

## ABSTRACT

Title of Thesis: MENTAL HEALTH LITERACY, STIGMA,  
AND ATTITUDES TOWARD HELP-  
SEEKING AT SCHOOL FOR ASIAN- AND  
LATINO-AMERICAN ADOLESCENTS

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Although adolescents are most likely to receive mental health services in the school setting compared with other settings, few studies have examined barriers to mental health help-seeking at school for ethnic minority students. The current mixed-methods study utilized surveys and semi-structured interviews to examine the relation between mental health literacy (MHL), stigma, and attitudes toward formal help-seeking among 56 adolescents (50.0% Asian-American, 44.6% Latino-American, 5.4% Asian/Latino bi-racial;  $M$  age= 17.28 years,  $SD$ = 2.28). As hypothesized, stigma negatively predicted attitudes toward formal help-seeking. However, contrary to our hypotheses and prior work, MHL did not predict attitudes toward formal help-seeking. Qualitative analysis revealed important knowledge, attitudinal, and practical barriers that inhibit minority adolescents from seeking help for mental health problems at school. The current work has implications to assist school personnel and service providers in understanding and reducing barriers to care, particularly for Asian- and Latino-American adolescents at school.

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SEEKING AT SCHOOL FOR ASIAN- AND LATINO-AMERICAN  
ADOLESCENTS

by

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## CHAPTER 1: INTRODUCTION

Adolescent mental health is a growing concern in the United States, with researchers estimating that between 20 and 32% of American adolescents experience a mental health problem in any given year (Patel, Flisher, Hetrick, & McGorry, 2007; Blanco et al., 2007). However, the majority (74%) of youth struggling with mental health challenges do not seek or receive appropriate treatment (Eisenberg, Hunt, Speer, & Zivin, 2011). Adolescents who receive mental health services are most often treated at school, as school settings reduce many practical barriers such as money and transportation (Farmer, Burns, Phillips, Angold, & Costello, 2003). However, minority adolescents are still less likely to be referred for school-based mental health services and less likely to seek help at school than their peers (Barksdale, Azur, & Leaf, 2010). Despite these findings, few studies have examined factors contributing to help-seeking for school-based mental health services.

Some barriers, such as lack of knowledge, stigma about mental health, linguistic or cultural differences, and poverty, often impact minority students and their families more than their European American peers (Umpierre et al., 2015). For instance, mental health literacy (MHL) has been identified as a crucial factor in understanding the low rates of treatment-seeking at school among minority adolescents. Jorm et al. (1997) define MHL as “knowledge and beliefs about mental disorders which aid their recognition, management, or prevention” (p. 182). Individuals with high MHL are more likely to seek help for themselves and others (Moses, 2010). Unfortunately, MHL among American adolescents is relatively low: one study showed that only 27.5% of adolescents correctly identified anxiety and 42.4% correctly identified depression as a mental health

problem or illness (Olsson & Kennedy, 2010). Therefore, researchers and educators need a better understanding of how to promote MHL and reduce other barriers, such as stigma, that students face when dealing with mental health problems at school.

The current work addressed this gap in the literature by investigating the relation between MHL, stigma, and attitudes toward help-seeking at school among Asian- and Latino-American. The limited number of studies that have examined this relationship (D’Cunha, 2015; Mendoza Masuda, & Swartout, 2015; Cheng, Wang, McDermott, Kriedel, & Rislin, 2018) have utilized college-aged or adult populations, and the generalizability of their findings to younger adolescents has yet to be explored. Additionally, this study contributes to the literature by emphasizing the unique barriers impacting Asian- and Latino-American adolescents from seeking out school-based mental health services, a sector of care that has previously received minimal attention. A mixed-methods approach was utilized in order to both examine the relation between MHL, stigma, and attitudes toward help-seeking and reveal what barriers inhibit Asian- and Latino- American adolescents from seeking formal help for mental health problems at school.

### **Guiding Theory for the Current Study**

To investigate the help-seeking attitudes and perceived barriers for help seeking at school of minority adolescents, the current study was guided by the mental health help-seeking framework put forth by Cauce et al. (2002). The framework includes three interconnected steps of help-seeking: Recognizing the problem, deciding to seek help, and selecting appropriate services. Cauce and colleague’s model is particularly fitting for this study because it emphasizes how culture affects all stages of the help-seeking



process. Race/ethnicity and cultural norms, in particular, may impact how an individual perceives his/her symptoms, whether the individual feels it is culturally acceptable to seek help for the symptoms, and what types of services are available and acceptable. Given the current study's sample of Asian- and Latino-American adolescents, it is vital to consider the impact of race and culture on attitudes toward help-seeking. Furthermore, the specific barriers to help-seeking explored in this work can be applied to each step of Cauce's model: For instance, low MHL may inhibit an adolescent from recognizing he/she has a problem, while stigma may prevent the adolescent from seeking help even once problem recognition has occurred. The mental health help-seeking framework thus underlies the proceeding literature review, which will outline help-seeking behavior and barriers to help-seeking at school among minority youth.

## CHAPTER 2: LITERATURE REVIEW

### **Help-Seeking Behavior in Adolescents**

In order to understand factors that hinder Asian- and Latino-American adolescents from seeking help for mental health problems, it is first important to establish patterns of help-seeking behavior among this population. Help-seeking behavior is often divided into formal help-seeking, which involves mental or physical healthcare professionals such as counselors, psychologists, and doctors, as well as informal help-seeking, which involves non-professionals such as teachers, parents, peers, or religious leaders (D'Avanzo et al., 2012). After a brief overview of adolescent informal and formal help-seeking behaviors, this section will emphasize gender and racial disparities in formal help-seeking behaviors in adolescents.

**Informal help-seeking behavior.** Although the current work focuses on formal help-seeking, the role of informal help-seeking in how adolescents manage mental health problems warrants brief discussion. Youth tend to become more reliant on peers and less reliant on parents and school personnel for support as they get older (Tishby et al., 2001). Therefore, adolescents may feel more comfortable reaching out to informal supports, such as family, friends, and community or religious leaders, than to formal services such as psychologists and physicians. For instance, an investigation of help-seeking in Italian adolescents found that participants' most preferred source of help was a friend, then a parent, followed by a psychologist or psychiatrist (D'Avanzo et al., 2012). Only 5% of adolescents in this sample indicated they would seek formal help without first seeking informal help, indicating the importance of informal sources of help for adolescents. Additionally, research suggests that Asian-American adolescents are more likely than

other adolescents to use informal sources, such as close friends and family, rather than formal sources of help (Lee et al., 2009). Therefore, it is important for future studies to consider both formal and informal help-seeking in adolescent populations.

Importantly, research suggests a relation between informal and formal help-seeking that should be noted. Several studies indicate that seeking help from informal sources, such as friends, can often lead to recommendations for formal help-seeking. For example, Burns and Rapee (2006) asked Australian adolescents to determine how they would assist a peer displaying depressive symptoms. Participants were most likely to recommend the peer seek help from a counselor or school counselor (57.7%), other friends (41.8%), family members (40.8%), and a professional psychologist or psychiatrist (20.3%). Adolescents suffering from depression in particular are more likely to seek professional help following a recommendation from someone they know (Vogel, Wade, Wester, Larson, & Hackler, 2007), and peers can often observe symptoms that adults may not see (Olsson & Kennedy, 2010). Given the influence peer groups can have on adolescents' actions (e.g., Coleman, 1980), peer recommendations can be a crucial step for adolescents to be willing to seek more formal assistance for their mental health problems. While informal help-seeking is certainly important for adolescents and warrants future research, formal help-seeking is typically more effective in helping adolescents cope with mental health problems. Therefore, the current study focuses on adolescents seeking help for mental health problems from formal sources, particularly school-based mental health services.

**Formal help-seeking behavior.** In the current proposal, we define formal help-seeking behavior as seeking help from formal sources, including psychologists,

psychiatrists, doctors, counselors, and other physical and mental healthcare professionals. Adolescents who seek help may or may not actually receive services due to different access-related barriers, such as lack of service providers. Among the limited literature available on school-based mental health services, some studies use the terms help seeking and service utilization interchangeably (e.g., Amaral, Geierstanger, Soleimanpour, & Brindis, 2011). In the current study, we will also treat service utilization and help seeking as synonyms. We assume that adolescents who received services at school were those who engaged in help-seeking, and that low rates of service utilization at school are due to low rates of help seeking.

Considering the above findings that indicate adolescents often seek help from informal sources for mental health problems, it is not surprising that formal help-seeking behavior among adolescents is quite low. A large, nationally representative study of American children and adolescents found that, over a one-year period, nearly 80% of children and adolescents ages six to 17 with mental health symptoms did not receive formal mental healthcare services (Kataoka, Zhang, & Wells, 2002). The authors found particularly high levels of unmet need among Hispanic youth and youth whose families did not have insurance. Thus, while formal help-seeking behavior is low among adolescents in general, minority students and students from low socio-economic backgrounds are disproportionately affected. The impact of race on help-seeking is particularly significant and is explored further in the “Racial Disparities in Help-Seeking Behavior” section below.

A more recent study, which focused on formal help-seeking behavior in high school students with self-reported social anxiety, found similarly low levels of formal

help-seeking behavior (Colognori et al., 2012). Only 14% of students who indicated feeling social discomfort reported receiving any type of help for their anxiety, and only 5% of students who reported social anxiety symptoms in the clinical range had received formal mental health services within one year of symptom onset. Thus, particular mental health challenges such as social anxiety can further inhibit adolescents from seeking professional help. Participants who did seek help most commonly reported seeking help from a doctor or therapist outside of school or a school counselor. Notably, over two-thirds of students who received help from mental health providers described the mental health services as beneficial, indicating that adolescents can benefit from services if they overcome the barriers to seeking help. Together, the findings of Kataoka et al. (2002) and Colognori et al. (2012) reveal that the majority of American adolescents with mental health symptoms fail to seek professional help for their symptoms.

While overall rates of formal help-seeking are low for adolescents, research suggests there are important differences in seeking professional help based on gender and race that will be discussed in the following sections.

***Gender differences in help-seeking behavior.*** Most studies that examine gender as a correlate of help-seeking reveal that females tend to be more willing to seek help for mental health problems than males. In adult populations, there is considerable evidence suggesting that men are less likely to seek professional psychological help than women (e.g., Hammer & Vogel, 2010; Yousaf, Popat, & Hunter, 2014). Men who report stronger belief in traditional gender roles are even less likely than other men to endorse a willingness to seek help (Yousaf et al., 2014). Although fewer studies have been conducted on younger populations, the gender difference appears to be consistent: Boys

are both less willing to seek help and less likely to have actually sought help for mental health problems than girls (Boldero & Fallon, 1995; Rickwood & Braithwaite, 1994). Work by Chandra and Minkovitz (2006) revealed gender differences in a racially and economically diverse sample of eighth-grade students' willingness to seek help for mental health problems. In this study, participants were given a hypothetical scenario in which they faced a personal mental health problem for over one month. When asked to identify their willingness to use mental health services for the presented situation, girls were twice as likely as boys to report being willing to use mental health services. Thus, an increasing body of research has solidified the gender difference in adolescents' formal help-seeking behavior.

Despite overall agreement that a gender difference exists, researchers have yet to establish consensus regarding the causes of this difference. Research has revealed that boys are less likely than girls to believe that recovery from mental disorders is possible (Williams & Pow, 2007), which has been hypothesized to contribute to reduced help-seeking behavior. Additionally, Chandra and Minkovitz (2006) found that perceived parental disapproval of formal help-seeking and self-reported stigma around help-seeking partially explained the relation between gender and willingness to seek help. Specifically, boys reported higher levels of mental health stigma and lower mental health literacy (MHL) than girls, both of which will be discussed in subsequent sections. In another sample of high school students, boys were more likely to seek informal help for mental health problems from female friends than male friends, leading the researchers to hypothesize that masculine norms may inhibit boys from supporting one another through mental health challenges (Sears, Graham, & Campbell, 2009). Other researchers (e.g.,

Chandra & Minkovitz, 2006; Yousaf et al., 2014) have noted the impact that traditionally masculine ideals, such as being perceived as strong and being able to suppress emotion, may have on boys. Gender-specific roles tend to become more pronounced during early adolescence, which may partially explain why adolescent boys are less likely to seek help than girls (Chandra & Minkovitz, 2006). Despite these hypotheses, additional research is needed to further examine the factors impacting the gender difference in adolescent help-seeking behaviors.

***Racial disparities in help-seeking behavior.*** In addition to gender, racial differences in help-seeking also play an important role in adolescents' access to care. Even after controlling for potential confounding variables such as income, diagnosis, and problem severity, race significantly predicts overall mental health service utilization among high-risk youth (Garland et al., 2005; Zimmerman, 2005). Garland and colleagues (2005) found that racial minority youth had significantly lower rates of mental health service use than Non-Hispanic white youth; African-American and Asian-American/Pacific Islander youth in particular were approximately half as likely to utilize services than white youth. Additional research from a large, nationally representative survey indicated that Latino- and African-American youth utilized mental health services of any kind significantly less often than white youth (Kataoka et al., 2007). Among adolescents from the same study who reported suicidal thoughts, white youth were significantly more likely to receive clinical care than minority youth. These findings are especially troubling given the fact that minority youth tend to experience higher levels of psychological distress than white youth (Blanco et al., 2007).

To further examine racial/ethnic disparities in formal help-seeking behavior, Gudino, Lau, Yeh, McCabe, and Hough (2008) investigated whether problem type (internalizing/externalizing) impacted service use with regard to race. Among participants with only internalizing problems, white youth were more likely to utilize mental health services than racial minority youth over a two-year period. Among participants with only externalizing problems, racial minority youth were more likely to utilize mental health services than white youth over the same period. However, Gudino and colleagues (2008) did not assess the specific reasons that participants utilized services, leaving unclear whether the youth sought help for the reported symptoms or for an unrelated reason. Despite this limitation, the findings mirrored those of Thompson (2005), which indicated that 22% of minority children with externalizing problems received treatment while only 7% of minority children with internalizing problems received treatment. Therefore, minority youth who experience internalizing problems may be particularly vulnerable to not receiving appropriate help for their mental health problems.

As with gender, researchers continue to investigate the factors influencing the effect of race on help-seeking behavior. Overall, research suggests that these discrepancies are not due to racial differences in the prevalence of mental disorders: Rather, they have been attributed to cultural, attitudinal, and practical barriers often faced by minority students. Practical barriers, such as cost, lack of transportation, and limited English proficiency, have been shown to disproportionately affect minority youth and their families (Abe-Kim et al., 2007, Gudino et al., 2008). The impact of practical barriers could partially explain why Garland and colleagues (2005) found significant racial disparity in the use of outpatient services (e.g., psychologists, psychiatrists, and



pediatricians) but not in the use of more easily accessible informal services (e.g., religious leaders, family, or self-help groups). Additionally, research has shown that some minority individuals tend to rely on informal services more than formal services due to the high levels of stigma and shame surrounding mental disorders and mental health treatment (e.g., Lee et al., 2009; see “Mental Health Stigma” section below). Cultural mistrust—the distrust of mainstream American institutions such as legal, political, educational, and healthcare systems—can also inhibit help-seeking among minority individuals (David, 2010). Clearly, the factors contributing to the racial disparity in help-seeking behavior are multi-faceted and warrant further research and discussion. In the following section, several barriers that are particularly relevant to help-seeking at school for minority adolescents will be investigated.

### **Barriers to Help-Seeking at School**

In order to discuss barriers adolescents face when seeking help for mental health problems at school, it is important to first establish the differences between school-based and non-school based services available to youth. Research suggests that school-based mental health facilities can actually reduce some practical barriers to help-seeking by providing services to students who are otherwise unable to access mental health care (Lyon, Ludwig, Vander Stoep, Gudmundsen, & McCauley, 2013). Private sector mental health care often requires referral from a physician or other specialist, and adolescents typically need parental help to navigate this system (Stiffman, Pescosolido, & Cabassa, 2004). In contrast, most students can access school-based care independently and at no financial cost to their families. For instance, research with ethnically diverse middle school students at risk for depression revealed that school-based mental health services

were accessed more frequently than private sector services by all youth, regardless of race/ethnicity, socioeconomic status, or gender (Lyon et al., 2013). Similarly, Farmer et al. (2003) found that youth ages nine to 16 were more likely to receive services from school-based mental health professionals than from professionals in any other sector (specialty mental healthcare, general medicine, juvenile justice, or child welfare). Thus, schools have become a crucial resource—and sometimes the only viable option—for youth to seek formal help for mental health problems.

Despite the importance of school-based mental health services, relatively few studies have specifically examined adolescents' help-seeking behavior for mental health problems at school. One such study, conducted by Amaral et al. (2011), assessed what factors impacted American high school students' rates of utilization of a school-based health center (SBHC). In explaining the importance of SBHCs for adolescents, the authors wrote:

“SBHCs are uniquely positioned to serve adolescent health needs by providing low- or no-cost services in a teen-centered, accessible environment. In the last 20 years, the number of SBHCs has grown exponentially, from 120 in 1988 to over 1700 across 45 states as of 2005. Studies have shown that SBHCs increase appropriate use of medical and mental health services and positively impact mental health status. (p. 139)

Findings indicated that students whose families were on public assistance or did not have insurance were more likely to use the SBHC for mental health services than other students. This result highlights the essential role of school-based services in providing mental health care to low-income students who may not otherwise have access to care.

However, significant barriers remain even in school settings: Among students in Amaral et al.'s sample who had never used the SBHC, 78% reported feeling they did not need services, 28% reported not knowing where to go for care, and 12% reported they were unaware the SBHC existed. Although our study does not specifically assess whether or not adolescents received services from a SBHC, many of the same barriers apply to general school-based mental health services. Thus, while school-based services have several key benefits in comparison to private sector services, adolescents still face numerous challenges that may prevent them from seeking help for mental health problems at school.

Researchers studying barriers to mental health help-seeking have categorized person-related barriers (e.g., type and severity of symptoms, attitudes and stigma about receiving mental health services, and privacy concerns) as well as system-related barriers (e.g., cost, availability, accessibility, and social/cultural acceptability of treatment) (Marsh & Wilcoxon, 2015). Since school settings typically have fewer system-related barriers than non-school based settings, this work will focus on the person-related barriers of attitudes toward help-seeking, stigma, and MHL as well as barriers specific to help-seeking in the school environment.

### **Attitudes Toward Help-Seeking**

One critical barrier that can prevent adolescents from seeking help at school is negative attitudes toward help-seeking. Fischer and Turner (1970) conceptualized help-seeking attitudes as encompassing (1) recognition of the need for help, (2) tolerance for stigma associated with mental health treatment, (3) willingness to disclose personal information about one's problems, and (4) confidence in mental health practitioners.

Fischer and Turner posited that the combination of these four beliefs played a vital role in determining actual help-seeking behavior. To further investigate these factors, Mendoza and colleagues (2015) examined dimensions of formal help-seeking attitudes among Latino/a undergraduates using Fisher and Turner's framework. Their findings revealed that mental health stigma was negatively related to overall help-seeking attitudes. In other words, participants who reported high levels of mental health stigma were less likely to endorse positive attitudes about help-seeking, such as willingness to seek out therapy or the belief that mental health professionals can be beneficial (see "Mental health stigma" section below for further discussion). Additionally, participants who were older, female, and had previous experience with mental health services were more likely than others to hold favorable attitudes about help-seeking. While Mendoza et al. (2015) did not examine whether these attitudes relate to actual help-seeking behavior, the Theory of Planned Behavior (TPB; Azjen, 1985) posits that an individual's attitude regarding a given behavior predicts his or her performance of that behavior. Thus, based on the TPB, attitudes about help-seeking for mental health problems should predict actual help-seeking behavior.

Bonabi and colleagues (2016) further examined predictors of mental health service use (an example of formal help-seeking behavior) among Swiss adults. Participants who held positive attitudes about mental health care and who reported higher levels of perceived need were more likely than others to have received psychotherapy services during a 6-month follow-up period. This finding suggests that positive attitudes about mental health are indeed related to formal help-seeking behaviors. Similarly, a study of over 21,000 European adults found that the four factors of help-seeking attitudes

created by Fischer and Turner (1970) each significantly predicted formal help-seeking behavior (Ten Have et al., 2010). Notably, these studies have focused on adult populations, so it remains unclear whether the relation between help-seeking attitudes and help-seeking behaviors is consistent in adolescents.

### **Mental Health Stigma**

While adolescents' attitudes toward help-seeking deserve further research, one of the most common and pervasive barriers that inhibits help-seeking is stigma toward mental illnesses and mental health providers. Stigma is defined as a deeply discrediting attribute associated with a given condition, directed toward individuals of perceived lower social standing (Goffman, 1963). Mental health stigma, specifically, has been defined as "objectifying and dehumanizing a person known to have or appearing to have a mental disorder" (Mendoza et al., 2015, p. 206). Different stigmas are often commonly associated with particular mental disorders, such as the belief that individuals with schizophrenia are dangerous and aggressive or that individuals with depression are lonely, dependent, or lazy (Imai & Dailey, 2016). These stigmas can have tangible effects on the way people with mental illness are perceived by those around them. For example, research has shown that undergraduate students are more likely to react with fear or uneasiness toward someone with schizophrenia, whereas they are more likely to react with pity or empathy toward someone with depression (Imai & Dailey, 2016). A recent meta-analysis of 144 studies including over 90,000 participants of all ages found that stigma has an overall small- to moderate-sized negative effect on help-seeking attitudes and behaviors (Clement et al., 2015). Stigma can become so burdensome that many people identify public perception of their mental illness as more problematic than the

actual condition itself (Thornicroft, 2006). Therefore, it is not surprising that the U.S. Surgeon General identified stigma as the most significant obstacle in the treatment of mental disorders (U. S. Department of Health Human Services, 2000).

Individuals struggling with mental health problems can be affected by both public stigma—being judged and discriminated against by others—and self-stigma—internalizing these stigmatizing attitudes (Evans-Lacko, Brohan, Mojtabai, & Thornicroft, 2012). Self-stigma in particular is associated with low self-esteem, which can in turn inhibit help-seeking. For instance, in a sample of university students, perceived public stigma was not related to future help-seeking intentions, but self-stigma was related to a decreased likelihood of future help-seeking (Lally, O’Conghaile, Quigley, Bainbridge, & McDonald, 2013). However, the relationship between stigma and help-seeking may be moderated by resilience, or the ability to positively adapt to adversity. When individuals do seek help for a mental illness, those with high resilience often feel less stigma about the help-seeking process than those with low resilience (Crowe, Averett, & Glass, 2016). Researchers have called for interventions aimed at reducing both public and self-stigma in order to increase the likelihood that individuals seek help for mental illnesses.

For adolescents, stigma appears to play an especially strong role in determining help-seeking attitudes due to a focus on peer perceptions during this stage of life. Work by Hart and colleagues (2014) revealed that nearly 44% of high school students in their sample endorsed embarrassment/stigma as a barrier to help-seeking, and nearly 40% endorsed social/interpersonal reasons as a barrier. In another study, half of adolescents stated they would hesitate to access mental health care because they were “too embarrassed by what other kids would say” (Chandra & Minkovitz, 2006). Clearly, the

strong stigma surrounding mental health problems prevents many adolescents from seeking help for such problems. However, as will be described next, stigma can be particularly burdensome for Asian- and Latino-American adolescents due to specific cultural expectations and stereotypes surrounding mental health and help-seeking.

**Stigma in the Asian cultural context.** Although Asian-Americans represent a diverse group of individuals from unique geographic, linguistic, and cultural backgrounds, there are several pertinent cultural values common to many Asian-American subgroups that may impact individuals' views on mental health. For instance, many Asian-Americans value the ideals of collectivism and familism, which emphasize solving problems within the family unit and place a high level of shame on seeking outside help (Kim, 2007; Lee et al., 2009). In one study, interviews with the children of Filipino immigrants revealed that Filipino youth felt pressure from their parents and believed their parents would not support their decision to seek counseling for a mental health problem (Maramba, 2013). Previous research affirms that Asian populations tend to report higher levels of stigma and shame toward seeking help from counselors or psychologists compared to other cultural groups (Gilbert et al., 2007). Asian-American college students have also been shown to view individuals with mental illnesses as more dangerous than Caucasian and Latino-American participants, which is one example of the stigmatizing beliefs held within Asian communities (Rao, Feinglass, & Corrigan, 2007). Another cultural value, emotional self-control, may further contribute to this stigma by encouraging individuals to suppress emotions rather than openly discuss them with others (Sun, Hoyt, Brockberg, Lam, & Tiwari, 2016). Overall, the espousal of Asian cultural values has been associated with decreased willingness to seek counseling, while the

adoption of European-American cultural values has been associated with increased willingness to seek counseling (Kim, 2007; Choi & Miller, 2014). Thus, Asian-American adolescents may face heightened levels of stigma surrounding seeking help for mental health problems depending on the cultural values of their family and community.

**Stigma in the Latino cultural context.** Latino-American adolescents may also experience specific cultural values that can impact their willingness to seek help. As with the Asian-American community, Latino-Americans represent numerous distinct sub-groups that vary in their levels of adherence to cultural norms, beliefs, and practices. However, several Latino cultural values have been shown to contribute to mental health stigma. Research suggests that Latino communities tend to value honor and place both personal and familial honor above all else (Bauer et al., 2000; Hampton & Sharp, 2014). Having a mental health problem can be perceived as a dishonor to one's family in Latino communities (Graf, Blackenship, Sanchez & Carlson, 2007). Therefore, it is perhaps not surprising that Latino-Americans tend to experience heightened levels of shame surrounding mental health problems. Specifically, among a sample of university students, Latino-American participants endorsed the highest levels of shame about how they would feel about themselves and how their families would view them if they had a mental health problem (Hampton & Sharp, 2014). In another study, Uebelacker and colleagues (2012) conducted focus groups with Latino-American adults to determine culturally-specific barriers to treatment for depression. In addition to cultural stigma, many participants discussed religious stigma, such as the belief that mental illnesses such as depression were "demonic" or "diabolical" rather than medical (Uebelacker et al., 2012, pp. 120).



Both of these perceived stigmas may contribute to Latino-American adolescents' hesitancy to share their mental health problems with others.

Despite the research base examining the impact of Latino and Asian cultural values on mental health stigma, the vast majority of studies have been conducted on college-age and adult populations rather than adolescents. Further, these studies focus on seeking help from community providers, such as counselors and doctors, rather than school-based providers. Given the current work's focus on help seeking at school, the following section provides more detail on the barriers to mental health help-seeking specifically faced in school settings.

### **School-Specific Barriers**

Researchers have only recently begun to examine barriers specific to school-based mental health services. Unlike community mental health centers, schools are in an ideal position to provide students with mental health services because there are fewer structural barriers at school. In general, students can access school-based mental health services without concern for cost, time, or transportation, three of the most common structural barriers that inhibit adolescents from accessing care outside of school. Despite these advantages, schools continue to face unique barriers in trying to provide services for their students.

In order to receive school-based services, students must first be identified as in need of mental health support. Teachers, who are the primary gatekeepers for referring students for mental health services, frequently report a lack of training and knowledge in this area (Becker, Buckingham, & Brandt, 2015). Racial bias in adult recognition of mental health problems in minority youth can further impede teachers and other adults

from adequately identifying students in need of mental health services (Gudino et al., 2008). For instance, teachers and school personnel often fail to recognize the mental health needs among Asian-American youth due to the “model minority” stereotype, and as a result, fail to refer them for appropriate mental health services (Guo et al., 2014). Thus, lack of knowledge and racial biases among adult gatekeepers represent an initial barrier to care for minority youth.

Even if students are referred for school-based mental health services, additional barriers may impede them from receiving appropriate treatment. Children and adolescents generally benefit from consistent treatment techniques across multiple settings (e.g., school and home), meaning parental involvement can be a crucial factor in the success of the treatment (Becker et al., 2015). Since school-based services take place during the workday, parents and caregivers are often unable to be involved in the treatment process. In most cases, parents also must consent to their child receiving prolonged services at school, and parents vary greatly in their views on counseling and other mental health services. For instance, research indicates that many Asian cultures associate high stigma and even shame with seeking help from mental health professionals (Lee et al., 2009), meaning school staff must be culturally sensitive in discussing treatment plans with students and their parents. Successful collaboration with families is therefore a significant obstacle for schools to overcome in providing services to students.

In addition to issues regarding referrals and parental involvement, middle and high schools also face barriers unique to serving adolescent populations. In particular, confidentiality has been identified as a critical hurdle in adolescents’ willingness to seek help. Rickwood, Deane, Wilson, and Ciarrochi (2005) conducted focus groups to allow

students to voice their concerns about accessing mental health care at school. While students frequently cited stigma-related barriers such as embarrassment and fear of teasing, many others reported worrying that the school counselor would break confidentiality and tell others about their personal problems. Students even noted that they were less likely to seek help if the counselor's office was in a particularly noticeable location, such as near the exit or the principal's office. Such concerns reveal how difficult it can be for adolescents to feel comfortable seeking help at school.

To summarize these barriers, Becker et al. (2015) identified four common beliefs that often hinder adolescents from accessing care at school. These include failing to recognize that their problems require treatment; believing they should be able to handle mental health problems on their own without adult interference; believing formal mental health services will not be helpful; and being preoccupied with the stigma surrounding how peers will view their help-seeking behaviors. Overall, the concerns above indicate a general lack of knowledge among adolescents about the symptoms and treatment of mental health disorders. The concept of mental health literacy (MHL) originated as a way to define and assess this lack of knowledge surrounding mental health issues. MHL will be defined and discussed more thoroughly below in order to argue that low MHL is a crucial barrier in understanding the low rates of mental health help-seeking among Asian- and Latino-American adolescents.

### **Mental Health Literacy**

MHL stems from the broader concept of health literacy (HL), which began as a way to describe how effectively individuals navigated their health care environment (Kutcher, Wei, & Coniglio, 2016). The World Health Organization (WHO) defines HL as

“the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand, and use information in ways which promote and maintain good health” (Kanj & Mitic, 2009, p. 26). HL has been identified as one of the most important social predictors of overall health: It predicts an individual’s health status more than other important factors such as income, employment, education, and ethnicity (World Health Organization, 2013). Although HL primarily involves physical health, the concept of MHL evolved as a way to capture individuals’ knowledge and beliefs specifically regarding mental health.

Jorm and colleagues (1997) originally defined MHL as “knowledge and beliefs about mental disorders which aid their recognition, management, or prevention” (p. 182). Since nearly half of all people will develop a mental disorder at some point in their lives (Kessler et al., 1994), improving individuals’ literacy surrounding mental health is crucial to improving mental health outcomes. More recently, the definition of MHL has been extended to include stigma and self-help strategies. Kutcher and colleagues (2016) described MHL as “understanding how to obtain and maintain positive mental health; understanding mental disorders and their treatments; decreasing stigma related to mental disorders; and, enhancing help-seeking efficacy (knowing when and where to seek help and developing competencies designed to improve one’s mental health care and self-management capabilities)” (p. 155). Since researchers’ conceptualizations of MHL have evolved over time, the following section outlines the ways in which MHL has been measured since its conception.

**Measuring MHL.** In the existing literature, MHL is typically measured using scales and/or interviews that ask questions about the characters in short vignettes. Jorm et

al. (1997) created the first assessment of MHL using vignettes that depicted someone with either depression or schizophrenia. Australian adults were asked to identify whether a certain mental disorder was present and then rate whether specific people (e.g., physician, counselor, psychologist) and specific treatments (e.g. antidepressants, admission to a psychiatric ward, stress management) would be helpful or harmful for that person. Both interviews and rating scales were used to allow participants to explain their answers in an open-ended forum. This study was the first to explicitly test the public's knowledge surrounding mental health disorders and treatments, and most assessments of MHL have been based on or adapted from their original scale.

While the scales used by Jorm and colleagues (1997) focused on adult populations, more recent work has modified MHL scales for adolescents. Burns and Rapee (2006) developed The Friend in Need Questionnaire, which presents participants with five brief vignettes depicting adolescents experiencing life difficulties. Participants then answer questions about the person in each vignette, such as how worried they are about the person, what they think is the matter with the person, and how long they think the person will need to feel better. By utilizing open-ended responses rather than multiple-choice answers, The Friend in Need Questionnaire allows respondents to provide their own opinions about each vignette. The questionnaire includes two vignettes in which the character displays symptoms of major depression, as well as three vignettes in which the character is experiencing a typical life crisis (e.g., being dumped by a significant other or the death of a relative). It has been utilized by several recent studies (e.g., Byrne, Swords, & Nixon, 2015; Coles et al., 2015; Marshall & Dunstan, 2013) examining MHL in adolescent populations.

Despite their prevalence, the use of vignettes in MHL assessments has been criticized for several reasons. First, participants are generally presented with vignettes about only two to three different disorders, which limits MHL to participants' knowledge about those specific disorders rather than mental health more broadly (Kutcher, et al., 2016). Identification of symptoms is one component of MHL, but it does not take into account attitudes about mental disorders, knowledge about treatment, or other important aspects of the term. Further, a recent review of over 400 MHL studies concluded that the majority utilized assessments that lacked sufficient psychometric properties (Kutcher et al., 2016). Without adequate assessment tools, the validity of MHL studies and interventions cannot be evaluated. For these reasons, an increasing number of studies use a mixed-methods approach to examining MHL. Combining open-ended, qualitative questions about vignettes with quantitative rating scales—as was done in our current work—can improve the overall validity of an assessment and provide a more holistic evaluation of an individual's MHL.

Having established the ways MHL is currently operationalized and measured, this work will discuss the growing body of research on MHL in American youth. After a general overview of the research on MHL in this population, the proceeding sections will highlight studies examining adolescent MHL specifically for depression and eating disorders, the main focuses of this study. Important gender differences in adolescent MHL will also be discussed

**MHL among American adolescents.** Unfortunately, the growing number of studies that evaluate adolescent MHL have revealed that MHL among adolescents is relatively low. In one sample, only 27.5% of American middle and high-school students

correctly identified anxiety and 42.4% correctly identified depression as a mental health problem or illness (Olsson & Kennedy, 2010). Many adolescents also struggle to determine whether a character in a vignette has a specific mental health disorder, with approximately half making a correct depression diagnosis (Byrne, Swords, & Nixon, 2015) and about a quarter making a correct psychosis diagnosis (Wright, McGorry, Harris, Jorm, & Pennell, 2006). Studies investigating causes and treatments of disorders have shown further gaps in adolescents' knowledge surrounding mental health problems. The majority of middle school students in an American sample were uncertain whether mental illnesses have biological causes, and only a third believed medication was useful to treat mental illnesses (Wahl, Susin, Lax, Kaplan, & Zatina, 2012). Finally, while nearly half of adults believe a doctor would be helpful for someone with depression (Jorm et al., 1997), only two percent of adolescents in one sample indicated this belief (Burns & Rapee, 2006). Clearly, there is much to be improved upon to provide adolescents with the knowledge and skills to navigate mental health problems.

*MHL for depression.* Of the numerous mental health problems adolescents face, many researchers argue that adolescent depression remains the most concerning (Burns & Rapee, 2006). In fact, a study by Lewinsohn, Rohde, and Seeley (1998) revealed that an estimated 28% of adolescents will experience a major depressive episode by age 19. Contributing to this widespread concern is the association between depression and suicidality, with research indicating that depression is the strongest individual risk factor for attempted and completed suicide (Beautrais, Joyce, & Mulder, 1996). Given the prevalence of depression among both adolescents and adults, it is particularly important to assess MHL specifically for depression.

To date, a large body of literature has examined MHL for depression. The first major study of this kind, conducted by Jorm et al. (1997), presented over 2000 Australian adults with vignettes about a character with depression and a character with schizophrenia. Thirty-nine percent of participants correctly identified depression and 27% correctly identified schizophrenia based on the vignettes. However, when investigating adolescents' MHL for depression, studies have found mixed results regarding adolescents' ability to identify characters with depression. For instance, Burns and Rapee (2006) presented Australian adolescents with five vignettes, two of which included characters with symptoms of depression. While 67.5% of participants correctly identified one of the depressed characters ("Emily"), only 33.8% correctly identified the other depressed character ("Tony"). A more recent study utilizing the same vignettes found a similar discrepancy, with 51% of Irish adolescents identifying Emily as depressed and 33% identifying Tony as depressed (Byrne et al., 2015). Both of these studies found a sizeable difference in adolescents' ability to correctly identify the two depressed characters. Burns and Rapee (2006) partly attributed this discrepancy to the mention of suicidal intent in the vignette for Emily, showing that adolescents may be more likely to recognize depression in the presence of more severe symptoms such as suicidality. However, less than 10% of adolescents in Byrne et al.'s (2015) sample outright identified Emily as suicidal, indicating that suicidality may not have been the reason many adolescents labeled her as depressed. Future research should explore what specific aspects of a vignette lead participants to identify whether a character is experiencing a specific mental illness or not. Nonetheless, it is clear that the majority of American adolescents have crucial gaps in their knowledge of depression.



*MHL for eating disorders.* In addition to depression, eating disorders are another significant mental health concern for adolescent populations, as the vast majority of eating disorders develop before age 20 (National Association of Anorexia Nervosa and Associated Disorder, 2000). According to the DSM-5 (2013), the 12-month prevalence rate among young females is approximately 0.4% for anorexia nervosa, 1-1.5% for bulimia nervosa, and 1.6% for binge eating disorder. Prevalence rates for eating disorders are far lower for males than females, although approximately 0.8% of males experience binge eating disorder in a given year (DSM-5, 2013). Eating disorders are associated with elevated mortality rates due to medical complications from the disorder or suicide; anorexia in particular has a crude mortality rate of approximately 5% per decade (DSM-5, 2013).

Despite these risks, few studies thus far have specifically examined MHL for eating disorders. One study, by Mond et al. (2010), investigated MHL for eating disorders in female college students in Australia (median age=22 years). The researchers divided participants into three groups depending on their self-report of eating disorder symptoms: low-risk, high-risk, and symptomatic. When presented with a vignette describing a teenage girl with bulimia nervosa, 21%, 20%, and 25% of participants in the low-risk, high-risk, and symptomatic groups (respectively) reported that the character's main problem was bulimia. A larger number of participants (36%, 37%, and 21%) in each respective group endorsed low self-esteem as the character's main problem. These results mirrored previous work from this research team, which indicated that only 18.5% of adult women with eating disorders correctly identified a character with bulimia

nervosa from a vignette (Mond, Hay, Rodgers, & Owen, 2008). Thus, MHL for eating disorders in young women appears to be quite low.

While the work of Mond and colleagues (2008, 2010) focused on Australian women, recent research has investigated MHL for eating disorders among both male and female adolescents (O'Connor, McNamara, O'Hara, & McNicholas, 2016). Questionnaires about vignettes describing characters with depression, eating disorders, or Type 1 Diabetes revealed that Irish adolescents recognized significantly more symptoms of depression than of eating disorders. Further, participants believed the vignette characters with eating disorders were more personally responsible for their illness than those with depression or diabetes. A previous study revealed similar findings, noting that American college students believed characters with anorexia and bulimia to be more culpable, attention-seeking, and fragile than characters with depression (Roehrig & McLean, 2010). These findings indicate that adolescent MHL for eating disorders appears to be lower than for other mental disorders such as depression, and that eating disorders may be stigmatized even more than other disorders among this population. Therefore, addressing the lack of research on MHL for eating disorders in adolescents is of utmost importance.

*Gender differences in MHL.* Although MHL among adolescents in general is fairly poor, research indicates significant gender differences in adolescents' MHL. Typically, studies that examine gender differences show that girls tend to have higher MHL than boys. For instance, girls are significantly more likely than boys to identify that the character in a vignette was experiencing emotional distress and needed help (Byrne et al., 2015). In another sample, Australian girls performed significantly better than boys at

correctly diagnosing depression from a vignette; girls also reported more concern for the depressed individual and believed the individual would take longer to get better than boys did (Burns & Rapee, 2006). An additional facet of this gender difference lies in participation statistics: In Burns and Rapee's (2006) school-based study, 91% of girls opted to participate while only 60% of boys did so. It is possible that the boys who chose to participate in the study were more psychologically-minded than boys who declined to participate, which means the actual gender differences in MHL may be even larger than those reported by Burns and Rapee.

Several potential explanations have been offered to explain the discrepancies in boys' and girls' MHL. Certain disorders, particularly internalizing disorders such as depression and anxiety, are more commonly diagnosed in adolescent girls than boys. The prevalence of depression in particular is twice as high in teenage girls than boys (Swahn & Bossarte, 2007). Burns and Rapee (2006) hypothesized that if girls have had more personal experiences with a disorder (either themselves or through their close friends), they may be more adept at recognizing symptoms and diagnosing the problem. It is also possible that girls tend to have higher emotional understanding than boys, or they may simply be more willing to openly discuss psychological problems with researchers (Burns & Rapee, 2006). The specific reasons for these gender differences require further research. However, it remains evident that ways to improve MHL in all adolescents, especially boys, must be investigated. This is especially true given the relation between MHL and help-seeking behavior, which will be discussed in the following section.

**MHL and Help-Seeking Behavior.** Since the term MHL was introduced in 1997, a growing body of research has suggested that high MHL is associated with a wide

variety of positive outcomes, including improved help-seeking behaviors. Adults with high MHL are more likely to seek help for themselves and others than adults with low MHL (Moses, 2010). High MHL has also been associated with use of psychotherapy and taking psychiatric medication in adults (Bonabi et al., 2016), suggesting that individuals with higher MHL may be more likely than others to seek out and utilize treatments for mental health problems. In adolescents and young adults, the ability to identify symptoms of mental health disorders, one facet of MHL, has been linked to improved help-seeking behaviors (Cotton, Wright, Harris, Jorm, & McGorry, 2006; Scott & Chur-Hansen, 2008). Although additional research is needed on children and adolescent populations, overall high MHL is linked to positive outcomes, especially in terms of willingness to seek help for mental health problems.

In contrast, low MHL has been associated with negative outcomes such as reduced use of mental health services and negative beliefs about mental health care (Ten Have et al., 2000). Among a sample of adult Latino immigrants, Coffman and Norton (2012) found that low MHL predicted self-reported depression symptoms. Recently, researchers have begun to investigate low MHL as a specific barrier to help-seeking for mental health problems. Such work has revealed low MHL as a primary reason for the underutilization of mental health services in Asian (Collier, Munger, & Moua, 2012) and Latino (Coffman & Norton, 2010) adult communities. Collier and colleagues (2012) suggested this low MHL may stem from a number of factors, including linguistic isolation, cultural norms, and lack of understanding of American healthcare systems. In sum, while most research has focused on adult populations, low MHL may inhibit

adolescents' ability to seek help for mental health problems, particularly for ethnic and racial minority adolescents.

### **MHL, Stigma, and Attitudes Toward Help-seeking**

Although recent studies have identified MHL as a potential barrier to help-seeking behavior, few have examined the relation between MHL and other crucial barriers. Specifically, this section focuses on how the relationship between MHL, mental health stigma, and attitudes toward help-seeking may play an important role for adolescents seeking help for mental health problems at school.

To date, limited research has assessed this relationship even among adult populations. D'Cunha (2015) asked a sample of rural American adults to complete surveys regarding mental health stigma (both public and private), MHL, attitudes toward professional help-seeking, and intentions to seek help for mental health problems. Analyses revealed that private stigma and MHL both predicted attitudes toward seeking professional help. More precisely, individuals with low levels of private stigma and high MHL were more likely to report positive attitudes toward help-seeking for mental health problems. One limitation of D'Cunha's work was the use of a largely white, educated, adult sample, which prevents generalizability to the broader adult population or to adolescents. Nonetheless, the study provides initial evidence for the potential relation between these three barriers to help-seeking behavior.

Among younger populations, emerging work has also begun to link MHL, stigma, and help-seeking attitudes. For instance, Mendoza and colleagues (2015) found that mental health stigma uniquely predicted overall help-seeking attitudes in a sample of Latino/a college students. Though their study did not explicitly assess MHL, analyses

suggested a significant relation between mental health stigma and the ability to recognize personal need for professional psychological services, which is one component of MHL. This would suggest that young adults with low stigma are more likely to endorse positive help-seeking attitudes, and that low stigma may be associated with increased ability to recognize mental health problems. Recent work by Cheng et al. (2018) provided further evidence for this relationship: Among a sample of college students, both self-stigma and MHL uniquely predicted attitudes toward help-seeking above and beyond demographic and psychological symptom correlates. Therefore, there appears to be an important connection between MHL, stigma, and attitudes toward help-seeking which can potentially be targeted to improve the way adolescents perceive seeking help for mental health problems.

With this connection in mind, several studies have noted the effectiveness of psychoeducational interventions at improving MHL, stigma, and attitudes toward help-seeking simultaneously. A sample of Australian undergraduate students participated in a brief online training intervention, which targeted increasing MHL and stigma for depression, anxiety, and suicide; positive attitudes about help-seeking; and help-seeking intentions (Taylor-Rodgers & Batterham, 2014). Over a three-week period, participants in the experimental group showed significant improvements in anxiety MHL, depression stigma, and help-seeking attitudes and intentions. It should be noted that significant improvements were not found for depression or suicide MHL or for stigma surrounding anxiety or suicide, and that the study used a small sample of undergraduate students. Nonetheless, other intervention studies have revealed similar findings for high school students. In a large randomized controlled trial, Milin and colleagues (2016) found that

increases in MHL following a school-based mental health curriculum significantly predicted decreases in stigma toward mental health. Another school-based mental illness education program had a significant impact on improving MHL and a moderate impact on reducing stigma in high school students (Rickwood, Cavanagh, Curtis, & Sakrouge, 2004). However, Milin et al. (2016) did not examine help-seeking attitudes, and Rickwood et al. (2004) found that the intervention had only a weak impact on improving students' help-seeking intentions. More research is needed to determine how MHL, stigma, and attitudes about help-seeking are related for adolescent populations and particularly minority adolescents.

### **Current Study and Contribution to the Literature**

The current study examined perceived barriers to help-seeking and the relation between MHL, stigma, and attitudes toward help-seeking among Asian- and Latino-American adolescents. Although previous studies have investigated the relation between MHL and help-seeking attitudes and between MHL and stigma, the author is unaware of any studies examining all three constructs in an adolescent population. Additionally, the majority of research on MHL has been conducted outside the United States and has focused on adult populations, limiting the generalizability to U.S. adolescents. This lack of research is especially a concern for minority youth in U.S., who have been shown to be at increased risk for experiencing mental health problems without adequate access to care (Garland et al., 2005). It is important to determine whether the relationship between MHL, stigma, and help-seeking attitudes found by D'Cunha (2015) and Cheng et al. (2018) holds true for Asian- and Latino-American adolescents in order to establish how these factors may help or hinder youth from seeking help for mental health problems.

Since no studies to date have assessed this relation in an adolescent population, our work represents an important contribution to the literature.

Another gap in the literature that this study sought to address involves a lack of research on barriers that hinder adolescents from seeking help for mental health problems specifically in school settings. Most studies on adolescent help-seeking have focused on community mental health services, such as general practitioners or mental health clinics (e.g., Rickwood, et al., 2005; Chandra & Minkovitz, 2006). However, the majority of children and adolescents receiving mental health services are treated solely at school (Wood et al., 2005). Thus it is essential to examine the challenges students face in seeking help for mental health problems in the school environment. Previous work has identified mental health stigma and help-seeking attitudes as two primary factors inhibiting adolescents' help-seeking behavior (Chandra & Minkovitz, 2006; Mendoza et al., 2015). Research also suggests that low MHL may be a previously unstudied but crucial barrier for minority populations seeking help for mental health problems (Coffman & Norton, 2010; Collier et al., 2012). However, existing studies have mainly utilized quantitative methodologies, which do not allow for as in-depth analyses of the unique challenges faced by minority adolescents. By employing a mixed-methods approach, the current study aimed to both examine the relation between MHL, stigma, and help-seeking attitudes and explore the unique barriers to help-seeking for Asian- and Latino-American adolescents at school.

### **Quantitative research questions and hypotheses.**

1. Do MHL and stigma independently predict attitudes toward formal help-seeking?



- a. Hypothesis 1: Higher MHL and lower stigma will each independently predict more positive attitudes toward formal help-seeking.

**Qualitative research questions.**

1. What are the barriers that inhibit Asian- and Latinio-American adolescents from seeking help for mental health problems at school?

## CHAPTER 3: METHODS

The current study examined MHL (for depression and eating disorders), stigma, and attitudes toward help-seeking, particularly for school-based mental health services. Qualitatively, this study explored the barriers that prevent Asian- and Latino-American adolescents from seeking help for mental health problems at school.

### Participants

Participants included 56 minority adolescents (10 male) ranging in age from 11 to 20 years ( $M= 17.28$ ,  $SD= 2.28$ ). Forty-six participants (82.14%) were born in the U.S. to first- generation immigrant parents. Participants born outside the U.S. had been living in the U.S. for an average of 7.7 years ( $SD= 6.64$ ). The sample was 50.0% Asian ( $N= 28$ ), 44.6% Latino ( $N= 25$ ), and 5.4% bi-racial (Asian and Latino,  $N=3$ ). Participant-reported countries of origin included USA (35.7%), China (21.4%), Mexico (12.5%), Vietnam (7.1%), Philippines (7.1%), El Salvador (3.6%), Cambodia (1.8%), Central America (1.8%), India (1.8%), South Korea (1.8%), and Peru/Cuba (1.8%) [Two participants, or 3.6%, did not report country of origin].

### Procedure

Participants were recruited through fliers posted online and in stores, restaurants, clinics, and a large public university in southern California. For participants under age 18, parental written informed consent was collected in addition to adolescent written assent. For participants over age 18, participant written informed consent was collected.

The current study utilized a mixed-methods, cross-sectional design including a survey and a semi-structured interview. Analyses were based on an existing database of data that were collected either in-person or over the phone during spring and summer

2015. The survey allowed the researchers to quantitatively examine the relationships of interest, while the interview allowed for more in-depth exploration of barriers to help-seeking among this population.

**Quantitative procedure.** Participants individually completed the survey, which was administered by trained research assistants under the supervision of the principle investigator (PI), Dr. Cixin Wang. The survey included demographic questions, a MHL questionnaire, a stigma questionnaire, and a questionnaire assessing attitudes about help-seeking. The survey also included two vignettes describing an adolescent with an eating disorder and an adolescent with depression in order to further assess MHL. Individual measures will be discussed in more detail in the “Measures” section below. The survey took approximately 15 minutes to complete and was immediately followed by the interview. A full copy of the survey can be found in Appendix A.

**Qualitative procedure.** Following completion of the survey, participants participated in an audio-recorded interview administered by trained research assistants. The semi-structured interview asked participants to discuss problem identification of the two vignette characters, how they would help a friend going through a similar problem, how prevalent the problem was among their peers, and what barriers prevented adolescents from seeking help for mental health problems inside and outside of school. Participants were also asked to explain why they thought specific people (e.g., friend, psychologist, teacher) or activities (e.g., finding new hobbies, exercising more) would be helpful, harmful, or neither to each vignette character. The interview lasted approximately 60-90 minutes. Interviews were transcribed verbatim and checked for

accuracy by research assistants. A full copy of the interview protocol can be found in Appendix B.

## **Measures**

The following section details each of the measures used in the current analyses. Psychometric data is provided when available.

**Demographics.** The demographics questionnaire included questions regarding participants' age, gender, grade level, race/ethnicity, country of origin, and number of years living in the U.S.

**Mental Health Literacy (MHL).** To assess MHL, participants read two brief vignettes, which depicted a 12 year-old girl with symptoms of bulimia nervosa and a 13 year-old girl with symptoms of depression. The depression vignette (from Jorm, 2000) and bulimia vignette (from Hart, 2010) were adapted in order to make the vignettes more relevant to the target populations of our sample. For instance, the characters' ages were lowered to make the characters more relatable to younger adolescents, and the characters' names were manipulated to be culturally familiar to the participants (i.e., Asian names were used for Asian-American participants and Latino names were used for Latino-American participants).

Following each vignette, participants were asked to choose from a list of potential problems what they considered the vignette character's "main problem." Data were coded dichotomously so that 1 indicated correct recognition of each mental health problem (bulimia nervosa and depression) and 0 indicated incorrect recognition. Recognition of eating disorder and depression were used as independent variables in our analyses.

**Stigma.** Stigma was assessed using a scale adapted from Skre, Friborg, Breivik, Johnsen, Arnesen, & Wang (2013) to measure stigma and prejudiced beliefs about mental illness. The scale utilized in the current study included a five-point Likert scale ranging from “disagree completely” to “totally agree.” Participants were asked to rate their agreement with seven stigma statements, such as “I believe that people who have a mental illness are crazy” and “People with mental illnesses are weak.” Each participant receives a mean stigma score based on a mean of the seven items (using reverse coding when necessary). The original four-item measure (Skre et al., 2013) was demonstrated to have acceptable internal consistency ( $\alpha = .76$ ). The internal consistency of the current seven-item measure was also acceptable ( $\alpha = .69$ ). Stigma was used as an independent variable in our analyses.

**Attitudes toward formal help-seeking.** In order to assess attitudes about help-seeking, participants rated whether they believed various people (e.g., general doctor, school psychologist, close friend) and activities (e.g., becoming more physically active, receiving psychotherapy, trying to deal with the problem on her own) would be helpful for each of the two vignette characters. Participants reported whether they believed each option would be helpful, harmful, neither, or “I don’t know” for each character. This scale was adapted from Jorm et al.’s (1997) measure, in which participants were asked to rate whether various people, pharmacological treatments, and non-pharmacological treatments would be helpful or harmful to a vignette character with depression and a vignette character with schizophrenia. We adapted the original measure in order to include more school-specific providers (e.g., school counselor, school psychologist) relevant to our analyses regarding help-seeking at school.

In the current study, each answer choice was categorized as a formal (e.g., psychologist, therapy) or informal (e.g., family member, self-help book) source of help. Since the current work was primarily concerned with attitudes toward formal help-seeking, formal sources of help were further categorized into formal services (e.g., psychotherapy, cognitive behavioral therapy) and formal providers (e.g., general doctor, psychiatrist). Attitudes toward formal services and formal providers for both the eating disorder and depression vignettes were used as outcome measures in our analyses.

### **Data Analysis**

**Quantitative analyses.** To examine the quantitative research question (*Do MHL and stigma independently predict attitudes toward formal help-seeking?*), four multiple regression analyses were conducted. For the eating disorder vignette, the independent variables were stigma and recognition of eating disorder and the dependent variables were attitudes toward formal services for eating disorders (regression one) and attitudes toward formal providers for eating disorders (regression two). For the depression vignette, the independent variables were stigma and recognition of depression and the dependent variables were attitudes toward formal services for depression (regression three) and attitudes toward formal providers for depression (regression four). Correlations were also conducted in order to further examine the relation between MHL, stigma, and attitudes toward formal help-seeking for the depression and eating disorder vignettes.

**Qualitative analyses.** To investigate the qualitative research question (*What are the barriers that inhibit Asian- and Latino-American adolescents from seeking help for mental health problems at school?*), interviews were coded for themes using an emergent coding process guided by a grounded theory framework (Glaser & Strauss, 1967). The

coding process consisted of two stages. In stage one, we established a coding frame using three a priori categories including: 1) *definition and contributing factors of mental health issues*, 2) *helpful strategies or ways of seeking help*, and 3) *barriers preventing help-seeking*. In stage two, we explored one of these three categories (*barriers preventing help-seeking*) to generate specific themes relating to barriers toward seeking mental health services.

A “negotiated agreement” approach (Campbell, Quincy, Osserman, & Pedersen, 2013) was utilized to insure reliability during coding. First, 20% of the interviews were randomly selected in order to code for reliability. Four coders (three doctoral students and a post-doctoral fellow) independently coded each transcript for three general categories of interest: a) Definitions and contributing factors of mental health issues; b) Helpful strategies or ways to seek help; and c) Barriers preventing help-seeking. Coders added memos to record their observations, thoughts, or questions. Intercoder reliability was calculated on a line-by-line basis using a formula adapted from Campbell et al. (2013). It involved dividing the total number of lines coded the same by all coders by the total number of lines coded by any of the coders, in order to take into account chance agreement. Coders communicated after each transcript to discuss observations and challenges and to modify the coding rules. Next, each transcript was recoded based on the discussion, and reliability was re-calculated. This process continued for the 12 randomly selected transcripts. Overall intercoder reliability was 82% (range= 70-94%).

During the second stage, the primary author and post-doctoral fellow coded all of the remaining transcripts. They then coded specifically for barriers to help-seeking by reading through each text segment that was designated as a barrier and assigning code

labels to describe that specific segment. After coding each transcript, they independently labeled each coded segment of text to capture the overall idea or meaning of the highlighted text segment. For instance, “people are afraid others will judge them” would be labeled stigma; “What is a psychiatrist?” would be labeled lack of knowledge. The two coders discussed discrepancies in labeling in order to reach a consensus. Code labels were then organized in Excel files into broad, larger themes and smaller subthemes that could be further explored. For example, finances, lack of time, lack of providers, and lack of access/transportation were all organized as subthemes under the umbrella of “structural barriers.”

**Integrative Analyses.** The themes identified in the interviews were also utilized in integrative analyses as a way to connect the quantitative and qualitative aspects of our study. To do so, the primary author calculated how many total barriers and how many distinct barriers each participant mentioned in the interview (since a given participant could mention a single barrier, such as stigma, multiple times). With this information, we examined whether there was a relation between the total and distinct number of barriers participants identified in the interview and their MHL, stigma, and attitudes toward help-seeking as measured by the survey.



## CHAPTER 4: RESULTS

### Quantitative Results

First, descriptive statistics were carried out in order to gain a general understanding of participants' survey responses. Overall, 83.9% of participants correctly identified depression from the survey vignette, and 57.1% correctly identified the eating disorder (bulimia). For the depression vignette, depression was the most commonly selected answer choice. For the bulimia vignette, participants more commonly selected "lack of self-esteem or self-confidence" (67.9%) and just as commonly selected "anorexia nervosa" (57.1%). See Table 1 for a breakdown of participants' responses on the MHL recognition items. On the stigma scale, participants' mean stigma score was 1.69 (SD= .53) out of a possible score between one and seven, which indicated overall low levels of mental health stigma. Descriptive statistics were also used to examine participants' attitudes toward formal help-seeking. Participants most commonly endorsed counselor, psychologist, self-help support group, and psychiatrist as helpful providers and counseling, relaxation therapy, and therapy with a specialized professional as helpful services. Table 2 depicts participants' responses regarding attitudes toward formal providers and services.

Independent sample *t*-tests were conducted to examine potential differences in the variables of interest based on participant race/ethnicity. No significant differences were found among Latino- and Asian-American participants in terms of correct recognition of bulimia or depression, stigma, or attitudes toward formal services or providers. Latino- and Asian-American participants also did not vary significantly in the number of barriers identified during the interviews.

Correlation analyses were used to explore the relation between MHL, stigma, and attitudes toward help-seeking. As shown in Table 3, stigma was negatively correlated with attitudes toward formal providers for eating disorders ( $r = -.47, p < .001$ ) and attitudes toward formal services for depression ( $r = -.33, p < .05$ ). In the eating disorder vignette, endorsement of positive attitudes toward psychologists was related to recognition of eating disorders ( $r = .36, p < .05$ ) and stigma ( $r = -.33, p < .02$ ). Similarly, in the depression vignette, endorsement of positive attitudes toward psychologists was related to recognition of depression ( $r = .36, p < .05$ ) and stigma ( $r = -.29, p < .05$ ).

In order to answer the quantitative research question, “*Do MHL and stigma independently predict attitudes toward formal help-seeking?*”, four multiple regression analyses were conducted as described above. Results of each regression can be found in Table 4. Consistent with our hypothesis, stigma negatively predicted attitudes toward formal providers for eating disorders ( $F(2, 51) = 7.97, p < .001; \beta = -.45, p < .001$ ) and attitudes toward formal services for depression ( $F(2, 51) = 4.56, p < .05; \beta = -.35, p < .01$ ). Contrary to our hypothesis, MHL (as measured by recognition of eating disorders and depression) did not significantly predict attitudes toward formal services or providers for either eating disorders or depression. Stigma also did not significantly predict attitudes toward formal services for eating disorders or formal providers for depression.

### **Qualitative Results**

The qualitative analyses in this study explored the barriers to seeking help for mental health problems experienced by Asian- and Latino-American adolescents. Interview questions focused on what challenges adolescents face when seeking help for eating disorders and depression, with a particular focus on barriers to seeking help at

school. Based on analyses of the interview data, three overarching types of barriers—knowledge barriers, attitudinal barriers, and practical barriers—emerged from the interviews, with nine main themes falling under these general barrier types (see Table 5 for a full list of themes and sub-themes). On average, each participant mentioned a total of 17 barriers ( $SD= 11.26$ ) during the interview, with a range between zero and 53 barriers across all participants. Additionally, each participant mentioned an average of 5.9 ( $SD= 2.31$ ) distinct barriers out of the nine main themes.

Themes and sub-themes falling under each type of barrier will be discussed in order of the percentage of participants who mentioned the theme at least once during the interview. Examples of each sub-theme are included to highlight participants' unique experiences and perceptions about the barriers to seeking help for mental health problems, with particular attention to examples regarding help-seeking at school. Percentages listed following each theme indicate the percentage of participants who mentioned each theme at least once during the interview.

### **Knowledge Barriers**

Throughout the interviews, many participants expressed a lack of knowledge surrounding mental health problems and ways to seek help. Adolescents cannot seek help for mental health problems if they lack the knowledge to recognize the problem, identify who can help, and coordinate how to access that source of help. Therefore, low mental health literacy (MHL) represents an important barrier that can inhibit adolescents from seeking help for mental health problems at school. Overall, participants mentioned statements suggesting a lack of knowledge about appropriate providers and treatments (47.7%); about where or how to seek help for a mental health problem (47.7%); and

about symptoms and causes of specific mental health disorders (50.0%). Participants also discussed that adolescents are often unable to recognize when a mental health problem exists (36.4%), with some specifically describing low MHL stemming from a lack of prior experience dealing with mental health problems (27.3%). Each of these categories of knowledge barriers will be described next to highlight the gaps in knowledge surrounding mental health that exist for some adolescents.

***Lack of knowledge about providers and treatments.*** A crucial area of low MHL for many participants was a lack of knowledge about specific providers and treatments. Participants mentioned being unsure about how specific providers, like psychologists or general doctors, or specific treatments, like psychotherapy or anti-depressants, could help someone with a mental disorder. By far the most common misunderstanding was about the role of psychiatrists, especially about the difference between a psychologist and psychiatrist. Of particular interest was also the lack of knowledge regarding school-based providers. Participants stated, “I didn’t know that they had psychologists at school” (24G); “We had the school counselor and then the other one I don’t know what they were called” (CT); and “I’ve never had to go to a counselor except for like scheduling. But um, I’m so, not so entirely sure what they can do” (33YA). Thus, a small but important number of adolescents were unaware of the providers available at school who could help them with mental health problems.

***Lack of knowledge about where and how to seek help.*** In addition to lack of knowledge about providers and treatments, a lack of knowledge about how and where to seek help for mental health problems was common among adolescents. Many participants described that they would not know what to do to help a friend experiencing an eating

disorder, depression, or anxiety. Some participants recalled friends who felt lost or helpless while trying to seek help due to a lack of knowledge about how to do so. When discussing help-seeking at school, several participants noted that students are generally unaware of the resources available at school or how to access them. A Latino-American female adolescent explained:

Maybe some students don't know that they have these resources at hand and that they're free [...] I just think that it's more of being aware that there are people here that can help you [...] and then not really knowing like being notified of these resources (CA529).

Similarly, another Latino-American participant echoed this sentiment in describing what she perceived as the difference between students' knowledge of the resources available in high school compared to college:

There's a lot of like resources here and in college campus. You see it everywhere. You see uh you see like a lot of pamphlets. Uh notices in clinics you know that you feel that there is a resource that they can go to. Opposed to high school you don't really see that, you do know that there is a school psychologist but you don't really know how involved or how um available they are. You don't see them (BY528).

***Lack of knowledge about specific mental disorders.*** Another type of knowledge barrier involved a lack of knowledge about causes and symptoms of specific mental disorders. Low MHL was present for each of the disorders discussed in the interviews (eating disorders, depression, and anxiety). Sample statements highlighting low MHL about disorders include “I don't really know that much about depression” (JZ), “I don't

know what causes anxiety” (11YA), and “A lot of the teenagers don’t think [eating disorders] exist because like it’s not really prominent” (HL601). These examples indicate the adolescents are mainly unfamiliar with the causes and symptoms of mental disorders. Several participants mentioned having difficulty differentiating between mild symptoms resulting from typical life stressors and more severe symptoms that can be indicative of mental illness. For instance, a Latina-American adolescent expressed the following:

I feel like I see it a lot in like the people around me like they don’t know what they’re feeling because, are they homesick or are they depressed? You know, like that’s a hard distinction to make. Like am I anxious or am I just stressing out, you know? So I think that distinction between the two is hard to formulate, and so that’s why they don’t seek help (JS).

Importantly, some participants felt that lack of discussion about mental illness in their cultural backgrounds inhibited problem recognition. In both Asian and Latino communities, mental illnesses were described as taboo and “not something that’s normal to talk about” (JZ).

According to some participants, the lack of discussion about mental illness in certain cultures can impede individuals from even recognizing they have a mental health problem. For instance, in Latino households where family members “[don’t] generally talk about that, maybe they won’t be able to like figure out the symptoms” of their mental illness (JZ). A similar situation was noted for some Asian families as well:

The mentality that exists in like Asian families about like mental illnesses, I guess, it’s just like if someone in an Asian family has a mental illness, they usually don’t like recognize it as a mental illness [...] Asian kids they’re just like

they just like don't really know about it that much, enough to actually like even if it happens to them, they'll just think, oh, I'm just tired [...] they would still move on with their lives (9G).

***Lack of problem awareness.*** While many adolescents struggle to recognize their problems as specific mental illnesses, other adolescents lack awareness that they even have a problem. For example, one participant stated that some youth “don't think there's anything wrong with them” (BH516), and another worried that “if they don't realize the problem, they're not gonna get help” (11YA). Without awareness that their behavior is problematic, youth will not be motivated to change their behavior or seek help from others. Several participants illustrated this by describing a lack of problem awareness among adolescents with eating disorders who do not view symptoms such as weight loss as a problem:

-- “They think they're fine. They think they're perfect, since they're losing weight, [so] whatever they're doing is okay” (3YA).

-- She thought everything was good for her, because she was finally losing weight” (JM528).

Lack of prior experiences with mental health. Other participants also discussed low MHL among adolescents due to a lack of prior experiences in dealing with mental health problems. For example, one participant stated that “none of us really have enough life experience on our hands to be able to be like, okay, well you have bulimia” (16G).

Another added that “I never really was exposed to depression. I never really knew what it, how it affected people, so never thought that's what I had” (JM528). Thus, adolescents felt they were not able to identify mental disorders and appropriate forms of support

because they lacked enough experience to be familiar with mental health problems. One participant even stated being hesitant to go to therapy when he was younger because it was not something he was ever “taught to use” (LB). This suggests that adolescents desire to be more informed about how to handle mental health problems in themselves and their friends. A Latino-American participant described her hesitation to seek help at school due to her lack of knowledge about the prevalence of anxiety and the benefits of seeking help:

Well in the case of anxiety, I know that someone like myself, I would definitely not look for help at school. Well, when I was in high school. Now I would be willing, because [...] I know it's something people go through, and it's not normal, but it happens and you have to find help (JM528).

### **Attitudinal Barriers**

While knowledge-related barriers inhibit adolescents from being able to identify mental health problems and appropriate ways to seek help, a number of attitudinal barriers can prevent youth from deciding to seek help even after recognizing they have a problem. Themes relating to attitudinal barriers included stigma surrounding mental health problems, negative perceptions of providers and treatments, a perceived lack of support, and a desire to solve mental health problems independently. Such barriers negatively impact adolescents’ attitudes and beliefs about whether seeking help for mental health problems would be either acceptable or beneficial. Sub-themes illustrating each of these attitudinal barriers will be discussed next.

**Stigma.** Stigma surrounding mental health problems and mental health help-seeking is pervasive among adolescents, often preventing them from seeking help.



Stigma was one of the most commonly mentioned barriers in our interviews and frequently motivated students' desire for confidentiality regarding mental health problems. While adolescents discussed stigma with regard to seeking help both inside and outside of school, in general they were most concerned with stigma in school—particularly with regard to peers and friends. Participants described that adolescents commonly deny the problem (63.6%), worry about other students judging them (59.1%), and hide mental health problems from others (45.5%). Many also mentioned avoiding the topic of mental health altogether (34.1%) or feeling embarrassed or ashamed for seeking help for mental health problems at school (29.5%). This section highlights excerpts detailing how each of these perceived stigmas can inhibit adolescents from seeking help at school.

*Denial.* Participants commonly described denying the problem as a way for youth to avoid dealing with their mental health problems. They described how difficult it can be for adolescents to accept that they have a problem and admit that they may need help. For instance, one participant noted that “it’s [kind of] hard asking for help because you don’t want to admit it [...] You don’t want to admit that you have an eating disorder and you need help” (MC529). Similarly, another stated, “I think just accepting that they have a problem with anything is a barrier that we all come across. Like we don’t want to admit it” (JS519). For some adolescents, part of the challenge of accepting the need for help stemmed from a fear of being labeled with a certain diagnosis after seeking help. A Latino-American female adolescent described the following:

They’re scared to actually, like, face the fact that they have a problem, they don’t want to, um, admit it. Because they’re scared of the consequences, or they’re

scared of what could happen to them if they, if they um, are diagnosed with [...] a disorder (NH527).

Similarly, a Latino-American male echoed worrying about the consequences of admitting having a mental disorder. He described how being labeled as having a specific disorder can negatively impact the way adolescents view themselves, which is why some choose to deny the problem:

I don't think they would ever use the word, uh, anxiety [...]. If they used that then- then I think they'd see themselves like kind of like this mental disorder and that's I don't think they want to see themselves as that so [...] they just try- try to keep a good picture of themselves for as long as they can before there's actually not a good picture.

*Fear of judgment from peers.* Another type of stigma that adolescents frequently mentioned was a fear of judgment from others, especially peers. Specifically, participants worried other students would judge or pity them; think they were crazy or weak; or think something was “wrong” with them if they sought help for mental health problems at school. Most indicated that peers could treat them differently for seeking help, and several indicated seeking help was grounds for complete social rejection. For instance, an Asian-American female adolescent said someone could be “alienated from or maybe ostracized from family and friends if they were discovered that they have a disorder of any type” (12YA). While peer judgment was the most commonly mentioned, it became clear that adolescents feel judged by nearly everyone around them. When asked who might judge adolescents for going to the school counselor or school psychologist, a

Latino-American female participant described how pervasive the judgment surrounding mental health help-seeking can be:

People are afraid others will judge them [...] Their peers, their parents [...] I feel like people they're close to. Social media will judge them and just like any type of communication area people will judge them: friends, family, teachers could judge them and like just anyone. People they barely know will judge them (11YA).

Some participants also revealed culture-specific concerns about the judgment around seeking help for mental health problems in their communities. In general, participants described similar cultural concerns despite having different cultural backgrounds:

“In Asian families particularly it's kind of it's considered weak to ask for help [...] you're crazy because you're seeking help.” –Asian-American adolescent (MC529)

“[In] Hispanic tradition it's very weird that you go to a therapist. What's wrong with you if you're going to a therapist.” – Latino-American adolescent (JS)

Many of the examples in this theme revealed the types of judgments that participants felt they would face if others found out they sought help for mental health problems. Fear of being labeled or judged by peers often inhibited adolescents from seeking mental health services at school, where peers were likely to find out about their problem. The impact of these stigmatizing labels was clearly illustrated by the following quote:

I think there is definitely a stigma of going to the psychologists or counselor.

Umm just like when your friends ask where are you going and [you] say the school counselor. They will say why, is there something wrong with you? [...] It

should not be like that but I know that most people associate school counselors or psychologists with people that are crazy. Yeah so I think that is one of the huge barriers that teenagers are facing in high school (RP).

As the above excerpt shows, many adolescents were particularly self-conscious about their image at school. Some were concerned about the way their classmates viewed them and felt pressure to maintain a positive image; for these students, seeking help for mental health problems at school would be detrimental to that image. Participants also described that there was additional pressure to maintain a positive image for students who were involved in certain social activities, such as cheerleading in high school or Greek organizations in college. These examples show how the stigma around seeking help for mental health problems in general is exacerbated by students' concerns with how others will view them for seeking help at school.

***Hiding the problem.*** As a result of the stigma towards mental illness, many participants described the tendency for adolescents experiencing mental health problems to hide the problem from others, particularly from their peers at school. They indicated that adolescents would rather “bottle it up” (11YA) and “keep it within themselves” (CT) than allow other students to find out about what they were experiencing. Interestingly, several participants acknowledged that hiding it was “bad” (CA529), “self-destructive” (SD) and that the problem can “really like build up” (15YA). However, most would rather deal with the personal consequences of hiding their problem than face the public embarrassment or stigma associated with sharing their problem with others. An Asian-American female adolescent used the striking image of her friend wearing a “mask” to

describe the great lengths to which youth will go to hide their mental health problem at school:

She just kind of put on a mask and masked her true feelings. [...] Yeah, I did that too but not to the extent that I think she did it, but for her I know she put on a happy face and that I was the only one that she told about how she was depressed (SM518).

Though adolescents in general seemed to try to hide their disorder, several participants noted a gender difference that warrants discussion. These participants indicated that males are more likely than females to hide their symptoms, bottle up their feelings, and avoid talking about the problem with others. For instance, a Latino-American female stated that “guys don’t really talk about their issues. They bottle things in” (13YA); a Latino-American male described that males “aren’t noticeable about it. They’re not as open” as females (RD). Another Asian-American female participant referenced the concept of the “alpha male” to describe how males do not want to be viewed as weak for admitting they have a problem (MW). Thus, males may feel more pressure to conceal their disorder from others, making them less likely to seek help at school.

*Avoiding the topic of mental health.* Another aspect of the stigma surrounding mental health problems was avoiding talking about mental health issues with others. Numerous adolescents mentioned, either from personal experience or their perceived experiences of others, that youth often do not want to discuss mental health problems; they consider the topic to be too personal and uncomfortable to share even with their closest friends. Examples include statements such as “I feel like afraid to like tell

someone about my problems” (DD528) and “they just don’t feel confident talking to anyone about it” (EP529). Notably, some adolescents seemed unwilling to discuss mental health problems not only with friends and family members but also with mental health providers. Such was the case for an Asian-American college student, who described her experience seeing a psychologist in high school:

I think I wasn't willing to open up much about it so I was like I didn't want help I just kind of talked about it a little [...]. So that was the main reason why my depression didn't really it wasn't alleviated as much [...]. I really think she could have helped me but I just didn't want help (SM518).

Some participants also did not feel comfortable telling others about a mental illness due to the cultural stigma surrounding mental health problems. Participants perceived that mental health stigma was exacerbated by their respective cultural backgrounds, which prevented them from wanting to talk about mental health with others. One adolescent summarized the following about her perception of the way Latino- American culture views mental illness:

As far as for Latinos that I can say [...] like mental illnesses and stuff, it's not spoken about a lot [...] It's taboo basically [...] I think it's just kind of avoided, not really talked about, it's in the shadows. It's not really recognized as something like big or important (CA529).

***Internal stigma/shame.*** Finally, while many adolescents worried about the stigmatizing views of others, others also internalized these stigmatizing views in judging themselves for needing to seek help. This included participants stating that they would feel personally embarrassed or ashamed for needing to seek help for a mental health

problem. For instance, one participant stated that “in high school I would have been extremely embarrassed to go look for help” (JM528). Others felt that even having a mental disorder was shameful, sometimes citing personal experiences dealing with a mental health problem. For example, a Latino-American high school student stated that “a lot of times I feel really ashamed of having depression” (16G). This sentiment was shared by an Asian-American college student, who described that adolescents “would feel ashamed for actually like needing to get help” (CL529). Thus, judgment both from their peers and from within adolescents themselves can be a barrier for youth trying to seek help for mental health problems at school.

**Negative perceptions toward helpers and services.** Another attitude-related theme that emerged from the interviews involved negative perceptions toward helpers and services that inhibited adolescents from seeking formal help for mental health problems, both in and outside of school. Participants commonly felt that mental health services were not helpful (40.9%), felt discomfort with the help-seeking process (40.9%), and worried about negative consequences of seeking help (34.1%). Others also mentioned concerns about formal providers, including that providers lack empathy (27.2%) or that school-based providers were underqualified (13.6%). Examples of each type of negative perception barrier will be discussed next.

***Mental health services were not helpful.*** One of the most common negative perceptions mentioned by participants was the belief that mental health services were not helpful. Adolescents provided examples from their personal experience of seeking mental health services, or the experiences of others, to explain why they thought mental health services were not beneficial to individuals with mental health problems. Some described

therapy as useless, a waste of time, and not as helpful as simply talking to a friend about the problem. Importantly, participants indicated that hearing about others' negative experiences made them less likely to seek help themselves when experiencing mental health problems. Such was the case for JM, a Latino-American college student, who described her cousin's battle with bulimia including repeated unsuccessful attempts at attending therapy. JM's explanation shows how adolescents can internalize the experiences of others in believing that formal mental health services would not be helpful:

It made me not want to look for help, because it didn't seem like it was helpful...Um but when I started to feel bad when I started looking for help, I would remember that she mentioned psychologists, and I didn't want to go to a psychologist or a counselor, because I thought maybe I would be upset by the way they wanted to help me, or I didn't think it would work out, because of the way she talked.

*Discomfort with the help-seeking process.* While many believed mental health services were not beneficial to those with mental health problems, other participants discussed feeling uncomfortable with or intimidated by the help-seeking process. Some indicated feeling that the professional setting of a mental health provider's office (inside or outside of school) was scary, intimidating, and foreign. Additionally, many adolescents mentioned they would not feel comfortable talking about their problems with a counselor or psychologist; they would rather "talk to [their] mom" (7G1), "talk to their friend" (AG527), or "go through it alone and... help themselves" (BY528) instead of talking to a counselor or psychologist. One reason for this discomfort included the age



gap between youth and helpers, which made mental health professionals seem more “intimidating” (8YA) to adolescents than they might be to adults. Other participants attributed their discomfort to a lack of experience interacting with mental health providers: Youth “don’t trust” (LZ) counselors and may be “nervous [because] this might be their first time talking to someone about it” (JZ). There was also a belief that mental health providers were too intrusive by expecting adolescents to immediately open up about their problems:

Talking to a counselor, just like, you pretty much have to open up everything, you know, and you don't know if you're like completely comfortable with it. Like if there are certain things you don't want to talk about with somebody (7G1).

Importantly, participants noted that youth tend to feel less comfortable seeking help at school than outside of school. They indicated adolescents were much more likely to seek help outside of school because the school environment was stressful, anxiety-provoking, and generally unsupportive. Such sentiments are central to the current work and will be discussed more in the “Structural Barriers” section below.

*Negative consequences of help-seeking.* Other adolescents held beliefs about possible negative consequences of seeking help from mental health providers both inside and outside of school. Many adolescents feared negative social implications from others, such as parents or peers, finding out about their problem if they sought help at school. In discussing school-based providers, one adolescent mentioned the fact that school counselors are “mandated reporters,” which to her meant that telling a school counselor about her problems could lead to others (such as parents) getting in trouble if abuse or another serious problem was suspected (7G1). Another concern regarding school-based

providers was the belief that providers may over-react to the problems students disclose. Below, a Hispanic American adolescent described her negative experience with seeking help from a school counselor:

I remember the one time I went to the school guidance counselor, um I said something like that about I was just really tired and like really anxious about like school and finals [...] and I got home and I got a call from my Mom and she wanted to know why my school guidance counselor called her and told her to hide all the knives in her house, anything I could hurt myself with. [...] And it's deterring, it's just not something you want to have to deal with (16G).

When discussing the negative consequences of seeking help for mental health problems outside of school, many adolescents worried about adverse effects to being prescribed psychiatric medications. Participants described medication as “scary” (12YA) and noted side effects such as dependency and feeling numb or emotionless. Fear surrounding medication was the most common reason for participants to endorse that a psychiatrist would not be helpful for someone with mental health problems. In general, participants thought psychiatrists tend to over-prescribe psychiatric medication. Many viewed it as a last resort, as can be seen in this excerpt from a Latino-American college student:

I'm just kind of like really against [psychiatric medication], unless you really really need it, like when people are um schizophrenic and it helps them control that. But like for depression, I feel like it kind of numbs them. It doesn't really help them deal with the depression (AG527).

*Helpers lacked empathy.* Over a quarter of adolescents discussed the negative perception that helpers were not caring, supportive, or understanding of their problems. For instance, participants characterized mental health providers as “strangers” (19G) who “don’t really understand your problem” (14YA) or “may not truly listen and care about what you’re saying” (9G). Some attributed this discomfort to the age gap between students and helpers, indicating that adult helpers did not understand the unique problems adolescents face. When discussing school-based providers, adolescents also stressed the idea that school counselors were mainly focused on academics and therefore would not care about students’ mental health problems:

Maybe [students] won’t feel welcome because I had a friend who was suffering from depression and she wanted to go talk to someone but she felt the [school] counselors wouldn’t care about her problems [...] She said that they were only there to help you schedule classes and that sort of thing so maybe they won’t feel that they’re there to help them for things like that (JM528).

*School-based providers were underqualified.* Additionally, when considering help-seeking at school, some participants described negative perceptions specific to school-based mental health providers lacking training and expertise. These adolescents felt that school counselors and school psychologists were generally underqualified or not equipped to deal with students’ mental health problems. For instance, one participant stated that school psychologists are not “real like actual psychologists most of the time” (16G) because they spend most of their time doing other things unrelated to counseling. Another stated that school psychologists are undertrained and tend to treat students’ problems “like a manual- just do this and you’ll be fine” (14YA) without taking the time

to understand their whole situation. Similarly, a Latino-American college student discussed the perception that school counselors in high school were not qualified to provide specialized mental health services:

Sometimes the [school] counselor is more focused on academics maybe not so much on the whole, uh, psychology like feeling like that. Maybe go see a counselor outside of school that- that's specialized in that type of, uh, that type of whatever she's going through, depression [...] That would be more, uh, beneficial than going to a counselor who's more focused on grades than your well-being (RD).

**Lack of support.** Perceived lack of support around their mental health problems both inside and outside of school represented another salient attitudinal barrier for our participants. More specifically, many adolescents (45.5%) felt a lack of parent or family support inhibited help seeking, while a smaller number (18.2%) felt lack of peer support inhibited help seeking. Additionally, some participants (29.6%) worried about others dismissing their problem or not taking their problem seriously. This section will detail examples of participants' beliefs related to lack of support.

**Lack of family support.** Overall, many adolescents worried that family members would not understand their mental health problem and would not be supportive in helping them through the problem. Some were concerned about disappointing or upsetting their parents or felt their parents were “not educated on the subject,” and therefore “wouldn't know what to do” even if they shared the problem with them (EP529). Another common reason that inhibited participants from telling parents about mental health issues was fear of parents overreacting. For example, a female adolescent described the following:

They might not want their parents to know. Um, just because they might think their parents may worry or, um, may take extreme actions to, uh, deal with their problem [...] So, they might overreact, um, at the situation, and um, maybe criticize or make the person feel bad about themselves (24G).

Other participants described a lack of support stemming from their familial cultural background. For instance, one adolescent described not feeling supported in seeking formal mental health services due to cultural beliefs about appropriate ways to seek help: “For a Hispanic family it’s like drink tea, you’ll be fine. Pray, you’ll be fine [...] Go to church, you know, God, you know, will fix it” (JS). Another stated, “In Asian families particularly it’s kind of it’s considered weak to ask for help” (MC 529). In such cases, participants did not feel comfortable seeking support from their families or communities for mental health problems due to negative cultural beliefs around mental illness. Because of this lack of support, some youth indicated their preference for sharing mental health problems with friends instead of family members. One described, “if my parents reached out to me versus my friends, I think I would go with my friends, just because we [kind of] share like more common ground” (JS).

*Lack of peer support.* However, not all participants felt willing to disclose their problem to friends; some perceived a lack of support from peers as well. In particular, they believed adolescents were “not comfortable” (MC529; 7G2) sharing mental health problems with friends and that peers would not understand what they were going through. A Latino-American female adolescent also described not wanting to “burden” her friends by telling them about her experience with depression (16G). She confided in her mom but explained how difficult it was to feel alone at school during the day:

A lot of my problem before was that my Mom would help me on the weekends and like after school but [...] That's eight hours every single day that she couldn't be there to help me and that was eight hours of feeling sad and depressed and like I couldn't talk to my friends (16G).

Another participant shared a similar concern that reveals the lack of support many adolescents feel at school. Reflecting on her high school experience, JM528 stated, "You don't feel like there's someone out there like there's a support system, or like there's anyone that can help you with what you're dealing with." This perceived lack of support can therefore be crucial to adolescents' decisions about whether or not to seek help at school.

*Dismissal of the problem by others.* A final concern participants shared regarding lack of support was the perception that others would dismiss their problem or not take their problem seriously. Examples included thinking that parents would ignore the problem, that a general doctor would think the problem was "all in her head" (SD), or that family members would tell the person to "brush it off" (CA529). Such comments indicated participants' belief that the people in their lives would not be supportive in helping them through a mental health problem. Importantly, participants who had experienced or were currently experiencing a mental disorder expressed how challenging and frustrating it can be to have others not take their problem seriously. They described feeling "like it's an imaginary problem" (16G) and feeling pressure to "get over this yourself, just like man up and deal with it" (SD) instead of reaching out to others. Considering how difficult it is for adolescents to discuss mental health problems with others in the first place, it is not surprising that such feelings greatly inhibit adolescents

from seeking help. An Asian-American female participant was candid about how the dismissiveness of her family and friends prevented her from wanting to talk about her experience with depression:

Some people just think it doesn't exist and that you are just sad and like people would say go outside and get fresh air or take a break from your homework [...] Like you tell someone hey yeah I've been feeling depressed and [they would] be like no! You are just going through a phase. It is like you don't want to [tell anyone] because you just don't want to deal with other people's reactions (SM518).

**Independence.** An attitudinal barrier that is somewhat unique to the adolescent population was concern about independence in the help-seeking process. Many adolescents (36.4%) desired independence in their mental health decisions and therefore felt that they could solve their mental health problems on their own without seeking help. Additionally, when adolescents desired independence but felt coerced by parents into seeking mental health services, some (27.3%) mentioned resenting the services. The theme of independence highlights the tension adolescents may feel between seeking increased independence while simultaneously relying on adult assistance, which can make it more challenging for them to successfully seek help.

***Desire for independence.*** As described above, adolescents frequently mentioned that a sense of independence held them or their peers back from reaching out to others for help with mental health problems. Participants believed that adolescents “think it’s better to solve [the problem] themselves than to seek help” (CL529); they “want to be able to do their own thing and do their own life, and not have anyone tell them what to do” (20B).

Importantly, both high school students and college students indicated feeling pressure to solve mental health problems on their own. When discussing high school, participants mentioned teenagers' "stubbornness" and "pride" (RD) interfering with seeking help. An Asian-American female participant also described how high levels of stress in high school have normalized negative feelings such as anxiety in a way that pushes teenagers to try to solve mental health problems on their own:

I would say for high school a lot of [students] think it's like a normal part of [life] but yeah you know how a lot of people go through this, other people are taking like five AP [Advanced Placement] classes while I'm only taking two so they must be feeling a lot more worse than I am. So they just know it is a minor problem and they think they can just deal with it on their own (RP).

College-age participants also mentioned how a desire for independence can inhibit help-seeking. They described that college students feel the need to prove they are self-reliant adults who can solve their own problems without assistance. Some described feeling "confident" in themselves and perhaps "a little bit arrogant", believing that they could handle the problem themselves (CL529). One participant also mentioned that college students sometimes use inappropriate strategies, such as drinking alcohol, as a way to cope with mental health challenges, which further inhibits them from seeking adult assistance. A Latino-American male participant summarized the importance college students place on independence and proving they are adults:

People in college I think especially when they're starting college, they think they're adults now so they could do things on their own, so they don't want to



seek help [...] Like they think that being an adult they could do things on their own (RD).

**Coercion.** In addition to seeking independence, participants commonly described the inhibiting nature of parents forcing or pressuring their children into seeking mental health services. Adolescents discussed cases of personal experience or the experiences of their peers that emphasized how youth can resent going to therapy if it was not their personal decision to seek help. For example, a participant recalled a friend whose “parents made her [go to counseling], but if it were up to her, she wouldn’t have gone” (5YA). Another said that “usually it was their parents wanting [them] to go, and if they didn’t want to go [...] they wouldn’t really open up and try to get better” (AG527). Thus, because adolescents desire independence in making their mental healthcare decisions, they may react negatively to being coerced into seeking help. Having overprotective or overinvolved parents can feel “restricting [...] like not having any freedom” (24G) to adolescents. Several Asian-American participants highlighted the tendency for some Asian parents to become over-involved in managing their teen’s decisions. For example, an adolescent stated, “It’s just some Asian parents, not all, but they want to control, uh, a lot of aspects of their child’s life in an effort to um, in an effort to make them successful” (33YA). Another Asian-American participant detailed what he believed can happen if parents and friends push a teenager into seeking help before he or she is ready:

[Seeking help] has to be up to the kid because otherwise you’re going to make the kid more stressful and he or she would uh probably be too nervous and too anxious, choosing to probably make themselves more isolated from people. Yeah um I think they [friends and family] can’t push them to talk everything out [...]

because you're pushing the child into isolating themselves from the world, from the people closest to them (KI).

### **Practical Barriers**

A final over-arching theme that emerged from our interviews involved several key practical barriers that inhibit adolescents from seeking help. While knowledge and attitudinal barriers impact adolescents' decisions about whether or not to seek help, practical barriers can make help-seeking difficult—or impossible—for adolescents even after they have decided to try to seek help for a mental health problem. Practical barriers most common in our sample included concerns about confidentiality, structural barriers such as time and finances, and symptoms of certain mental disorders that inhibit help-seeking. Specific examples related to each type of practical barriers are described in the proceeding section.

**Confidentiality.** A significant area of concern among the adolescents in our sample was confidentiality with regard to disclosing mental health problems to others. Participants worried about peers (29.6%) finding out about their problem if they sought help, and many (22.7%) shared an overall lack of trust in adults and mental health providers. Some participants were also concerned about the lack of privacy at school (15.9%) or about a problem being disclosed to their parents (11.4%). It was clear that adolescents, particularly in school settings, valued privacy and trust and did not want others to find out about their mental health problems. Specific examples illustrating these subthemes relating to confidentiality will be discussed below.

***Fear of peers finding out about problem.*** Participants commonly shared concerns about their peers finding out if they sought help, especially at school. A recurring fear

was that other students would start rumors that could spread throughout the school. One Asian-American student was candid in describing how a fear of rumors would prevent her from going to a school counselor:

If I had an eating disorder and like I was wanting to go to a counselor about it but I wouldn't really [because] there's so many like people that might talk about it [...] Once a rumor starts it [kind of] gets like bigger and bigger and snowballs (HL601).

Many adolescents reported personally knowing students who have been bullied, judged, or made fun of in school for their mental health problems, again highlighting the previously discussed stigma surrounding mental health help-seeking. Overall, adolescents were clear about their desire to prevent their friends and peers from discovering their mental health problem. One Asian-American student indicated that part of what made it difficult to seek help in high school was the fact that everyone, including the school counselors, knew the student personally. She believed this familiarity made it more likely that she would be judged and word would spread to her peers:

I guess it's because they're counselors at school, like there's more of a personal connection. They know who you are so I guess if they know what you're doing, they might they might judge you or word might get out around the school itself and like people at school might know. And I think the main reason people seek counseling outside of school is because they don't want people in school or in their social circle or people that know them to know what they've been doing (9G).

***Lack of trust in adults/mental health providers.*** Like participant 9G, adolescents often believed that mental health providers might tell others about their problem. Thus, an additional concern regarding confidentiality as a barrier involved participants' general lack of trust in adults and mental health providers. Some felt it was difficult to trust or open up to any adults; several indicated they were far more likely to seek help from a close friend they knew they could trust. Interestingly, adolescents most commonly discussed lack of trust with regard to non-school based providers, who were viewed as "strangers that don't know about their problem" (CL529). This perception made some students hesitant about seeking help outside of school. Thus, while participants were concerned that the personal connection with school providers made it more likely that others would find out about the problem, they were simultaneously worried about trusting an unfamiliar non-school based provider.

***Concerns about lack of privacy at school.*** In considering seeking help at school, adolescents perceived an overall lack of privacy about mental health problems at school. Participants stressed that they did not want others to find out about their disorder, but they felt this was very likely to happen in the school environment. For instance, an Asian-American male commented that "everyone kind of knows that you have this problem" if you seek help at school (20B). Part of the concern about confidentiality at school revolved around others seeing the student walk into the counselor or psychologist's office. As the following example from a Latino-American male adolescent illustrates, the perceived lack of confidentiality can prevent students from seeking help at school or lead them to hide their help-seeking behavior:

If they're at school maybe they won't necessarily go to [seek help at] school because they don't want [...] other people [to] see them go into the counselor. Maybe they would probably go to the counselor with no- when nobody else is looking (RD).

Further, adolescents may not be familiar with their school's policies about what information is and is not confidential, and this can impact their decision about whether to seek help. For instance, an Asian-American student described her uncertainty about how school mental health providers handle confidentiality:

I feel like if they were to seek help from um a professional or maybe a counselor at their school, um like if there weren't any um policies um for confidential information, like the school may try to contact their family and tell their family um the child's problem (CL529).

***Fear of parents finding out about problem.*** Such an example also highlights the concern among adolescents that school mental health providers would reveal their problem to parents and other family members. Youth feared that their parents or relatives would find out their personal problems if they went to a school counselor or psychologist. Some had increased concerns about confidentiality due to the prevalence of gossip and rumors within their cultural community which tends to be more collectivistic in nature with less focus on privacy. For example, an adolescent expressed concerns about a lack of confidentiality within her Chinese community:

In China, I don't know, it's usually like if someone hears that you have a mental disorder, like eventually like the whole neighborhood knows about it. And then

they'll talk about it, it's like, oh that person is not well [...] So people don't really want others to know about it in China so you don't really hear hear that a lot (9G).

**Structural barriers.** Another type of practical barrier that adolescents frequently discussed was the structural barriers impeding access to mental health services inside and outside of school. The most commonly mentioned structural barriers included lack of time to seek help (34.1%); financial concerns (27.3%); providers not being available or not having time to help (20.5%); and lack of access/transportation (13.6%). While most of these structural barriers posed more of a concern for adolescents when seeking help outside of school, a noteworthy number of adolescents (11.4%) described the school environment specifically as a barrier to help-seeking. Each structural barrier will be described in the proceeding sections.

*Lack of time to seek help.* The most common structural barrier for our participants involved lacking the time to seek help for mental health problems. Participants described how their schoolwork, extracurricular activities, and other commitments left little time to access mental health services. In explaining this lack of time, one adolescent stated:

Going to therapy sessions would be time consuming. And they would have to change their whole life style [...] and um, it would probably cause them to be stressed at first [...] [and would] cause them more problems because they'll be delaying their school work or their family life" (NH).

Therefore, some adolescents viewed therapy as an additional commitment that is difficult to coordinate into their already busy lives. At first glance, time appears to be more of a concern when accessing services outside of school, since students' schedules are "packed

with things” (JS) during typical weekday business hours. However, students mentioned lacking time to seek help at school as well. For instance, an Asian-American adolescent described:

If you have seven classes that is like your whole day [...] You have little to no time to yourself let alone to seek out help [...] I know a lot of people umm in my school that would have probably been helped if they would have just seen the counselor or even myself [...] but there just would be no time for it even amongst school because it’s just like class, eat, class, eat, do homework, class. Day after day” (SD).

While some adolescents mentioned lacking time in general, others indicated that students frequently lack time to seek help because they fail to make mental health a priority. They discussed how many high school students prioritize schoolwork at the expense of their physical and mental health. A similar phenomenon occurred for college students, who found that “taking care of themselves could be the last thing on their plate, because they’re so focused on grades” (RD). In this vein, another participant made an important distinction between individuals who do not *have* time to seek help versus those who *choose* not to make time to seek help for mental health problems:

[You put] so much emphasis on school that you don't really have time or you don't want to make time to see someone to make sure you're mental health is like pretty good. I guess it is just like I think mostly the time because you don't want to take away from schoolwork (SM518).

***Financial barriers.*** In addition to time constraints, many adolescents were concerned about the financial burden associated with mental health services. Participants

recognized that “not everyone can afford certain services (CL529), and that mental health services could be expensive without insurance or medical coverage. Further, some participants described friends and family members who had been personally affected by the expense of mental health care. A Latina-American participant said the following about her friend:

[My friend] would go to counseling. She said that it was really helpful that, you know, she really got better and um, but then she had to stop, because it was obviously getting really expensive for her (6YA).

Although most students recognized that services such as counseling were free at school, a few participants believed money continued to be a factor in accessing services in high school. These students were unaware that they could access mental health services at school free of charge. Furthermore, college-age participants discussed added financial concerns that they faced in accessing services in college. This included “struggling with debt” (MW) and worrying about how to pay for medications with lack of money or insurance. Thus, the cost of mental health services continues to be a concern for adolescents in both high school and college.

***Providers lack availability.*** While adolescents perceived youth as lacking time and money to seek help, they also perceived mental health providers as not readily available, especially at school. Students felt that their schools were “understaffed” (14YA) and lacked enough providers to adequately meet students’ mental health needs; they also felt that the school counselors and psychologists were too busy to be a reliable source of support. School counselors were described as being too preoccupied with other job functions, such as scheduling classes, to deal with students’ mental health needs. One



adolescent even described worrying about “having to be kicked out [of the counselor’s office] because she had a line of 40 people outside the door” (16G). Similarly, participants felt that school psychologists see so many students every day that they cannot establish the type of ongoing relationship that someone can find with a provider outside of school, who can provide longer-term treatment. Participants were clear that school providers’ lack of availability made students less likely to reach out to them for help with mental health problems:

Counselors are really busy. Like, especially it was like around um college, you know, like applications and stuff [...] the school counselors were always packed. So there was just never like a time to actually sit down and talk about how she felt, and so I think that the amount of like busyness of people who can actually help her aren't there for her when she needs it (13YA).

***Lack of access/ transportation.*** Though provider availability was more of a hindrance for adolescents in school compared to outside of school, one structural barrier that was mainly a concern outside of school was access and transportation. Participants worried about the complex process of searching, locating, and getting to the office of non-school-based providers. Students in high school “might need a parent to drive [them] there” (9G). For college students, “if someone wanted to do long term therapy then it would be harder to get off campus and get their own transportation” (16G). Access to services was not mentioned as frequently as other structural barriers, but it does represent an important concern adolescents have about how to access services outside of school.

***School environment as a barrier.*** A final structural barrier that is of unique interest to this study is the middle/high school environment itself as a barrier to help-

seeking. Several participants explained how school was a hectic, high-pressure environment in which students did not feel comfortable seeking help. One participant described the school environment as “weird” and “uptight” and felt that “there are a lot of pressures that are associated with school. Like academics, sports, uh clubs, and also peer pressures like drugs or alcohol, and also pressure to fit in” (24G). Given these pressures, several adolescents believed that it was especially difficult for students to seek help at school: One participant even stated that “schools could cause more anxiety” (RD). Youth were more likely to discuss the school environment as a barrier for help-seeking in middle and high school as opposed to college. When discussing why he believed it was easier to seek help in college, one student stated that students are “a bit more mature” in college and the environment feels “more like your home” than a school (BY528). Clearly, the pressure and stress that some students associate with middle and high school can prevent them from being willing to seek help at school. A Latina-American participant summarized the ways in which the school environment makes it more difficult for teenagers to seek help at school:

I think it’s because the counselors and the psychologists they’re in school [...] A lot of like teenagers you know they do get stressed out because of school or like you know the cliques [...] But the fact that they’re in that environment I don’t think that that really helps and I think that that stops teenagers from going there. I think that it’s easier for people to go outside and look for outside help (BY528).

**Symptoms of disorder inhibit help-seeking.** When discussing mental disorders, participants often mentioned that the symptoms of some internalizing disorders actually inhibit help-seeking. While some participants (25%) made more general comments about

how experiencing a mental disorder can prevent individuals from feeling motivated to seek help, others specifically described how symptoms of depression (20.5%) or anxiety (13.6%) were a barrier in themselves. In discussing these disorders, students noted how particular internalizing symptoms make it more challenging for individuals to be able to seek help. Comments specific to symptoms of depression and anxiety will be discussed below.

***Depression symptoms.*** When considering depression, participants often felt that depressive symptoms such as lack of motivation and hopelessness would be difficult to overcome. They used words such as “helpless,” “drained,” and “unfixable” to describe the feelings associated with depression; one youth compared experiencing depression to feeling like being “in a hole and there’s no coming out.” Thus, many adolescents noticed that the symptoms of the depression itself could prevent someone from being able to reach out for help. One Latina-American participant, who was open about her own struggle with mental health problems, described the everyday challenge of living with depression:

“[Individuals with depression are] just not motivated in any way to seek help, because they kind of just feel like it's the end of the road in a way. They just don't want to do anything about it" (11YA).

***Anxiety symptoms.*** Participants also felt that the symptoms of anxiety disorder could be a barrier to seeking help. They mentioned that anxiety was often associated with low self-esteem, worrying what others would think if they sought help, and being afraid of reaching out for help. A Latina-American participant explained how the symptoms of social anxiety she experienced made her especially hesitant to seek help at school:

I think mostly the anxiety would be difficult for people in high school [...] If I was in high school right now, I think I'd still be scared to look for help. [...] I would be scared of others noticing, and I don't know if it's the high school environment that I hated so much and that's what really kept me from wanting to look out for help and I feel that's mostly just that form of anxiety that would really um hinder someone for looking for help in that sort of environment (JM528).

### **Integrative Results**

In considering the quantitative and qualitative data together, integrative analyses were conducted in order to gain more insight regarding the connections between participants' responses in the surveys and interviews. Correlations were conducted to examine whether the number of total and distinct barriers participants mentioned in the interview was related to their MHL, stigma, and attitudes toward help-seeking as measured by the survey. Analyses revealed that attitudes toward formal providers for eating disorders were related to the total number of barriers mentioned ( $r = .35, p < .05$ ) as well as the number of distinct barriers mentioned ( $r = .47, p < .01$ ) in the interview. Thus, participants who endorsed more positive attitudes toward formal providers in the survey tended to identify more barriers in the interview than other participants. Number of barriers mentioned did not correlate with MHL or stigma. Discussion of possible interpretations of the quantitative, qualitative, and integrative results will be considered next.

## CHAPTER 5: DISCUSSION

The current study examined the unique barriers to mental health help-seeking at school among Asian- and Latino-American adolescents. While mental health help-seeking is low among adolescents in general, research indicates that minority adolescents are less likely to receive formal treatment for mental health challenges than their non-minority peers (Eisenberg et al., 2011; Barksdale et al., 2010). This disparity has been attributed to the many barriers to care that disproportionately impact minority adolescents and their families. Specifically, research suggests that stigma and low MHL may play an important role in inhibiting minority college students and adults from seeking help (D’Cuhna, 2015; Mendoza et al., 2015; Cheng et al., 2018). However, few studies have specifically examined stigma and MHL for school based mental health services among minority adolescents, or interviewed minority adolescents about their perceived barriers to care. To extend the current literature on adolescent mental health help seeking, the current work used a mixed-methods design to investigate the relation between MHL and stigma on minority adolescents’ attitudes toward seeking help for mental health problems, as well as to explore salient barriers to mental health help-seeking at school among this population. Although schools are the most common setting for youth to receive mental health services (Wood et al., 2005; Rickwood et al., 2005), schools represent an understudied setting in the literature.

Partially consistent with our hypotheses, stigma (but not MHL) emerged as an important factor in predicting adolescents’ perceptions of the helpfulness of mental health services and service providers. Adolescents also described a myriad of other barriers that

adolescents face when seeking help for mental health problems both inside and outside of school. Knowledge barriers, attitudinal barriers, and practical barriers each emerged from the interviews, which represent some of the most salient barriers to help-seeking among the current sample. The following sections will discuss the findings in more detail, integrate the findings of this mixed-methods study, and address both limitations and implications for future research and practice.

### **Stigma, MHL, and Attitudes toward Formal Help-seeking**

As described above, findings indicated partial support for the quantitative hypothesis (*Higher MHL and lower stigma will each independently predict more positive attitudes toward formal help-seeking*). As hypothesized, stigma negatively predicted attitudes toward formal providers for eating disorders and attitudes toward formal services for depression. Though it is not clear why stigma did not predict the other two attitude variables (i.e., attitudes toward formal providers for depression or formal services for eating disorders), it is possible that the relatively small sample size contributed to these findings. In general, our findings indicate that higher mental health stigma is associated with less favorable attitudes regarding seeking help. These results provide support for previous work such as that of Mendoza and colleagues (2015), in which mental health stigma uniquely predicted help-seeking attitudes among Latino/a college students. Additionally, a large body of literature has identified stigma as a particularly pervasive barrier to care among Asian (Kim, 2007; Gilbert et al., 2007) and Latino (Graf et al., 2007; Hampton & Sharp, 2014) adults, due in part to cultural views on mental disorders and mental health help-seeking. As most of these studies have been conducted on adult populations, the current work provides further evidence of the impact of stigma

on attitudes toward mental health help-seeking among Asian- and Latino-American adolescents.

Contrary to our hypothesis as well as prior research (e.g., Cheng, et al., 2018), MHL did not significantly predict any of the four attitude outcome variables. There are several potential explanations for these unexpected findings. First, MHL in the current sample was substantially higher than that of many previously reported samples, with 83% of participants correctly identifying depression and 57% correctly identifying an eating disorder (bulimia) from the vignettes. In the literature, reported percentages of adolescents' recognition of these disorders have been much lower, such as 33-51% for depression (Burns & Rapee, 2006; Byrne et al., 2015) and 18-25% for eating disorders (Mond et al., 2008; Mond et al., 2010). One potential reason for this discrepancy lies in the response format of the current work's survey. After reading the vignette, participants were presented with several possible answer choices and were permitted to "choose all that apply" to the vignette character. Therefore, many participants selected multiple answers, which increased the probability of selecting the correct choice. Alternatively, it is possible that the current sample of Asian- and Latino-American youth is simply higher in MHL than the samples used in previous research, which warrants future examination. Given the lack of full support for the current study's hypotheses, further research is needed to clarify the relation between MHL, stigma, and attitudes toward formal help-seeking among Asian- and Latino-American adolescents.

### **Barriers to Mental Health Help-seeking at School**

While additional research is still needed, a significant contribution of the current work lies in the richness of the qualitative data yielded from in-depth interviews with

Asian- and Latino-American adolescents. A semi-structured interview format maintained an overarching structure, including a particular focus on school-based services, while allowing participants to expand on barriers they viewed as most relevant and meaningful. Overall, the interviews revealed the substantial number and intensity of the challenges that Asian- and Latino-American youth face when seeking help for mental health problems both in and outside of school. As mentioned above, knowledge, attitudinal, and practical barriers all emerged from analysis of interview data. The present discussion will center on the barriers most relevant to help-seeking at school among the minority adolescents in our sample.

Across interviews, a recurring concern for participants involved the fear of others finding out about their mental health problem, particularly at school. It was clear that adolescents consider their mental health problems to be personal, private information, and they were often unsure whom to trust with that information. Many youths did not feel comfortable seeking help at school due to a perceived lack of privacy at school and a belief that others (namely peers and parents) could find out about their problem. Once others became aware of a student's mental health problem, many worried about negative repercussions such as rumors, bullying, and social judgment. Therefore, it is important to note that the themes of confidentiality and stigma were closely linked in many participants' narratives: Privacy and confidentiality were so essential for many adolescents because of the high stigma surrounding mental health problems and mental health help-seeking. Research has long documented the strong influence of peer groups on adolescents' beliefs and actions (e.g., Coleman, 1980; Tishby et al., 2001), which may explain participants' desire to avoid any negative social consequences that could stem



from disclosing a mental health problem to others. These findings echo results from the survey, in which stigma emerged as a predictor of adolescents' attitudes toward formal help-seeking. Prior qualitative work on school-based help-seeking (e.g., Rickwood et al., 2009; Hart et al., 2014) has also upheld stigma and confidentiality as two of the most significant hurdles to overcome in promoting help-seeking at school.

While stigma in general is a pervasive barrier for adolescents, cultural stigma in particular was a concern for the participants in our study. Stigma is socially constructed within cultural groups, and specific values and expectations within that culture can lead to increased stigma surrounding behaviors, such as seeking mental health services (Han, Cha, & Lee, 2017). Guided by the mental health help-seeking model put forth by Cauce and colleagues (2002), we approached our qualitative data with a focus on the myriad of ways that culture can impact the help-seeking process. Overall, despite coming from two different ethnic groups (Asian and Latino), participants in this study perceived similar cultural concerns surrounding seeking help in their communities. This included a perceived heightened level of judgment and stigma around mental health problems in both Asian and Latino cultural communities. For some youth, formal mental health services were so highly stigmatized within their cultural group that they feared they would be considered weak or crazy for seeking help, and they worried about judgment from even close friends and family. Such views are consistent with a growing body of research documenting the strong stigma surrounding mental health help-seeking in some Latino (e.g., Graf et al., 2007; Uebelacker et al., 2012); Hampton & Sharp, 2014) and Asian (e.g., Kim, 2007; Gilbert et al., 2007; Lee et al., 2009) cultural groups.

Given the stigma that some participants experienced regarding help-seeking in their cultural communities, schools are often considered to be the most accessible place for students to seek help; however, our interviews also revealed important aspects of the school environment itself that can inhibit adolescents from seeking help at school. Of great concern is adolescents' negative perceptions of school mental health providers. In general, school mental health providers were viewed as underqualified, as lacking time to help students, and as failing to understand students' unique problems and perspectives. School providers' varied roles (e.g., school counselors being responsible for academic scheduling and college advising in addition to mental health counseling) contributed to the perception that they did not have time or interest in helping students through mental health problems. Such perceptions are consistent with prior work on parent-reported barriers to school-based mental health care (Ohan, Seward, Stallman, Bayliss, & Sanders, 2015). Additionally, participants perceived a lack of support at school from both peers and school providers, which often led youth to hide their problem from others. Participants emphasized that a single negative experience with school mental health providers— or hearing about the negative experiences of peers— could deter them from seeking help for mental health problems. Seemingly minute factors, such as the location of the school counselor or school psychologist's office, can also impact students' willingness to seek help (Rickwood et al., 2005). Therefore, these sentiments show the importance of mental health providers creating a friendly and safe space in which adolescents can feel comfortable opening up about their problems at school.

Another area of concern that impacts youths' help-seeking both in and outside of school is low MHL, which was the most commonly mentioned barrier in our interviews.

Although participants reported relatively high MHL themselves in terms of depression recognition and eating disorder recognition on the survey, many still viewed low MHL as an important issue for adolescents in general. Participants believed that adolescents often lack knowledge about specific disorders, about how to recognize a problem, and about appropriate sources of help for a mental health problem. At school, youth reported feeling uninformed about the various services and personnel available to them; several were unsure where their school psychologist's office was or whether school-based services were free for students. Importantly, some attributed this low MHL to a lack of experience with mental health problems and services. This concept is particularly important for adolescents, who may not have as much experience dealing with mental health problems compared to college students and older adults. Research has affirmed the connection between experience and MHL: A study by Lauber, Nordt, Falcato, and Rossler (2003) showed that prior interactions with someone with a mental illness improved the ability to recognize depression. Participants in our study felt that this lack of experience led to uncertainty regarding both the identification of mental health problems and the process of where and how to seek help. Many researchers have called for increased education for young people surrounding MHL, with several online and school-based curricula showing promising results in improving MHL and reducing stigma in adolescents (e.g., Taylor-Rodgers & Batterham, 2014; Milin et al., 2016; Rickwood et al., 2004). However, the majority of these studies have only utilized short-term follow-ups, and there remains a need for research examining whether MHL curricula can evoke lasting improvements in students' knowledge and beliefs. In the meantime, as our sample affirms, MHL continues

to be a significant barrier in adolescents' ability to recognize and seek help for mental health problems.

Several participants further described how the lack of discussion around mental illness in their culture can make it difficult to recognize symptoms of a mental disorder, which is one component of MHL. This sentiment identifies culture as a factor contributing to low MHL, which has also been documented by previous research. Cross-cultural studies have shown that Western populations tend to have higher MHL than non-Western populations, and that Caucasian-Americans tend to have higher MHL than ethnic minority Americans (e.g., Altweck, Marshall, Ferenczi, & Lefringhausen, 2015; see Angermeyer & Deitrich, 2006 for a review of population studies on MHL). While some participants specifically highlighted their cultural background in their responses, it is important to note that culture undoubtedly impacted participants' opinions across all aspects of the study. For instance, participants describing stigma or lack of support were doing so through the lens of their individual cultural environment, even if they did not explicitly reference it. Since we did not specifically ask participants about their perceptions of the impact of culture on help-seeking, future research should gain more insight into the ways culture can inhibit (or promote) help-seeking for mental health problems among adolescents.

Overall, our interviews upheld Cauce et al.'s (2002) help-seeking model by revealing barriers that impact each step of the model. This framework suggested three interconnected steps of the help-seeking process: Recognizing a problem, deciding to seek help, and selecting appropriate services. Knowledge barriers can impede individuals from being able to achieve the first step of the process, recognizing mental health

problems. Youth in our sample stated that they lacked knowledge about mental disorders and often struggled to differentiate between normal life stressors, such as sadness from a breakup or loss of a family member, and serious mental disorders such as depression. Other barriers—especially attitudinal barriers— impact the second step in the model, the decision to seek help. Cauce et al. suggested this decision involves realizing that a mental health problem is both impacting one’s life and is unlikely to improve without intervention. These factors can be particularly difficult for youth to assess, as adolescence is marked by ongoing developmental changes and transitions (Holmbeck et al., 2000). An increasing desire to become independent and solve problems without adult assistance can further prevent adolescents from seeking help in making these decisions. Lastly, all three types of barriers, but particularly practical barriers, can hinder the final step of the model, service selection. Participants acknowledged that some structural barriers, such as financial concerns and lack of transportation, were diminished in the school setting. However, other structural barriers, including lack of time to seek help during the school day and providers’ lack of availability, applied to seeking help at school. Many students also mentioned struggling to make mental health a priority, which speaks to the immense pressure adolescents feel to succeed in school as well as the need for increased awareness around the importance of mental wellbeing.

Finally, as described above, culture undoubtedly impacts each stage of the help-seeking framework and should not be under-estimated. Our participants were first- or second-generation immigrants, some of whom lived in communities and attended schools with mainly individuals of their same cultural background. Thus, many participants were keenly aware of the cultural expectations surrounding mental health problems and

appropriate ways to seek help. Heightened levels of stigma around mental health within cultural groups can add to the existing pressures that adolescents already experience, making it even more difficult to feel comfortable discussing mental health problems and accessing appropriate services. In sum, our findings reveal that Asian- and Latino-American adolescents face significant barriers across each stage of the help-seeking model that create a challenging environment in which to seek help for mental health problems at school.

### **Integration of Mixed-Method Findings**

In the current literature, the majority of research examining barriers to mental health help-seeking has utilized quantitative methodologies and predominantly White, adult populations. Such studies have identified several crucial barriers, including stigma, attitudes toward help-seeking, and (more recently) MHL, which can inhibit individuals from seeking help. Emerging research has extended to youth populations and has begun to examine connections between these barriers. For instance, stigma and MHL have been shown to predict positive attitudes toward help-seeking in two samples of college students (Mendoza et al., 2015; Cheng et al., 2018). The current work aimed to further examine this relation among a sample of Asian- and Latino-American adolescents. By utilizing a mixed-method design, our study was also able to reveal a deeper level of detail regarding the barriers that participants felt were most salient and important. As outlined by McKim (2017), one of the most significant contributions of mixed-methods research is the ability to integrate the findings, which improves the conclusions readers can draw from the study. Our work provided several opportunities for such integration, which will be discussed below.

First, we investigated whether the number of barriers a participant mentioned during the qualitative interview was related to the quantitative variables of interest (MHL, stigma, and attitudes toward help-seeking). To our knowledge, such a connection across methodologies has not been previously identified, and thus warrants further discussion and research. Results indicated that participants with more positive attitudes toward formal providers for eating disorders typically mentioned more barriers during the interview. While this finding may appear counter-intuitive, previous work has suggested that positive attitudes toward providers is related to prior experience with mental health services (Mendoza et al., 2015). Therefore, it is possible that participants with more positive views toward providers have utilized mental health services more frequently than others; this increased experience with mental health services could make them more aware of the barriers to help-seeking. In addition, it is conceivable that participants with more negative views toward mental health providers may have been more hesitant to share their concerns with the interviewers. Research has shown that adolescents typically feel more comfortable discussing mental health concerns with close, informal sources such as friends or family (Tishby et al., 2001; D'Avanzo et al., 2012), which could have inhibited participants from revealing additional barriers to a stranger during the interview. However, these interpretations remain speculative, highlighting the need for future studies. Future research should investigate the potential relation between attitudes toward help-seeking and perceived barriers to help-seeking, which has not been previously investigated to the primary author's knowledge.

Another area of integration between the qualitative and quantitative portions of our study lay in the in-depth examination of MHL (lack of knowledge) and stigma, the

two barriers assessed by both methodologies. A particularly interesting finding involved reconciling the high levels of MHL and low levels of stigma identified in the survey with the number of participants who mentioned MHL and stigma as a barrier in the interviews. Recognition of both depression and bulimia were high and stigma was low, yet the majority of participants mentioned MHL (89%) and stigma (86%) as barriers to help-seeking at least once during the interview. Thus, while participants' own MHL appeared high and stigma appeared low, they still commonly felt that MHL and stigma were important barriers to adolescents' help-seeking in general. Such findings emphasize the benefit of a mixed methodology in providing a clearer picture of the variables of interest and affirm low MHL and high mental health stigma as crucial barriers to adolescents trying to seek help for mental health problems.

### **Limitations and Future Directions**

Although the mixed methodology of the current study allowed for a more comprehensive analysis of the barriers to mental health help-seeking, several important limitations warrant discussion in order to inform future research. First, it should be noted that the primary author is a Caucasian-American female who is therefore an outsider to the unique experiences of Asian- and Latino-American adolescents. While the use of qualitative data allowed us to gain greater understanding into participants' own narratives, the study is nonetheless written through the author's own cultural lens. Culture-specific research conducted by members of a cultural group would provide further insight into the experiences minority adolescents face when seeking help for mental health problems.



Another limitation concerns the characteristics of the study sample. The sample was attained through convenience sampling in order to reach the target population of Asian- and Latino- American adolescents. However, this sampling procedure can introduce selection bias and may not be representative of the larger Asian- and Latino- American adolescent populations. While the sample size was substantial for qualitative analyses, it was relatively small for quantitative analyses. Power analysis revealed a necessary sample size of 56, but due to missing data our regression analyses were slightly underpowered with an N of 51. Larger sample sizes should be used to replicate the findings and to determine whether demographic variables, such as race, gender, and age, mediate or moderate the relationships of interest. Additionally, our sample was majority (82%) female, which prevents generalizability to adolescent males. Previous research affirms that boys are often less likely than girls to opt to participate in studies examining mental health-related topics (Burns & Rapee, 2006). Since males have typically been shown to have lower MHL (Burns & Rapee, 2006; Byrne et al., 2015) and lower willingness to seek help (Rickwood & Braithwaite, 1994; Chandra & Minkovitz, 2006) than females, more research specifically focused on adolescent male populations is needed.

A final area for future research involves expanding the measures used to assess the construct of MHL. To measure participants' MHL, we utilized vignettes that evaluated participants' ability to recognize the symptoms of depression and bulimia. While this approach is consistent with previous studies in the field (e.g., Jorm et al., 1997; Burns & Rapee, 2006; Olsson & Kennedy, 2010), symptom recognition captures only one facet of the broader concept of MHL put forward by Jorm et al. (1997). Future

work should aim to implement measures that assess not only recognition of mental disorders, but also knowledge and beliefs about management and prevention. Another limitation of most MHL scales, including the one adapted for the current study, involves the lack of established psychometric properties. As outlined by Kutcher et al. (2016), most studies examining MHL do not include psychometric data, making it difficult to examine the validity of the reported results. Creation of a more standardized, comprehensive assessment tool will allow researchers to more adequately evaluate MHL across various populations.

## **Conclusions**

In conclusion, this study examined barriers to mental health help-seeking among Asian- and Latino-American adolescents, with a particular focus on help-seeking at school and on the relation between MHL, stigma, and attitudes toward help-seeking. Since the majority of research on MHL has been conducted outside the U.S. or on adults, the current work extended this research to racial minority American adolescents, a population often at-risk for unmet mental health needs (Garland et al., 2005). Overall, we found partial support for the work of D’Cunha (2015) and Cheng et al. (2018). While stigma appeared to be an important predictor for participants’ attitudes toward help-seeking, MHL did not emerge as a significant predictor of attitudes in our study. However, during the interviews participants most frequently mentioned MHL and stigma as barriers to seeking help for mental health problems. Thus, researchers and school-based mental health service providers should continue to explore avenues for improving adolescents’ MHL and decreasing the stigma surrounding mental disorders and help-seeking. In addition to MHL and stigma, several other crucial barriers emerged

throughout the interviews: Negative perceptions of providers and services; lack of support; confidentiality; structural barriers; a desire for independence; and symptoms of the disorder inhibiting help-seeking. Many participants also mentioned culture-specific expectations about mental illness and appropriate forms of help-seeking that can make seeking help even more challenging. While schools are frequently touted for decreasing barriers for all students to access mental health services (Lyon et al., 2013), these findings reveal the numerous challenges that Latino- and Asian-American adolescents continue to face when seeking help at school.

The current work informs several practical implications for school-based mental health providers to promote student help-seeking. First, we echo Becker and colleagues' (2015) call for increased attention toward reducing barriers and promoting engagement of youth and families in school-based mental health services, particularly for ethnic and racial minority youth. School mental health providers, such as school counselors and school psychologists, play a vital role in recognizing, understanding, and working to make school mental health services more accessible to students. Negative perceptions toward school mental health providers were common among our sample, including the belief that they were under qualified, lacked time, lacked empathy, or were not supportive of student mental health needs. Some participants were even unaware of the providers that were available to them at school. School-based mental health providers should work to understand the specific needs of the minority students with whom they are working, which includes recognizing the impact of culture on the help-seeking process. School-based mental health providers can also address broader concerns, such as ensuring students are aware of providers' roles and of policies surrounding confidentiality, in order

to improve some of the negative perceptions. For instance, Becker and colleagues (2015) emphasized the importance of promoting accessibility to engage youth and their families in school-based mental health care. To do so, the authors recommended actions such as participating in school-wide events with students and parents, improving school-home communication, and providing information about providers and services in an accessible, non-stigmatizing manner. Focus groups with students, parents, and staff were also identified as a crucial way to directly engage with youth and families to determine the specific barriers relevant to an individual school's stakeholders. Considering the growing mental health needs of ethnic minority adolescents in U.S., such efforts will be even more necessary to provide youth with the knowledge, resources, and support to be able to seek help for mental health problems in and outside of school.

Table 1

*Participant problem recognition for bulimia and depression vignettes.*

<b>Bulimia vignette</b>	<b>N endorsed</b>	<b>Percent</b>
Low self-esteem or lack of self-confidence	38	67.9%
Anorexia Nervosa	32	57.1%
*Bulimia Nervosa	32	57.1%
Binge eating disorder or problem	28	50.0%
Anxiety disorder or problem	21	37.5%
Mental Illness	18	32.1%
Nutritional deficiency	17	30.4%
Depression	14	25.0%
Exercise disorder or problem	13	23.2%
Yo-yo eating	12	21.4%
Loneliness	7	12.5%
Hormone problem	3	5.4%
No real problem, just stress	1	1.8%
Diabetes	0	0.0%
<b>Depression vignette</b>	<b>N endorsed</b>	<b>Percent</b>
*She has depression	47	83.9%
She is having a nervous breakdown	14	25.0%
She has a mental illness	11	19.6%
I do not know	6	10.7%
There is nothing wrong with her	1	1.8%
She has bulimia	1	1.8%
She has cancer	1	1.8%
She is schizophrenic	0	0.0%

*Note.* Participants were asked to identify the vignette character's main problem in a "choose all that apply" format from the list of answer choices. Correct answer choices are indicated with an asterisk (\*).

Table 2

*Participant attitudes toward formal providers and services for the bulimia and depression vignettes.*

<b>Bulimia vignette</b>	N endorsed	N responses	Percent
<b>Providers:</b>			
Counselor	50	52	96.2%
Psychologist	47	51	92.2%
Self-help support group	45	52	86.5%
Psychiatrist	39	46	84.8%
General doctor	36	50	72.0%
Pharmacist	11	41	26.8%
Social Worker	11	45	24.4%
<b>Services:</b>			
Counseling	49	54	90.7%
Relaxation Therapy	40	49	81.6%
Cognitive Behavior therapy	25	42	59.5%
Psychotherapy	21	41	51.2%
<b>Depression vignette</b>	N endorsed	N responses	Percent
<b>Providers:</b>			
Psychologist	50	51	98.0%
Psychiatrist	39	47	83.0%
Telephone hotline	27	43	62.8%
General doctor	28	48	58.3%
Nurse	20	47	42.6%
Social worker	12	39	30.8%
<b>Services:</b>			
Receiving therapy with a specialized professional	44	49	89.8%
Suggest she get professional help	33	48	68.8%
Going to a specialized mental health service	28	43	65.1%

*Note.* Participants were asked to indicate whether each provider and service would be helpful, harmful, or neither for the character in each vignette. “N endorsed” indicates the number of participants who endorsed that each answer choice would be helpful for the vignette character.

Table 3

*Correlations of symptom recognition, stigma, and attitudes toward formal providers and services.*

	1	2	3	4	5	6	7	8
1. Recognition of eating disorder	---							
2. Recognition of depression	.31*	---						
3. Stigma	-.13	-.20	---					
4. Attitudes toward providers for eating disorder	.19	.26	-	---				
5. Attitudes toward services for eating disorder	.15	-.11	.01	.27	---			
6. Attitudes toward providers for depression	.14	-.09	-.23	.53**	.47**	---		
7. Attitudes toward services for depression	.10	-.17	-.33*	.33*	.31*	.39**	---	
8. Attitudes toward psychologists	.36*	.31*	-.33	.42**	.23	.21	.26	---

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

Table 4

*Multiple regression analyses of the effect of stigma and MHL on attitudes toward help-seeking*

	Attitudes toward formal providers for eating disorders	Attitudes toward formal providers for depression	Attitudes toward formal services for eating disorders	Attitudes toward formal services for depression
	$\beta$	$\beta$	$\beta$	$\beta$
MHL	.15	-.12	.15	-.21
Stigma	-.45***	-.24	.03	-.35**
Model fit	$F(2, 51) = 7.97^{***}$	$F(2, 51) = 1.78$	$F(2, 51) = .59$	$F(2, 51) = 4.56^*$

*Note: \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .*



Table 5

*Themes and sub-themes of barriers to help-seeking mentioned during interviews*

<b>I. Knowledge Barriers</b>	
<b>1. Lack of Knowledge</b>	<b>89.4%</b>
<i>Lack of knowledge about mental disorders</i>	50.0%
<i>Lack of knowledge about providers/treatments</i>	47.7%
<i>Lack of knowledge about where/how to seek help</i>	47.7%
<i>Lack of problem awareness</i>	36.4%
<i>Lack of prior experiences with mental health</i>	27.3%
<b>II. Attitudinal Barriers</b>	
<b>2. Stigma</b>	<b>86.4%</b>
<i>Denial</i>	63.6%
<i>Fear of judgment from peers</i>	59.1%
<i>Hiding the problem</i>	45.5%
<i>Avoiding the topic of mental health</i>	34.1%
<i>Internal stigma/shame</i>	29.5%
<b>3. Negative Perceptions</b>	<b>72.3%</b>
<i>Mental health services not helpful</i>	40.9%
<i>Discomfort with help-seeking process</i>	40.9%
<i>Negative consequences of help-seeking</i>	34.1%
<i>Helpers lack empathy</i>	27.3%
<i>School-based providers underqualified</i>	13.6%
<b>4. Lack of Support</b>	<b>59.5%</b>
<i>Lack of family support</i>	45.5%
<i>Dismissal of problem by others</i>	29.6%
<i>Lack of peer support</i>	18.2%
<b>5. Independence</b>	<b>51.1%</b>
<i>Desire for independence</i>	36.4%
<i>Coercion from parents</i>	27.3%
<b>III. Practical Barriers</b>	
<b>6. Confidentiality</b>	<b>61.7%</b>
<i>Fear of peers finding out about problem</i>	29.6%
<i>Lack of trust of adults/mental health providers</i>	22.7%
<i>Lack of privacy at school</i>	15.9%
<i>Fear of parents finding out about problem</i>	11.4%
<b>7. Structural Barriers</b>	<b>55.3%</b>
<i>Lack of time to seek help</i>	34.1%
<i>Financial barriers</i>	27.3%
<i>Providers lack availability</i>	20.5%
<i>Lack of access/transportation</i>	13.6%

<i>School environment as a barrier</i>	11.4%
<b>8. Symptoms of Disorder Inhibit Help-seeking</b>	<b>51.1%</b>
<i>Mental disorders in general inhibit help-seeking</i>	25.0%
<i>Depression symptoms inhibit help-seeking</i>	20.5%
<i>Anxiety symptoms inhibit help-seeking</i>	13.6%

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*Note:* Percentages indicate the percent of participants who mentioned each theme/sub-theme at least once during the interview.

## Appendix A

### Copy of Survey Questions (Asian Version)

#### **Demographic information**

Age \_\_\_\_\_ Grade level \_\_\_\_\_ Gender \_\_\_\_\_

Race/Ethnicity \_\_\_\_\_ Country of origin \_\_\_\_\_ Years in U.S. \_\_\_\_\_

Please read the following questions carefully and select the most appropriate answer.

This first section will ask you questions about mental illness.

I believe that people who have a mental illness are crazy.	1 Disagree Completely	2 Disagree Slightly	3 Neither Disagree or Agree	4 Slightly Agree	5 Totally Agree
People who are mentally ill should be committed to a mental hospital.	Disagree Completely	Disagree Slightly	Neither Disagree or Agree	Slightly Agree	Totally Agree
All schizophrenics are violent.	Disagree Completely	Disagree Slightly	Neither Disagree or Agree	Slightly Agree	Totally Agree
All people with depression are crazy.	Disagree Completely	Disagree Slightly	Neither Disagree or Agree	Slightly Agree	Totally Agree

People with mental illnesses are weak	Disagree Completely	Disagree Slightly	Neither Disagree or Agree	Slightly Agree	Totally Agree
People who see a psychologist must really be in trouble	Disagree Completely	Disagree Slightly	Neither Disagree or Agree	Slightly Agree	Totally Agree
Mental illnesses are only something that adults have, and not children.	Disagree Completely	Disagree Slightly	Neither Disagree or Agree	Slightly Agree	Totally Agree

**This section contains questions about what you believe to be true about eating disorders and how you might help a young adult who you suspect has an eating disorder. Please choose whether you agree or disagree with each statement. If you are unsure whether you agree or not, choose the "not sure" option.**

Please read the following story and answer the questions based on what you read.

Linlin is a 12 year old girl. Linlin’s current weight is below average for her age and height. However, she thinks she is overweight. Upon starting sixth grade, Linlin started running regularly every day after school. Through this effort she gradually began to lose weight. Linlin then started to “diet”, avoiding all fatty foods, not eating between meals, and trying to eat set portions of “healthy foods”, mainly fruit and vegetables and bread or rice, each day. Linlin also continued running, losing several more pounds. However, she has found it difficult to maintain the weight loss and for the past 18 months her

weight has been continually fluctuating, sometimes by as much as 5 pounds within a few weeks. Linlin has also found it difficult to control her eating. While able to restrict her dietary intake during the day, at night she is often unable to stop eating, bingeing on, for example, a loaf of bread and several pieces of fruit. To counteract the effects of this bingeing, Linlin takes laxative tablets. On other occasions, she vomits after overeating. Because of her strict routines of eating and exercising, Linlin stopped hanging out with her friends on the weekends, like she used to.

1. What would you say is Linlin 's main problem? (choose all that apply)
  - a. Mental Illness
  - b. An exercise disorder or problem
  - c. Anorexia nervosa
  - d. A nutritional deficiency
  - e. No real problem, just stress
  - f. Low self-esteem or lack of self-confidence
  - g. A hormone problem
  - h. Loneliness
  - i. Yo-yo eating
  - j. An anxiety disorder or problem
  - k. Diabetes
  - l. A binge eating disorder or problem
  - m. Depression
  - n. Bulimia nervosa

2. This question is about which interventions you think might be helpful to Linlin.

Which of the following **people** do you think would be helpful, harmful, or neither (helpful nor harmful) to Linlin 's problem.

Person	Helpful	Harmful	Neither
General doctor			
Pharmacist			
School Counselor			
Psychologist			
Psychiatrist			
Social worker			
Alternative therapist			
Dietician or nutritionist			
Personal trainer			
Commercial weight loss program			
Community mental health worker or team			
Self-help support group			

Minister			
Family member			
Close friend			

3. This question is about which interventions you think might be helpful to Linlin .

Which of the following **activities** do you think would be helpful, harmful, or neither (helpful nor harmful) for Linlin 's problem?

Activity	Helpful	Harmful	Neither
Cutting back on exercise a bit			
Alternative therapy			
Assertiveness/social skills training			
Using a self-help treatment manual			
Admission to the psychiatric ward of a public hospital			
Getting advice about diet or nutrition			
Getting out and about more/finding new hobbies			

Counseling			
Just talking about the problem			
Psychotherapy			
Hypnosis			
Relaxation therapy, meditation, etc.			
Cognitive behavior therapy			
Trying to deal with the problem on her own			
Getting information about problem eating and available services			

Please read the following story and answer the questions, based on what you read:

Wenwen is a 13 year old girl who is feeling unusually sad for the last few weeks. She feels tired all the time and she has problems falling asleep. When she is able to fall asleep, she wakes up many times. She has lost her appetite and lately has lost some weight. It is difficult for her to concentrate and her grades have dropped. Her daily activities are a lot for her to handle, which led to her decision to stop attending piano



lessons. She also stopped hanging out with her friends, who she used to spend time with every Friday afternoon. Her parents and friends are very worried about her.

1) In your opinion, what is going on with Wenwen (choose all that apply)?

- a) I do not know
- b) There is nothing wrong with her.
- c) She has depression.
- d) She is schizophrenic.
- e) She has a mental illness.
- f) She has bulimia.
- g) She is having a nervous breakdown.
- h) She has cancer.
- i) Other (Please specify):

2) There are different types of people who can help Wenwen. Please indicate if you think getting help from these people would be helpful, harmful, or neither for Wenwen. If you are unsure, check the “I don’t know” box.

Person	Helpful	Harmful	Neither	I don't know
General doctor				
Nurse				
Teacher				
Psychologist				
Social Worker				

Psychiatrist				
Close friend				
Telephone hotline				

3) There are some types of products that might help Wenwen. Please indicate what you think will be helpful, harmful, or neither for Wenwen. If you are unsure, check the “I don’t know” box.

Type of Product	Helpful	Harmful	Neither	I don’t know
Vitamins				
Tea				
Antidepressants				
Antipsychotics				
Sleeping pills				

4) There are different activities that could help Wenwen. Please indicate which activities you think will be helpful, harmful, or neither for Wenwen. If you are unsure, check the “I don’t know” box.

Type of Activity	Helpful	Harmful	Neither	I don’t know
Becoming more physically active				

Getting relaxation training				
Practicing meditation				
Getting acupuncture				
Getting up early each morning and getting out into the sunlight				
Receiving therapy with a specialized professional				
Looking up information on a website about her problem				
Reading a self-help book on her problem				
Joining a support group of people with similar problems				
Going to a specialized mental health service				
Using alcohol to relax				
Using cigarettes to relax				

5) If you were friends with Wenwen, which of the following actions do you think would be helpful, harmful, or neither to Wenwen? If you are unsure, check the “I don’t know” box.

Type of action	Helpful	Harmful	Neither	I don't know
Talk to her firmly about getting her act together				
Suggest she get professional help				
Make an appointment for her to see a general doctor with her knowledge				
Ask her whether she is feeling suicidal				
Suggest she have a few drinks to forget her troubles				
Rally friends to cheer her up				
Ignore her until she gets over her problem				
Keep her busy to get her mind off her problems				
Encourage her to become more physically active				

6) Of the following options, which do you think are ways to prevent mental illnesses?

Do you think the item in this column prevents mental illnesses?	Yes, this item prevents mental illnesses	No, this item does not prevent mental	I don't know whether or not this item prevents mental illnesses

		illnesses	
Keeping psychically active			
Avoiding situations that might be stressful			
Keeping regular contact with friends			
Keeping regular contact with family			
Not using drugs			
Never drinking alcohol			
Making regular time for relaxing activities			
Having a religious or spiritual belief			

## Appendix B

### Interview Protocol

Please read the following story: [Linlin/ Maria] is a 12 year old girl. [Linlin's/ Maria's] current weight is below average for her age and height. However, she thinks she is overweight. Upon starting sixth grade, [Linlin/ Maria] started running regularly every day after school. Through this effort she gradually began to lose weight. [Linlin/ Maria] then started to “diet”, avoiding all fatty foods, not eating between meals, and trying to eat set portions of “healthy foods”, mainly fruit and vegetables and bread or rice, each day. [Linlin/ Maria] also continued running, losing several more pounds. However, she has found it difficult to maintain the weight loss and for the past 18 months her weight has been continually fluctuating, sometimes by as much as 5 pounds within a few weeks. [Linlin/ Maria] has also found it difficult to control her eating. While able to restrict her dietary intake during the day, at night she is often unable to stop eating, bingeing on, for example, a loaf of bread and several pieces of fruit. To counteract the effects of this bingeing, [Linlin/ Maria] takes laxative tablets. On other occasions, she vomits after overeating. Because of her strict routines of eating and exercising, [Linlin/ Maria] stopped hanging out with her friends on the weekends, like she used to. (Note: use Maria for Latino parents)

1. This question is related to the story you just read about Linlin. In your opinion, what is going on with Linlin? How often do you see what happened to Linlin happening among female Asian/Latino teens? If what happened to Linlin happened to your friend, what would you do?

2. Have you ever personally known a friend or teenager who you think might have an eating disorder? Tell me what you see or saw in that person that makes you think he/she might have an eating disorder.
3. If someone is struggling with an eating disorder, what do you think are some appropriate forms of support or services for them?
4. How to prevent eating disorder? What can teachers or school do to prevent eating disorder?

Please read the following story: [Wenwen/ Katrina] is a 13 year old girl who is feeling unusually sad for the last few weeks. She feels tired all the time and she has problems falling asleep. When she is able to fall asleep, she wakes up many times. She has lost her appetite and lately has lost some weight. It is difficult for her to concentrate and her grades have dropped. Her daily activities are a lot for her to handle, which led to her decision to stop attending piano lessons. She also stopped hanging out with her friends, who she used to spend time with every Friday afternoon. Her parents and friends are very worried about her. (Note: use Karina for Latino parents).

5. This question is related to the story you just read about Wenwen. In your opinion, what is going on with Wenwen? What do you think can be done to help Wenwen? If Wenwen is your friend, what would you do?
6. Have you ever personally known a friend or teenager (or maybe even you) who you think might be depressed? Tell me what you see or saw in that person that makes you think he/she might be (or was) depressed.

7. Have you ever personally known a friend (or maybe even you) who you think might be anxious? Tell me what you see or saw in that person that makes you think he/she might be (or was) anxious.
  
8. If someone is struggling with depression or anxiety, what do you think are some ways to help them?
  
9. Do you know any teens who have sought help from a counselor or psychologist for anxiety or depression [at school or outside of school]?
  - a. Did you talk about their experiences with them?
  - b. What did they tell you? What did you think about what they told you?
  
10. What do you think are the barriers for teenagers to seek help from counselors or psychologist for eating disorder, depression or anxiety at school? How are those barriers different from seeking help from counselors or psychologists outside of school?



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