or other people's feedback/perceptions are important to consider. For example, Korean and Korean American emerging and young adults may worry about other people's perceptions if they were to seek mental health treatment. They may worry that they would bring shame to themselves as well as their family if other people found out about their mental health concerns. As a result, they may experience decreased self-efficacy around finding appropriate resources. Furthermore, Korean and Korean American emerging and young adults may experience shame and anxiety when they think about seeking treatment due to stigma, a lack of modeling and vicarious experiences, and no mastery experiences. Therefore, they would have lower self-efficacy compared to their non-Asian counterparts.

Korean emerging and young adults, in particular, may have additional barriers that impact help seeking and self-efficacy. Individuals who may not speak English fluently may have difficulty communicating in English and feel reluctant to seek mental health resources (Marikiyo & Kameoka, 1992). Asian Americans are more likely to stay in treatment when their mental health professionals are Asian Americans compared to professionals whose racial background is not Asian (Flaskerud & Liu, 1991). Compared

to their White counterparts, Asian American outpatients expressed lower satisfaction, increased levels of symptoms, and less confidence/trust in their mental health providers when therapy did not seem culturally sensitive (Zane, Enomoto, & Chun, 1994). Given that there are fewer racial minority mental health professionals compared to White mental health professionals, Korean emerging and young adults, whose English may not be fluent or who may not have adjusted to the culture in the United States, may be less likely to seek mental health services and have lower self-efficacy compared to their non-Asian and Korean American counterparts.

Research Question 3: Attitudes towards Mental Health

The third research question for the main study was: Do attitudes toward mental disorders and treatments differ amongst non-Asian, Korean American, and Korean emerging and young adults? The hypotheses were (1) non-Asian emerging and young adults have less negative attitudes compared to their Korean American and Korean counterparts, and (2) Korean American emerging and young adults have less negative attitudes compared to their Korean counterparts.

There were two subscales in the attitude subscale: (1) attitude towards mental health and treatment and (2) willingness to interact with individuals with mental disorders. The findings indicated that non-Asian emerging and young adults reported less negative attitude towards mental health and treatment compared to their Korean and Korean American counterparts. Similarly, non-Asian emerging and young adults reported greater willingness to interact with individuals with mental disorders compared to their Korean and Korean American counterparts. There was no significant difference between

Koreans and Korean Americans in either of the subscales. The findings are consistent with the current literature on Asian Americans and their attitudes towards mental health. Although social stigma around mental health is a systemic issue that impact the general population (Ahmedani, 2011), Asian Americans and their cultural values may heighten the negative attitudes. For example, Asian Americans believe that emotional distress is bad and is a results of personality traits and a lack of self-control (Kung, 2004; Lee et al., 2009a; Leong, & Lau, 2001; Yi & Tidwell, 2005). Not only do they believe that mental health concerns are negative, but also believe that such concerns as family disgrace (Lin & Cheung, 1999, Okazaki, 2000). Though there is no known research that examined Korean and Korean American emerging and young adults' attitudes, many research studies on Asian Americans and mental health underscore negative attitudes towards mental health.

An attitude, which is a positive or negative opinion or feeling about something or someone, develops due to an experience or an external influence (e.g., persuasion from others; Petty, Wheeler, & Tormala, 2003). Attitudes that have been formed through emotions happen by various ways including values and classical conditioning (Pavlov, 1902; Watson & Rayner, 1920). As described by the previous paragraph, Korean and Korean American emerging and young adults' negative attitude towards mental disorders and treatments may have developed due to cultural values (e.g., perceiving emotional distress as a result of bad personality traits or a lack of self-control). As classical conditioning pairs an unconditioned stimulus to a conditioned stimulus to create a new conditioned response (Pavlov, 1902; Watson & Rayner, 1920), mental disorders and/or

treatment, which may be unfamiliar to young Koreans and Korean Americans, may become associated with negative attitudes when they are exposed to adverse values others in their community hold regarding mental disorders. Such negative attitudes, as a result, would lead to reluctance to interact with individuals with mental disorders.

According to Katz (1960), one's attitudes can serve four functions, one of which is to provide a structure to organize newly acquired knowledge and to create consistency and stability in their understanding using a framework that is guided by existing values/beliefs. Specifically for Koreans and Korean Americans, some of the values they hold include the belief that expressing emotions indicates a lack of self-discipline (Leong, 1986) and asking for help outside of the family creates a "loss of face" (Cheong & Snowden, 1990; Tracey, Leong, & Glidden, 1986). As Koreans and Korean Americans learn new information related to mental disorders and/or treatment, the values they hold may lead to an understanding that some symptoms such as feeling sad or crying may be perceived as a lack of control and that seeking help from a mental health professional would lead to feeling ashamed or bringing shame to their family. Consequently, negative attitudes may form due to mental disorders and treatments being perceived as harmful and adverse. This explains Koreans and Korean Americans' more negative attitude towards mental health compared to their non-Asian counterparts.

There were four items within the attitude subscale that did not fit into either of the subscales. The items were (1) if I had a mental disorder, I would not tell anyone, (2) Seeing a mental health professional means you are not strong enough to manage your own problems, (3) If I had a mental disorder, I would not seek help from a mental health

professional, and (4) I believe treatment for a mental disorder, provided by a mental health professional, would not be effective. Among those four items, significant differences among the sociocultural groups were indicated for two items, which are consistent with the results of the two subscales of the attitudes section (i.e., attitudes towards mental health and willingness to interact with individuals with mental disorders). That is, Korean and Korean American emerging and young adults reported more negative attitudes compared to their non-Asian counterparts. Non-Asians are least likely to disagree with the following statement, “seeing a mental health professional means you are not strong enough to manage your own problems,” compared to Koreans and Korean Americans. Korean Americans are less likely to disagree compared to Koreans. Furthermore, non-Asians were more likely to disagree with the statement, “I believe treatment for a mental disorder, provided by a mental health professional, would not be effective.” There was no significant difference between Koreans and Korean Americans or between Korean Americans and non-Asians. The degree to how each group agreed or disagreed with the items indicates that non-Asians hold least negative attitudes towards mental health treatment compared to their Korean American and Korean counterparts.

The items that did not show significant differences among the sociocultural groups are important to examine. The items are “if I had a mental disorder, I would not tell anyone” and “If I had a mental disorder, I would not seek help from a mental health professional.” For these items, -2 points were for “strongly agree,” -1 point was for “agree,” 0 point was for “neither agree or disagree”, 1 point was for “disagree,” and 2 points were for “strongly disagree.” For the first item, the mean scores were .7 for non-

Asians, .6 for Korean Americans, and .2 for Koreans. For the second item, the mean scores were 1.5 for non-Asians, 1.1 for Korean Americans, and 1.16 for Koreans. These results indicate that, despite stigma around mental health and differences in cultural values that impact attitudes, the average responses indicate some (1) neutral feelings and/or some willingness to talk about their own mental health concerns and (2) some willingness to seek mental health professionals if they had a mental disorder. Although this does not determine how likely they are to actually talk about mental health concerns or seek treatment, it does indicate that their beliefs about personally seeking support and/or help are similarly tenuous. At the same time, it is important to consider this finding in relation to other findings of the study. Recall that non-Asians reported greater knowledge of mental disorders and treatment, higher confidence in finding mental health resources, and less negative attitudes towards mental health than Koreans and Korean Americans. Thus, even though all these sociocultural groups report similar beliefs about discussing mental health issues and seeking help, differences in knowledge, self-efficacy, and attitudes may, in the end, make it less likely that Koreans and Korean Americans would actually do so, compared to their non-Asian counterparts.

Research Question 4: Individual and Contextual Factors

The fourth research question for the main study was: Are individual and contextual factors, such as age, gender, generational status, and level of education, significantly related to mental health knowledge, self-efficacy, and attitudes? The hypotheses were (1) there will be differences in participants' knowledge, self-efficacy, and attitudes based on gender, generational status, and how long an individual has lived

in the United States, and (2) there will be no significant differences based on age.

Knowledge. The findings indicated varied influences of individual and contextual factors on the knowledge, self-efficacy, and attitudes scores. Within the knowledge subscale, level of education and how long an individual has lived in the United States were significantly related to the level of knowledge for all the sociocultural groups (i.e., Koreans, Korean Americans, non-Asians) combined. When each group was examined separately, no significant relationships were found for Koreans and Korean Americans, whereas marital/family status, level of education, and how long an individual has lived in the United States were significantly related to the level of knowledge for non-Asians. These results suggest that (1) higher level of education and a longer duration of living in the United States were related to greater knowledge scores for all the sociocultural groups and (2) being married or being in a domestic partnership compared to being single, higher level of education, and (3) a longer duration of living in the United States were related to greater knowledge scores for non-Asians.

It is important to note differences in the individual and contextual influences for all the sociocultural groups combined versus Koreans, Korean Americans, and non-Asians separately. For the knowledge subscale, the level of education and how long an individual has lived in the United States were significantly related to knowledge scores for all the sociocultural groups combined, yet those were not found in the Korean or Korean American group. This may suggest that regardless of the individual/contextual factors measured for the study, Korean and Korean American emerging and young adults have limited exposure to information on mental health due to the stigma around mental

health and cultural factors (Ahmedani, 2011; Lin & Cheung, 1999; Okazaki, 2000). On the other hand, there were several significant individual/contextual factors related to mental health knowledge of non-Asians. Being married or in a domestic partnership was related to greater knowledge scores compared to being single. Although there is no known study that examined the relationship between mental health knowledge and marriage/domestic partnership, some studies explored various impacts of marriage. For example, the role of marriage can potentially be a source of purpose and meaning and can provide a sense of belonging and mattering to someone (Marks, 1996; Schieman & Taylor, 2001; Tayler & Turner, 2001). Marriage can provide more support and social integration compared to being unmarried (Carlson, 2012). An individual who may not have been exposed to mental health related information may be married to or live with someone who has mental health concerns or has more knowledge about mental health. The intimate relationship, whether it be marriage or domestic partnership, may lead to increased exposure to information on mental health and greater mental health knowledge. However, it is important to note that marital status may be a confounding variable, given different proportions of people who were single or married/in a domestic partnership among Koreans, Korean Americans, and non-Asians in the sample.

Similarly, the impact of level of education and how long an individual has lived in the United States on mental health knowledge may be related to the amount of exposure to mental health related information for non-Asian emerging and young adults. As people become more educated, they may be able to develop broader social supports, have financial resources, and develop skills to enhance/maintain healthy lifestyles (Kessler,

Foster, Saunders, & Stang, 1995; Mirowsky & Ross, 2003). During that process, they may be exposed to mental health related information, such as the counseling center on campus and strategies to do well on tests including sleep hygiene. As a result, they may be able to acquire more information related to mental health and be able to demonstrate higher mental health literacy than those who have lower educational level.

The United States have more mental health resources and outreach efforts compared to other parts of the world (e.g., South Korea), and people in the U.S. may be more likely to observe and/or be part of those resources. The impact can be seen in a recent survey which demonstrated that most Americans reported positive attitudes towards mental health and treatment (APA, 2019). This may explain the significant relationship between how long an individual has lived in the United States and their mental health knowledge for non-Asians. The longer individuals live in the United States, the more likely they are to be exposed to mental health resources whether it be through people in their communities or the media. As a result, they may be able to acquire more information on mental disorders and treatment.

Self-Efficacy. For the self-efficacy subscale, gender was significantly related to all the sociocultural groups. That is, women reported higher confidence in finding mental health resources compared to men. The result was similar across all the sociocultural groups. It is also important to note that Non-Asians reported the highest level of self-efficacy, following Korean Americans, and finally Koreans. The term gender encompasses a construct beyond the differences in the reproductive organs and includes ways that men and women are socialized. For example, in relation to mental illness,

women report more depressive symptoms than men (Murray, & Lopez, 1996; Piccinelli & Homen, 1997), whereas men are more likely to be diagnosed with substance use disorders and antisocial personality disorder than women (Brown, 1998). Such differences in the prevalence of mental disorders may be contributed by common ways that men and women have learned to cope with distress in our society. For example, women may be socialized to use emotional expressions, while using substances or isolating themselves to inhibit emotional expressions may be socially acceptable behavior for men. This may lead to people witnessing women's emotional distress and suggesting mental health resources, whereas others may not easily see or be as aware of men's level of distress. Consequently, women may be more exposed to mental health resources than men and have more self-efficacy in finding those resources. In addition, seeking support and successfully identifying the resources can lead to enhanced self-efficacy, while low self-efficacy can lead to avoidance (Bandura, 2001). Wendt and Shafer (2015) found that men are less likely to seek mental health resources compared to women. This may be a result of men's lower self-efficacy in finding mental health resources compared to women, which we found to be consistent across Korean, Korean American, and non-Asian emerging and young adults.

Attitudes: ATMH and WII. For one of the attitudes subscales (i.e., the attitudes toward mental health subscale; ATMH), gender, generational status and socioeconomic status were significantly related to attitudes towards mental health for all the sociocultural groups (i.e., Koreans, Korean Americans, non-Asians). When each group was examined separately, no significant relationships were found for Korean Americans. This suggests

that for this group, differences in the individual/contextual factors are not significantly related to increased or decreased negative attitudes towards mental disorders and treatment. However, socioeconomic status, level of education, generational status, and age were significantly related to Koreans' attitudes towards mental health; gender and generational status were significantly related to non-Asians attitudes towards mental health. These results indicate that (1) lower socioeconomic status, higher level of education, higher generational status, and older age were related to less negative attitudes towards mental health for Koreans and (2) being a woman and higher generational status was related to less negative attitudes towards mental health for non-Asians.

For the other attitudes subscale (i.e., willingness to interact with people with mental disorders; WII), gender, socioeconomic status, generational status, age, and how long an individual has lived in the United States were significantly related to the willingness to interact with people with mental disorders for all the sociocultural groups (i.e., Koreans, Korean Americans, and non-Asians). When each group was examined separately, no significant relationships were found for Korean Americans. This suggests that for this group, differences in the individual/contextual factors are not significantly related to the level of willingness to interact with people with mental disorders. However, for Koreans, gender, socioeconomic status, and age were significantly related to the willingness to interact with people with mental disorders; for non-Asians, generational status was significantly related. These results suggest that (1) being a woman, lower socioeconomic status, and being younger were related to greater willingness to interact with people with mental disorders for Koreans, and (2) higher generational status was

related to greater willingness to interact with people with mental disorders for non-Asians.

Level of Education. People who are highly educated are more likely to have additional financial resources, social support, and skills to enhance/maintain healthy lifestyles (Kessler et al., 1995; Mirowsky & Ross, 2003). They are also more likely to seek mental health resources, such as psychiatry, compared to people who have lower levels of education (Steele, Dewa, Lin, & Lee, 2007). Consequently, Koreans who have higher levels of education may have a better understanding of mental health concerns and related resources and have less negative attitudes compared to those who have lower levels of education.

Socioeconomic Status. Similar to the knowledge subscale, there were differences in significant relationships between the individual/contextual factors and the sociocultural groups (i.e., Koreans, Korean Americans, non-Asians) for the attitudes subscale. Koreans who reported that their family was from lower middle class or below had (1) less negative attitudes towards mental health and (2) greater willingness to interact with individuals with mental health concerns, compared those who reported that their family was from upper middle class or above. Socioeconomic status can have a significant impact on mental health especially due to specific stressors that are related to being in low socioeconomic background, such as unemployment and poverty (Hudson, 2005). Koreans who grew up in lower middle class backgrounds or below might have observed mental health concerns of their family members or people in their community and have a better understanding of the impact of poverty. As a result, they may have less negative

attitudes towards mental disorders and treatment and be more willing to interact with people with mental health concerns compared to those who are from more socioeconomically privileged backgrounds.

These findings may seem counterintuitive especially given the relationship between higher level of education and less negative attitudes towards mental disorders and treatments for Korean emerging and young adults. There may be an assumption that people who are from more socioeconomically privileged backgrounds are more likely to acquire higher level of education and have less negative attitudes towards mental health. However, the findings demonstrated that Korean emerging and young adults whose families are from low middle class or below had less negative attitudes and were more willing to interact with people with mental disorders compared to those whose families are from upper middle class or above. This may be due to “collective shame,” which means shame imposed by the moral expectations of the society (Lee, 1999). Due to the stigma related to mental health, Koreans try to meet the expectations of the society and “save face” by not sharing any mental health concerns with others and maintaining a certain façade. This may be especially true for Koreans who are from socioeconomically privileged backgrounds as they may focus more on maintaining a higher status in the society and a certain image aligned with the society’s expectations. As a result, Korean emerging and young adults who were raised in upper middle class families or above may hold more negative attitudes towards mental health and demonstrate less willingness to interact with individuals with mental disorders.

It is important to note, however, that the way socioeconomic status was measured

for this study was incomplete because it is challenging to measure socioeconomic status of individuals who are from different regions/countries as the definition and the impact of socioeconomic status can vary. Therefore, any results related to socioeconomic status need to be interpreted cautiously.

Age. It is important to note that the age range for the population of interest was between 18 and 34 years old. Therefore, younger age group would include from age 18 to early 20s (i.e., emerging adults), and older age group would include late 20s to age 34 (i.e., young adults). For Korean emerging and young adults, older age was significantly related to less negative attitudes towards mental health, whereas younger age was significantly related to increased willingness to interact with people with mental health concerns. Similar to the level of education, as they become older, they may be more exposed to their or other people's mental health related concerns and may be able to understand the common struggles, which subsequently would lead to less negative attitudes towards mental health. Interestingly, younger Koreans were more willing to interact with people with mental disorders compared to older Koreans. Older Korean young adults' higher attitudes scores on ATMH indicated less negative attitudes towards mental health compared to younger Korean emerging adults. However, older Korean young adults still had lower scores than their non-Asian counterparts in terms of attitudes towards mental health which would lead to less willingness to interact with people with mental disorders. Younger Korean emerging adults' greater willingness to interact with people with mental disorders compared to older Korean young adults may be due to various factors that would lead to more risk-taking behaviors. For example, teens and

individuals in their early twenties are more likely to engage in sexual risk-taking behaviors compared to those in other age groups (Zimmer-Gembeck & Helfand, 2008), and have higher rates of unplanned pregnancy (United Nations Statistics Division, 2017) and sexually transmitted diseases (Centers for Disease Control and Prevention, 2013). Though interacting with individuals with mental disorders is not as high risk as engaging in risky sexual behaviors, young Korean emerging adults' less awareness of mental disorders may lead to less fear and less likelihood of assessing consequences of their actions which subsequently would lead to greater willingness to interact with people with mental disorders compared to their older counterparts.

Generational Status. Generational status may indicate higher level of acculturation for Korean emerging and young adults. American-born Asian Americans compared to immigrant Asian Americans were more likely to seek mental health services (Le Meyer et al., 2009). Third-generation Asian Americans were more likely to use mental health services than their first-generation counterparts (Spencer et al., 2010). These findings may be due to higher levels of acculturation and more exposure to mental health concerns and resources in the United States. Therefore, Koreans who are 1.5 generation compared to their first generation counterparts may have a better understanding of mental health and have less negative attitudes towards mental disorders and treatment. This finding is also related to the finding with non-Asians in that, non-Asian emerging and young adults who have higher generational status (e.g., third or fourth generation) may be more acculturated and be more exposed to mental health resources, which may lead to (1) less negative attitudes towards mental health and (2)

increased willingness to interact with people with mental health concerns, compared to non-Asians who have lower generational status (e.g., first or 1.5 generation).

Gender. Non-Asian women reported less negative attitudes towards mental disorders and treatment compared to non-Asian men. This finding is consistent with a study that found that women were more favorable of psychotherapy and were more likely to suggest professional help compared to men (Holzinger, Floris, Schomerus, Carta, & Angermeyer, 2012). This may be due to ways that men and women are socialized differently in our society. Women are socialized to be emotionally expressive and seek help from others, whereas men are socialized to hide their emotions which can be perceived as weakness (Wendt & Shafer, 2015). This may help women to be more accepting of mental health concerns and treatment and develop less negative attitudes compared to men. In addition, Korean women were more willing to interact with individuals with mental health concerns compared to Korean men. The reason behind this finding may be similar to the finding for non-Asian women in that Korean women may be socialized to express emotions more so than Korean men. Furthermore, expectations for Korean women may also contribute to the willingness to interact with people with mental health concerns. According to Confucian tradition, Korean women are typically socialized to serve others (Sun & Cho, 2008). As a result, they may feel obligated to be polite and serve people with mental disorders regardless of any negative attitudes towards mental disorders. This would lead to greater willingness to interact with people with mental disorders compared to Korean men who may not have the same expectation to serve others.

Research Question 5: Knowledge and Moderation Analysis

The fifth research question for the main study was: Does the level of the knowledge of mental disorders and treatments differ based on whether they (1) have been in mental health treatment or not, (2) know someone with a mental disorder, (3) know someone who has been in mental health treatment, and (4) whether the effect differs based on the group membership (i.e., Korean, Korean American, non-Asian emerging and young adults). The hypotheses were: (1) individuals who have been in mental health treatment know more about mental disorders and treatments than those who have not been in treatment, (2) those who know someone with a mental disorder know more about mental disorders and treatments than those who do not know anyone with a mental disorder, (3) those who know someone who has been in mental health treatment know more about mental disorders and treatments than those who do not know anyone who has been in treatment, and (4) the relationship between these three predictors and the level of mental health knowledge will vary by group membership such that the relationship will be strongest amongst non-Asians, followed by Korean Americans, and finally Korean emerging and young adults.

The findings indicated that, when Korean, Korean American, and non-Asian emerging and young adults' data were combined, individuals who reported to have been in mental health treatment know more about mental health compared those who did not. Similarly, individuals who reported knowing someone with a mental disorder and/or reported knowing someone who has been in mental health treatment, also knew more about mental health compared to those who did not know anyone with a mental disorder

or anyone who has been in treatment. The findings are consistent with the pilot study as well as the study with the original MHLS (O'Connor & Casey, 2015). Being in mental health treatment or knowing someone with mental health concerns increases the possibility of an individual experiencing or being exposed to mental disorders and/or treatment. As a result, they may become more familiar with the information included in the knowledge subscale, such as symptoms of various mental disorders, confidentiality and its limits, and/or what may impact the mood.

One's racial/ethnic identity (i.e., identifying as Korean, Korean American, or non-Asian) did not moderate the relationship between individuals' experiences with mental health (i.e., having been in mental health treatment, knowing someone who has been in treatment, knowing someone who has a mental disorder) and how much they know about mental disorders and treatment. These results suggest that the impact of individuals' experiences with mental health on their mental health knowledge is similar regardless of the group membership (i.e., Korean, Korean American, or non-Asian).

Research Question 6: Self-Efficacy and Moderation Analysis

The sixth research question for the main study was: Does the level of confidence in finding appropriate mental health resources differ based on whether they (1) have been in mental health treatment or not, (2) know someone with a mental disorder, (3) know someone who has been in mental health treatment, and (4) whether the effect differs based on the group membership (i.e., Korean, Korean American, non-Asian emerging and young adults). The hypotheses were: (1) individuals who have been in mental health treatment have more confidence in seeking appropriate mental health resources than

those who have not been in treatment, (2) those who know someone with a mental disorder have more confidence in seeking appropriate mental health resources than those who do not know anyone with a mental disorder, (3) those who know someone who has been in mental health treatment have more confidence in seeking appropriate mental health resources than those who do not know anyone who has been in treatment, and (4) the relationship between these three predictors and the level of self-efficacy will vary by group membership such that the relationship will be strongest amongst non-Asians, followed by Korean Americans, and finally Korean emerging and young adults.

The findings indicated that, when Korean, Korean American, and non-Asian emerging adults' data were combined, individuals who reported to have been in mental health treatment had more confidence in finding mental health resources compared those who did not. Similarly, individuals, who reported knowing someone with a mental disorder and/or reported knowing someone who has been in mental health treatment, also had more confidence in finding mental health resources compared to those who did not know anyone with a mental disorder or anyone who has been in treatment. The findings are consistent with the pilot study as well as the study with the original MHLS (O'Connor & Casey, 2015).

Self-efficacy is defined as one's beliefs about their capacity to approach and complete a given task (Bandura, 2001). An individual with a high self-efficacy may believe that they can face a task and recover from it if they fail, whereas someone with a low self-efficacy may believe that they will not be able to complete the task and/or avoid it when possible. Individuals who have been in treatment or know someone with mental

health concerns may be more familiar with finding mental health resources as they may have to find the resources themselves or may have seen someone else use the resources. Consequently, the familiarity may help those individuals to feel more confident in finding appropriate resources compared to those who have not had any experience with mental disorders or treatment. On the contrary, those who have not been in mental health treatment or do not know anyone with mental health concerns may feel less confident about finding mental health resources as they do not know where to start and may give up easily when they encounter any challenges in identifying appropriate resources. This explains the findings which demonstrated that individuals who have been in treatment or know someone with mental health concerns have higher self-efficacy than those who do not have any experience related to mental health.

One's racial/ethnic identity (i.e., identifying as Korean, Korean American, or non-Asian) did not moderate the relationship between individuals' experiences with mental health (i.e., having been in mental health treatment, knowing someone who has been in treatment, knowing someone with a mental disorder) and how confident they feel about finding mental health related resources. These results suggest that the impact of individuals' experiences with mental health on their self-efficacy in finding mental health resources is similar regardless of the group membership (i.e., Korean, Korean American, or non-Asian).

Research Question 7: Attitudes and Moderation Analysis

The final research question for the main study was: Do attitudes of mental disorders and treatments differ based on whether they (1) have been in mental health

treatment or not, (2) know someone with a mental disorder, (3) know someone who has been in mental health treatment, and (4) whether the effect differs based on the group membership (i.e., Korean, Korean American, non-Asian emerging and young adults). The hypotheses were: (1) individuals who have been in mental health treatment have less negative attitudes compared to those who have not been in treatment, (2) those who know someone with a mental disorder have less negative attitudes compared to those who do not know anyone with a mental disorder, (3) those who know someone who has been in mental health treatment have less negative attitudes compared to those who do not know anyone who has been in treatment, and (4) the relationship between these three predictors and the attitudes towards mental health will vary by group membership such that the relationship will be least negative amongst non-Asians, followed by Korean Americans, and finally Korean emerging and young adults.

The findings indicated that, when Korean, Korean American, and non-Asian emerging adults' data were combined, individuals who reported to have been in mental health treatment had less negative attitudes towards mental health and treatment compared those who did not. Individuals who reported knowing someone with a mental disorder and/or reported knowing someone who has been in mental health treatment also had less negative attitudes towards mental health and treatment compared to those who did not know anyone with a mental disorder or anyone who has been in treatment. The findings were similar to the WII subscale. Individuals who reported to have been in mental health treatment were more willing to interact with people with mental disorders compared to those who did not report to have been in treatment. Individuals who reported

knowing someone with a mental disorder and/or reported knowing someone who has been in mental health treatment were more willing to interact with people with mental disorders compared to those who did not report to know anyone who has a mental disorder or anyone who has been in treatment. The findings are consistent with the pilot study results as well as with the original MHLS study (O'Connor & Casey, 2015).

Various individual and contextual facts impact individuals' attitudes towards mental disorders and treatments. Mental health knowledge, stigma around mental health, culture, how the media illustrate mental disorders, and familiarity with mental health resources are some examples (Corrigan, Markowitz, & Watson, 2004; Kobau et al., 2012; Wahl, 2003). Individuals who have been in treatment or know someone with mental health concerns demonstrated less negative attitudes towards mental health compared to those who do not have any experience with mental health concerns. Experiences related to mental health can increase individuals' knowledge about mental disorders and treatment and their understanding of the impact of mental health concerns on the daily functioning. As a result, those individuals may be able to refute stigma around mental health, understand common struggles related to mental health, and be willing to interact with those with mental health concerns.

It is important to note that, for the attitudes subscales, treatment history (i.e., whether or not someone has been in mental health treatment) was confounding when it was examined with the sociocultural groups (i.e., Koreans, Korean Americans, non-Asians). That was due to differences in the proportions of people who have been in treatment in each group. One's racial/ethnic identity (i.e., identifying as Korean, Korean

American, or non-Asian) did not moderate the relationship between individuals' experiences with mental health (i.e., having been in mental health treatment, knowing someone who has been in treatment, knowing someone with a mental disorder) and their attitudes (i.e., attitudes towards mental health and willingness to interact with individuals with mental disorders). These results suggest that the impact of individuals' experiences with mental health on their attitudes towards mental disorders and treatment is similar regardless of the group membership (i.e., Korean, Korean American, or non-Asian).

Summary

Overall, the results of the main study indicated that non-Asian emerging and young adults have the highest scores on mental health knowledge and self-efficacy in finding mental health resources, and the least negative attitudes toward mental disorders and treatments compared to their Korean American and Korean counterparts. These findings were consistent with the hypotheses. However, there was no significant difference in any of the subscale scores between Korean Americans and Koreans, even though it was hypothesized that Koreans would have lower scores than Korean Americans. The lack of significant difference may suggest that the stigma around mental health and cultural values have considerable impact on both Koreans and Korean Americans in that they may be hindered from being exposed to information related to mental health and related resources.

In addition to mental health literacy differences among Korean, Korean American, and non-Asian emerging and young adults, there were varied influences of individual and contextual influences such as gender, age, socioeconomic backgrounds,

and generational status. For example, the level of self-efficacy differed by gender, with women reporting higher levels of confidence in finding mental health resources compared to men. It was hypothesized that there will be differences in mental health literacy based on gender, generational status, and how long an individual has lived in the United States and not based on age. On the other hand, the relationships between the individual/contextual variables and mental health literacy varied by the group (i.e., Korean, Korean American, non-Asian emerging and young adults) and may need to be examined further to provide a thorough understanding of specific influences of each individual/contextual variable.

Similar to the pilot study, individuals who have been in mental health treatment and/or those who know someone with mental health concerns had higher mental health knowledge, self-efficacy, and less negative attitudes towards mental disorders and treatment compared to those who have not been in treatment and/or those who do not know anyone with mental health concerns.

Implications, Limitations, and Future Research

This section will present implications and limitations for the main study as well as suggestions for future research.

Implications

This study adds to the literature by being among the first to investigate mental health literacy among individuals of Korean background, and further, demonstrated several important findings. Korean and Korean American emerging and young adults reported lower mental health literacy (i.e., lower mental health knowledge, lower self-

efficacy, and more negative attitudes towards mental health) compared to their non-Asian counterparts, suggesting a need for concerted efforts with these groups, especially given significant mental health concerns including high rates of suicidal ideation, intent, attempts, and suicide (Duldulao, Takeuchi, & Hong, 2009; Kisch, Leino, & Wilverman, 2005; Lee, Park, Lee, Oh, Choi, & Oh, 2018; World Health Organization, 2019). When examining all the participants together, individuals who have been in treatment and/or know someone who has mental health concerns seem to have higher mental health literacy. This suggests that having some experience related to mental health is associated with higher mental health knowledge, higher self-efficacy, and less negative attitudes towards mental health. Given the stigma and cultural values may prevent Korean and Korean American emerging and young adults from seeking mental health support, other resources such as outreach programs are needed to provide psychoeducation on mental disorders, their impact, and treatment, to have discussions to reduce fears and stigma around mental health, and to enhance mental health literacy.

Stigma around mental health exists in various cultures, including Korean and American cultures (e.g., Cheng et al., 1993; Jorm, 2012; Sue et al., 2012) and leads to negative attitudes towards mental disorders and treatment (Vogel et al., 2007). As attitudes form with classical conditioning (Pavlov, 1902; Watson & Rayner, 1920) and as a function of organizing new information (Katz, 1960), it is important to think about ways to change attitudes. The Harris Poll conducted a survey of over 1,000 adults in the United States in 2018 and found that most American adults had positive attitudes towards the topic of mental health (APA, 2019). The survey results indicated that (1) 87% of

American adults stated that having a mental disorder is not a shame, and (2) 86% reported that they believe individuals with mental disorders can get better. This may be a result of greater exposure to people and the media discussing mental health in the United States. On the contrary, discussions on mental health among Koreans may be limited due to cultural values that would inhibit conversations around mental disorders and treatments (e.g., Cheong & Snowden, 1990; Kim & Omizo, 2003; Leong, 1986; Tracey et al., 1986). Although Korean American emerging and young adults may be exposed to mental health discussions in the United States more than Koreans, Korean Americans' parents or their communities may still withhold some Korean cultural values that may lead to conflicting attitudes towards mental disorders and treatments. Therefore, psychoeducation for Koreans and Korean Americans can include information on Korean cultural values, how they impact the mental health stigma and negative stereotypes, what mental disorder means (e.g., symptoms, causes), and treatment. Outreach program can also include conversations on individuals' experiences of how cultural values have inhibited them from talking about mental health and/or seeking available resources.

It is important to consider ways to change negative attitudes toward mental health. For example, classical conditioning (Pavlov, 1902; Watson & Rayner, 1920) can be used to repeated pair mental health with positive outcomes such as improved sleep and productivity to educate individuals about the importance of mental health. The mere exposure effect means the tendency to develop a positive association or a preference due to becoming familiar with something (Zajonc, 2001). With the classical conditioning and mere exposure effect combined, familiarity with various mental disorders, available

treatments, and their associations to positive outcomes may potentially lead to decreased stigma and less negative attitudes towards mental health. This may be done in classroom settings, in conventional and social media, in cultural community settings, and/or through outreach programs where Korean and Korean American emerging and young adults can be exposed to mental health related information continually.

In addition to being exposed to the information, it would be beneficial to have individuals actively engage in discussions about their attitudes towards mental disorders and treatments. According to cognitive dissonance theory (Festinger, 1957), people seek consistency in their thoughts, values, and beliefs and feel psychological discomfort when they face new evidence that contradicts what they believe. This can either motivate them to reorganizing the new information and change their attitudes or avoid opposing information that leads to cognitive dissonance (Festinger, 1957; Petty et al., 2003). If Korean and Korean American emerging and young adults can be engaged in conversations about mental disorders, their impact on daily functioning, and available treatments, they may learn new information that contradict their cultural values and may strive to reduce the dissonance by changing their attitude or avoid the conversations. Therefore, having conversations where individuals can ask questions and acquire necessary information to have a better understanding of mental health would be essential in reducing negative attitudes.

Limitations and Suggestions for Future Research

The current study focuses on mental health literacy, specifically mental health knowledge, self-efficacy, and attitudes towards mental health, of Korean, Korean

American, and non-Asian emerging and young adults. Although the study has many important findings, it is not without limitations. First, the sample is important to consider. The demographic survey and MHLS-R were distributed through various universities' listservs, social media, and other cultural communities in the United States. Most people in the sample were mainly well-educated individuals because nearly 100% of the participants noted that they have some college experience or above (i.e., a 4-year degree, a master's degree, a doctoral degree). Given the challenges in measuring socioeconomic status, it is unclear if the participants are from various socioeconomic backgrounds. Having a skewed sample, where most people are well-educated and/or most people are from middle class background, means that the sample is not representative of all Koreans, Korean Americans, and non-Asians in the United States and that the results may be different for those populations who have different levels of education and/or various socioeconomic backgrounds. For future research, it would be beneficial to collect data from different socioeconomic backgrounds and from individuals who have diverse levels of education by visiting communities and asking people to participate directly instead of using universities' listservs or social media which are often used by more privileged populations. This may increase the chances of diversifying the sample.

The study had a voluntary sample instead of a random sample. Voluntary responses can be biased in that people who were interested in the topic of the survey may have been overrepresented whereas those who were not interested might have been underrepresented. Of the 377 participants who started the survey, 154 (41%) completed it and met the criteria for the study. Having less than half the people who started the survey

may indicate that (1) the criteria for the study were specific and narrow, (2) the survey was long, and many people did not want to participate or have the time to finish, and (3) some of the questions on the survey elicited certain emotions which might have discouraged individuals who are mental health averse. Therefore, this may not be a representative sample of all of Korean, Korean American, and non-Asian populations in the United States. Future research may want to explore ways to reduce the length of the MHLS-R without sacrificing validity and reliability in order to encourage more people to participate. Furthermore, having an in-person interview or additional questions to explore emotions and reactions that are elicited by the MHLS-R may provide a sense of the impact of talking about mental health and a better understanding of reasons people decided not to complete the survey.

Another limitation is that the demographic survey and the MHLS-R are self-report measures. The MHLS-R collects information on mental health knowledge, self-efficacy, and attitudes towards mental health. Participants may not have indicated accurate perceptions on the surveys due to a desire to conform to what they perceive as the norm or the correct answer. For example, participants may have had low self-efficacy or negative attitudes towards mental health but may have reported higher self-efficacy or less negative attitudes because they worried about seeming incompetent or showing negative perceptions. Information on mental disorders and treatment can easily be found on the internet if participants decided to find the answers themselves before answering. For future research, having interviews with more targeted questions to explore the depth of the mental health knowledge, self-efficacy, and attitudes may provide more accurate

information on the depth of those aspects of mental health literacy.

The way that the questionnaires were presented may have impacted the completion rate. The demographic questionnaire which inquired personal information (e.g., age, gender, citizenship status) was presented before the MHLS-R. Individuals who did not want to provide personal information online might have dropped out before they went far enough to see the MHLS-R. For future research, it would be helpful to have half the participants start with the demographic questionnaires and the other half start with the MHLS-R. It would also be beneficial to examine if one way would lead to a higher completion rate.

The sample size is important to note. Despite the small size sample size (i.e., 50 Koreans, 50 Korean Americans, 54 non-Asians), there were significant findings that indicated differences in mental health literacy. However, no significant moderation effects and some confounding factors were found, which may be due to a small sample size. For example, 10 people out of 50 Korean emerging and young adults and 14 people out of 50 Korean American emerging and young adults have been in mental health treatment, whereas 31 people out of 54 non-Asians have been in mental health treatment. Even though there were significant differences in (1) treatment history (i.e., people who have been in treatment and those who have not) and (2) the sociocultural groups (i.e., Koreans, Korean Americans, and non-Asians), examining the relationship between the two variables led to treatment history not having any effect. This is a confounding variable that resulted from having different number of people who have been in treatment in each group (i.e., Koreans, Korean Americans, and non-Asians). Therefore, future

research with a larger sample with similar numbers of people in each variable would help reduce confounding variables and reexamine other findings that were not significant in this study.

Individual and contextual factors demonstrated varied relationships with mental health knowledge, self-efficacy, and attitudes towards mental health for Korean, Korean American, and non-Asian emerging and young adults. Given the small sample size and incomplete ways to measure certain individual/contextual variables (e.g., socioeconomic status, acculturation), it was challenging to fully understand the relationship between the variables and mental health literacy. For future research, increased sample size as well as accurate ways to measure specific individual/contextual variable would be beneficial in exploring each individual/contextual variable in depth. That would provide a thorough understanding of what enhances or inhibits mental health literacy in different populations and can help identify ways to have targeted outreach and mental health resources to improve mental health literacy and help seeking in marginalized and underserved populations.

Lastly, the current study focused on emerging and young adults ages between 18 and 34. According to Arnett (2000), emerging adulthood is a distinctive developmental period where individuals ages between 18 and 25 begin to gain relative independence and explore life experiences such as work and romantic relationships yet may not fully have adult responsibilities and commitments. This study combined the emerging adults with young adults creating one group and did not capture any potential differences between these two groups. For a future study, examining differences in mental health knowledge,

self-efficacy, and attitudes towards mental health between (1) Korean emerging adults and Korean young adults, (2) Korean American emerging adults and Korean American young adults, and (3) non-Asian emerging adults and non-Asian young adults can help explain specific individual and/or contextual influences for any of those groups and identify ways to provide appropriate resources to enhance mental health and help seeking behavior.

Conclusion

This study explored mental health literacy of Korean, Korean American, and non-Asian emerging and young adults. The MHLS-R was used to examine specific aspects of mental health literacy, which are the four subscales that assess mental health knowledge, self-efficacy, attitudes towards mental health and treatment, and willingness to interact with people with mental disorders. The scores for the subscales were consistent across the sociocultural groups (i.e., Korean, Korean American, and non-Asian emerging and young adults); non-Asians had the highest scores, following Korean Americans, and finally Koreans. The findings underscore empirical support for significant differences in mental health literacy and for a need to enhance mental health literacy for specific ethnic groups such as Koreans and Korean Americans. This study also examined individual/contextual variables that may influence mental health literacy. Factors that may interfere with enhancing mental health literacy within Korean and Korean American cultures were identified and suggestions were provided for changing negative attitudes toward mental disorders and treatment. Having a larger sample size and more targeted questions to examine mental health literacy in detail were recommended for future research. This

study specifically examined Koreans, Korean Americans, and non-Asian emerging and young adults between the ages 18 and 34 most of whom also turned out to have some college experience or higher level of education. Diversifying the sample by collecting data from individuals with lower levels of education or from other backgrounds that the current study's sample lacked is also recommended to have broader understanding of mental health literacy of Koreans and Korean Americans. This type of future research can continue to expand our current knowledge of (1) the intersection between mental health literacy and different cultures, (2) ways to reduce stigma and enhance mental health literacy, and (3) ways to increase help seeking for underserved and marginalized populations.

Appendix A**Demographic Questionnaire for the Pilot Study**

1. Age: _____
2. I identify as:
 - a. Female
 - b. Male
 - c. Nonbinary
 - d. Other: _____
 - e. Prefer Not to Answer
3. Race/Ethnicity (*select all boxes that apply*): (*Write specific ethnicity if known*)
 - a. Hispanic or Latino/a/x: _____
 - b. Native American, Indigenous Person, or Alaska Native: _____
 - c. Asian: _____
 - d. Black or African American: _____
 - e. Native Hawaiian or Other Pacific Islander: _____
 - f. White: _____
 - g. Other: _____
4. Marital/Family Status:
 - a. Single
 - b. Married, living together, or in a domestic partnership
 - c. Widowed
 - d. Divorced
 - e. Other: _____

5. When you were growing up, which best describes your family's economic class?
 - a. Lower middle class or below
 - b. Middle class
 - c. Upper middle class or above
6. Highest Level of Education:
 - a. Less than high school diploma
 - b. High school diploma or equivalent
 - c. Some college, but no degree
 - d. 2-year degree
 - e. 4-year degree
 - f. Master's degree
 - g. Doctoral degree
 - h. Other: _____
7. Job/occupation: _____
8. Please check all that applies to you:
 - a. I have been in mental health treatment
 - b. I know someone with a mental disorder
 - c. I know someone who has been in mental health treatment
 - d. I am a college student studying psychology
 - e. I am a graduate student studying mental health related field
 - f. I am a mental health professional
 - g. None of the above

Appendix B

Mental Health Literacy Scale – Revised

Sometimes we hear people around us or media sources talking about mental disorders and treatments. We may hear about different mental health concerns and how these concerns impact individuals. There may also be many resources we see online. The purpose of this survey is to gain an understanding of what you currently know and think about mental health.

1. When you were growing up, what words were used to describe mental disorders and/or treatment?
2. What words does your family/friends use to describe mental disorders?
3. What is the culturally appropriate way to help a family member with a mental disorder?
4. How would you convince your friend to seek mental health treatment?
5. If a friend did not want to get help, why do you think that might be?

For Questions 6 - 14, please read each item and choose the answer that you believe is best. *You should feel free to choose “I am not sure” if that best describes your knowledge level.*

6. Someone becomes extremely nervous or anxious in one or more situations with other people (e.g., a party) or performance situations (e.g., presenting at a meeting) in which they are afraid of being evaluated by others and acting in ways that will be humiliating/embarrassing. The fear is so intense that they avoid those situations as much as possible. Which best describes this condition?

Generalized Anxiety Disorder **Social Anxiety Disorder** Panic Disorder
 I am not sure Not a disorder

7. Someone has excessive worry about a number of events or activities where this level of concern is not warranted, has difficulty controlling this worry (e.g., “racing thoughts”), and has physical symptoms such as having tense muscles and feeling fatigued. Which best describes this condition?

Generalized Anxiety Disorder Social Anxiety Disorder Panic Disorder
I am not sure Not a disorder

8. Someone experiences a low mood for two or more weeks, has a loss of pleasure or interest in their normal activities, experiences changes in their appetite and sleep, and may have thoughts of death with/without a specific plan. Which best describes this condition?

Major Depressive Disorder Persistent Depressive Disorder Bipolar Disorder
I am not sure Not a disorder

9. Someone has consistently unstable emotions (e.g., emotions that easily become intense and/or out of proportion) and frequent mood changes. They are extremely critical of self, constantly feel “empty,” and show little to no empathy for others. They experience intense nervousness often in reaction to interpersonal stresses (e.g., fears of rejection or separation from significant others; fears of excessive dependency and complete loss of autonomy). Which best describes this condition?

Histrionic Personality Disorder **Borderline Personality Disorder** Bipolar
I am not sure Not a disorder

10. Someone frequently eats an amount of food that is definitely larger than most people would typically eat. They lack a sense of control over eating during the episode. They also engage in inappropriate behavior in order to prevent weight gain, such as self-induced vomiting, laxatives, diuretics, or other medications, fasting, or excessive exercise. These behaviors after binge eating happen at least once a week for three months. Which best describes this condition?

Anorexia Nervosa Binge Eating Disorder **Bulimia Nervosa** I am not sure
Not a disorder

11. Someone occasionally has difficulty starting their homework and procrastinates until the last minute. At times, they are self-critical about the difficulty they experience in

initiating their work. They experience mild disappointment that they have to prioritize homework over social activities and find themselves needing to snack in order to stay focused. However, they manage to complete their assignments on time.

Attention Deficit Hyperactivity Disorder Obsessive Compulsive Disorder
 Binge Eating Disorder I am not sure **Not a disorder**

12. Someone has a disproportionate fear of public places, often perceiving such environments as too open, crowded, or dangerous. They have anxiety about those situations where escape may be difficult or they may have embarrassing symptoms. They actively avoid those situations, require the presence of a companion, or endure those situations with intense fear or anxiety. Which best describes this condition?

Agoraphobia Claustrophobia Social Anxiety Disorder I am not sure Not a disorder

13. An adult has had hallucinations (e.g., seeing things other people cannot see), disorganized speech and behavior (e.g., incoherence), and diminished emotional expression for more than 6 months. Which best describes this condition?

Schizoaffective Disorder Bipolar Disorder **Schizophrenia** I am not sure
 Not a disorder

14. Someone consumes large amounts of substance (e.g., alcohol, cocaine, opiates, marijuana) over a longer period than was intended. They have a persistent desire to use and have not been able to cut down use. They spend a great deal of time obtaining the substance and continue to use when it is impacting major obligations at work, school, and/or home. Which best describes this condition?

Conduct Disorder **Substance Use Disorders** Substance Withdrawal I am not sure
 Not a disorder

For Questions 15 & 16, please read each item and choose the answer that you believe is best. When choosing your response, consider that:

- Very Unhelpful = I am certain that it is NOT helpful
- Unhelpful = I think it is unhelpful but am not certain
- Helpful = I think it is helpful but am not certain
- Very Helpful = I am certain that it IS very helpful

15. To what extent do you think it would be helpful for someone to **improve their quality of sleep** if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)?

Very Unhelpful Unhelpful Helpful **Very Helpful**

16. To what extent do you think it would be helpful for someone to **avoid all activities or situations that made them feel anxious** if they were having difficulty managing their emotions?

Very Unhelpful Unhelpful Helpful Very Helpful

For Questions 17 & 18, please read each item and choose the answer that you believe is best.

17. Mental health professionals are bound by confidentiality; however, there are certain conditions under which this does not apply. To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **break confidentiality**:

If you are at immediate risk of harm to yourself or others

Unlikely

Likely

18. Mental health professionals are bound by confidentiality; however, there are certain conditions under which this does not apply. To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **break confidentiality**:

if your problem is not life-threatening and they want to assist others to better support you

Unlikely

Likely

For Questions 19 - 32, please read each item and choose the answer that you believe is best. Please indicate to what extent you agree with the following statements:

19. I know where to seek information about mental disorders.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

20. I know how to use the computer or phone to seek information about mental disorders.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

21. I am willing to seek information about mental disorders in face to face appointments (e.g., seeing the primary care physician).

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

22. I have access to resources (e.g., primary care physician, internet, friends) that I can use to seek information about mental disorders.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

23. I am comfortable talking to my family and friends about mental health concerns.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

24. People with a mental disorder could snap out of it if they wanted or tried hard enough.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

25. A mental disorder is a sign of character weakness.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

26. A mental disorder is not a real medical illness.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

27. All people with a mental disorder are dangerous.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

28. It is best to avoid people with a mental disorder so that you don't develop similar problems.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

29. If I had a mental disorder I would not tell anyone.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

30. Seeing a mental health professional means you are not strong enough to manage your own problems.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

31. If I had a mental disorder, I would not seek help from a mental health professional.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

32. I believe treatment for a mental disorder, provided by a mental health professional, would not be effective.

Strongly Disagree Disagree Neither Agree or Disagree Agree Strongly Agree

For Questions 33 - 39, please read each item and select the response that best reflects your attitude.

33. How willing would you be to move next door to someone with a mental disorder?

Definitely unwilling—Probably unwilling—Neither Willing or Unwilling— Probably Willing—Definitely Willing

34. How willing would you be to spend an evening socializing with someone with a mental disorder?

Definitely unwilling—Probably unwilling—Neither Willing or Unwilling— Probably Willing—Definitely Willing

35. How willing would you be to make friends with someone with a mental disorder?

Definitely unwilling—Probably unwilling—Neither Willing or Unwilling— Probably Willing—Definitely Willing

36. How willing would you be to have someone with a mental disorder start working closely with you on a job?

Definitely unwilling—Probably unwilling—Neither Willing or Unwilling— Probably Willing—Definitely Willing

37. How willing would you be to have someone with a mental disorder marry into your family?

Definitely unwilling—Probably unwilling—Neither Willing or Unwilling— Probably Willing—Definitely Willing

38. How willing would you be to vote for a politician if you knew they had suffered a mental disorder?

Definitely unwilling—Probably unwilling—Neither Willing or Unwilling—Probably Willing—Definitely Willing

Appendix C

Demographic Questionnaire for the Main Study

1. Age: _____
2. I identify as:
 - a. Female
 - b. Male
 - c. Nonbinary
 - d. Other: _____
 - e. Prefer Not to Answer
3. Race/Ethnicity (*select all boxes that apply*): (*Write specific ethnicity if known*)
 - a. Hispanic or Latino/a/x: _____
 - b. Native American, Indigenous Person, or Alaska Native: _____
 - c. Asian: _____
 - d. Black or African American: _____
 - e. Native Hawaiian or Other Pacific Islander: _____
 - f. White: _____
 - g. Other: _____
4. Marital/Family Status:
 - a. Single
 - b. Married, living together, or in a domestic partnership
 - c. Widowed
 - d. Divorced

e. Other: _____

5. When you were growing up, which best describes your family's economic class?

a. Lower middle class or below

b. Middle class

c. Upper middle class or above

6. Highest Level of Education:

a. Less than high school diploma

b. High school diploma or equivalent

c. Some college, but no degree

d. 2-year degree

e. 4-year degree

f. Master's degree

g. Doctoral degree

h. Other: _____

7. Job/occupation: _____

8. Citizenship (e.g., American, Korean): _____

9. Which country were you born in?

10. Which countries have you lived in? And how long did you live in those countries?

11. U.S. generational Status:

a. First generation (i.e., I was born in another country and came to the U.S. as an adult)

- b. 1.5 generation (i.e., I was born in another country and came to the U.S. as a child or adolescent)
- c. Second generation (i.e., I was born in the U.S., and my parents were born in another country)
- d. Third generation (i.e., I was born in the U.S., and my grandparents were born in other country)
- e. Fourth generation (i.e., I was born in the U.S., parents and grandparents also born in the U.S.)
- f. Other: _____

12. Which do you identify as?

- a. Korean
- b. Korean American
- c. American
- d. Other: _____

13. Please check all that applies to you:

- a. I have been in mental health treatment
- b. I know someone with a mental disorder
- c. I know someone who has been in mental health treatment
- d. I am a college student studying psychology
- e. I am a graduate student studying mental health related field
- f. I am a mental health professional
- g. None of the above

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