Understanding Southeast Asian International Students' Mental Health Perceptions, Challenges, and Help-seeking Behaviors During Their Studies in the United States

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Submitted in partial fulfillment of the
requirements for the Degree of Doctor of Education in
Teachers College, Columbia University

2025

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Abstract

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This seminal work filled a knowledge gap in the literature by exploring the mental health perceptions, knowledge, concerns, and experiences of Southeast Asian international students studying during a crucial period with a looming collegiate mental health crisis unfolding on U.S. college campuses. This mixed-methods study identified the perceived threats to mental health; high stigma levels surrounding help-seeking behaviors (shaped by deeply rooted or traditional cultural and religious beliefs); significant acculturation challenges (language barrier, loss of cultural identity, culture shock, and guilt); structural and cultural barriers to seeking mental health; and alternative coping mechanisms preferred by Southeast Asian international students that resulted in low mental health uptake or avoidance. Rosenstock's (1966) Health Belief Model and Berry's (2005) acculturation theory were the theoretical frameworks used. A 50-item survey questionnaire was administered to a sample of 176 participants and 29 in-depth one-on-one interviews were conducted. For the treated quantitative data, Pearson Correlation Coefficients were calculated, and statistical tests such as one-way analysis variance and hierarchical linear regression models were conducted. Qualitative data were coded, and a thematic analysis was used to interpret overarching findings and draw conclusions. Results help provide a roadmap for U.S. higher education institutions, mental health counselors, and health education professionals to better understand the specific mental health concerns and needs of Southeast Asian international students. Implications for practice include tailoring programs, initiatives, and resources to be more culturally responsive to the unique needs of the study population.

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Acknowledgements

To my parents, who may not fully understand my work—

Con nhờ lòng biết ơn và công lao của Ba Má để đạt được luận án này. Thành tựu và bằng tiến sĩ ngày hôm nay là nhờ sự hy sinh, tình yêu thương và sự ủng hộ của Ba Má. Con dành tặng luận án này cho Ba Má để cảm ơn Ba Má nuôi và dạy dỗ con để có cơ hội được học xa nhà trong suốt 9 năm o New York và theo đuổi ước mơ lớn nhất của con ra được Tiến Sĩ. Nhờ Ba Má, con có thể thành công hôm nay.

To Dr. Odlum, the sponsor and mentor I don't deserve—

There are no words I can say to thank you enough and capture what God has given me through YOU. Meeting you when I felt defeated and nearly dropped out of the program during my "quarter crisis" was one of the greatest blessings I have ever received. Your unwavering guidance, unconditional love, and mentorship carried me through to the finish line. You helped ignite a light in me that I thought was lost. Thank you for always being there for all of your students, and most importantly, for believing in us when we didn't. You have forever changed my life, and I can only hope to be in the service of others and give back the way you selflessly do for those around you. You are stuck with me for life, Dr. Odlum—sorry, not sorry!

To Jose, the most loving and supportive partner—

Thank you for holding me through life's highs and lows since we met in front of John Jay, almost 9 years ago this August. From walking me to my first college course, to being my best friend, calming my anxiety, and wiping my tears as I finish one of the most challenging chapters of my life, you have been my biggest supporter. Thank you all that you are and do in helping me reach this milestone and many more. I am so grateful and excited for what lies ahead!

To the rest of my dissertation committee—

Thank you, Dr. Rajan, Dr. Bob, and Dr. Yolie, for being part of my journey and pushing my thinking and for the unconditional support, patience, and valuable feedback on my work.

To my teachers, counselors, and mentors in my hometown—

Thank you for believing in me, from my early days at Marysville without knowing a word of English or being able to ask to use the bathroom to then build my language skills and confidence by 4th grade. I have carried your lessons with me throughout my nine years here in New York, and I am forever grateful to Mrs. Lewis, Mrs. Kim-Folston, Mrs. Murray, Mr. Moxley, Mrs. Montano, Alice, Karen, and Julian for shaping my journey and cheering me on from 3,000 miles away.

To my friends—

Thank you to my friends: AJ, Drew, Sydney, Tev, Therese, Traci, and Peter—the LEDA family that I've known for almost 10 years now, and the second mother I gained from that lifechanging summer, Vynessa. Last, but not least, special thanks to Charmaine and Chioma for holding my hand and always looking out for me every step of the way in this program.

To my brave and amazing participants—

Most importantly, I would like to extend my gratitude to my study participants. I hope this dissertation lays a strong foundation that captures the unique experiences, narratives, and unheard voices of Southeast Asian international students in academia. Many of your stories and challenges resonated with me as a first-generation low-income student and Vietnamese immigrant. I am forever grateful for your time, your trust, your honesty, and bravery given the current political climate in our country. Thank you for giving me the greatest honor of learning from you and calling on U.S. higher education institutions to meet you where you are in your journeys.

Chapter 1: Introduction

Today, the current mental health landscape at colleges and universities in the United States is a public health concern that has garnered significant attention in recent years (National Education Association [NEA], 2023). This "mental health crisis" has left higher education institutions with the burdens and responsibilities of meeting the growing mental health needs of their students who are experiencing record levels of severe anxiety, depression, and suicidal ideation (National Education Association [NEA], 2023; Xiao et al., 2017).

International students are most impacted as this "mental health crisis" unfolds on college campuses (National Education Association [NEA], 2023). Specifically, they are at increased risk for experiencing more mental health issues due to the additional acculturation challenges they experience including financial constraints, language barriers, acculturative stress, and other adjustment challenges as they transition to a new foreign country and host culture (Qin, 2019). In fact, these mental health struggles are more pronounced among Asian international students, who not only make up the largest international student population in the United States but also have the significantly lowest levels of help-seeking intentions and behaviors as well as mental health utilization, compared to their domestic peers and other international students (Xiong & Yang, 2021). Strong evidence has suggested that Asian international students are a vulnerable population when it comes to mental health outcomes due to higher rates of depression, anxiety, and suicide ideation from experiencing language barriers, academic stressors, social isolation, financial burdens, visa constraints, discrimination and prejudice, adjustment challenges, homesickness, and other difficulties during the acculturation process that deteriorates their mental health and overall well-being (Acharya et al., 2018; Fritz et al., 2008; Ma et al., 2020; Sandhu & Asrabadi, 1994; Xiong & Yang, 2021; Yu et al., 2023; Zhang et al., 2022). Despite

this unfolding mental health crisis on U.S. college campuses, Southeast Asian international students may be experiencing "different [mental health] realities" that are not captured in the existing literature that generalizes the mental health challenges of the broader Asian international student population (Koo & Tan, 2022, p. 473). Specifically, Southeast Asian international students may be disproportionately at risk for increased mental health issues at higher severity levels (Tan, 2019).

Background

According to the National Education Association [NEA] (2023), alarming rates of depression and anxiety among college students in the United States are contributing to a "mental health crisis" that urgently needs more data-driven research and cues to action on effective interventions to help mitigate an epidemic (para. 3). The NEA referenced findings from the Healthy Minds survey conducted back in March 2023, which revealed that the majority of college students in the United States are struggling with their mental health at a crucial turning point in their adulthood, where they are juggling competing priorities. For instance, students are navigating rigorous coursework, attending office hours, participating in extracurricular activities, networking at professional development events, working jobs, pursuing internships or volunteer opportunities, and many other tasks. Accordingly, more than 60% of college students reported experiencing mental health problems, which increased the prevalence rate to 50%. This alarming rise in mental health issues since the last decade is concerning because most college students are now at elevated risk of meeting the criteria of experiencing at least one mental health condition. Colleges are left with the burden of addressing this "mental health crisis" on their campuses, which are at an all-time high with extensive waitlists for overwhelmed counseling centers and burned-out mental health professionals (National Education Association [NEA], 2023).

Specifically, the suicide rate among college students also hit its peak in the survey's 15-year tenure, where 15% of college students are reporting that they considered committing suicide (National Education Association [NEA], 2023). Alarmingly, Cornell University reported experiencing high suicide rates among Asian and Asian American students, who only represent 14% of their student population. Specifically, statistics revealed that 13 of the 21 suicide victims at Cornell since 1996 were of Asian descent (Choi et al., 2020).

Additionally, the American College Health Association National College Health Assessment (2022) data revealed that 75% of college students reported experiencing moderate (43.80%) to severe (30.70%) levels of psychological distress. Over a third of college students (approximately 35%) reported they had a diagnosis of anxiety, 27% had been diagnosed with depression, and 8% said they had a previous history with a trauma or stressor-related disorder like Post-traumatic Stress Disorder (PTSD) (American College Health Association, 2022). Alarmingly, 1 in 5 college students (approximately 21.80%) reported having suicidal ideation at least once and have told someone their plans. 10.10% reported they planned to commit suicide at least once, but did not want to die and 5.10% did more than once and wanted to die. Other reported mental health diagnoses among college students surveyed included trauma, eating disorders, Attention Deficit/Hyperactivity Disorder (ADD/ADHD), alcoholism or other drug-related abuse, obsessive-compulsive disorders, autism, bipolar, personality disorders, gambling disorders, insomnia, Schizophrenia and other psychotic conditions, and traumatic brain injury (TBI). Lastly, it is also worth noting the majority of participants in the American College Health Association National College Health Assessment (2022) (64.30%) reported having not received any psychological or mental health services for their issues.

This mental crisis raises significant concerns for international students, particularly Asian students who currently account for 71% of the international student population in the United States, according to the Student and Exchange Visitor Information System (SEVIS) data report released in 2023 by the Student and Exchange Visitor Program, part of U.S. Immigration and Customs Enforcement (ICE) (U.S. Immigration and Customs Enforcement [ICE], 2023). The majority of Asian international students primarily hail from China, India, and South Korea (U.S. Immigration and Customs Enforcement [ICE], 2024). To put it into greater perspective, the Open Doors Report by the Institute of International Education (IIE) (2023) revealed that 54% of international students call either India or China home.

In recent years, however, there has been a drastic increase in student enrollment from Southeast Asian countries including Brunei, Burma (Myanmar), Cambodia, Timor-Leste, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, and Vietnam (Asia Society, 2023). For example, in the academic year 2023-2024, there were 53,609 Southeast Asian international students studying in the United States, according to the Institute of International Education's (IIE, 2023) *Open Doors* annual report. More specifically, 2% of the total international student population were Vietnamese (approximately 22,066 students), followed by 0.74% were Indonesians (8,348 students), 0.47% were Thais (5,310), 0.43% were Malaysians (4,816 students), 0.41% were Singaporean (4,574 students), and 0.36% were Filipinos (4,100 students). Countries like Burma (0.29%, or 3,222 students), Cambodia (0.09%, or 997 students), Laos (0.01%, or 114 students), Brunei (0.003%, or 33 students), and Timor-Leste (0.003%, or 29 students) saw significantly lower student enrollments.

Given that Southeast Asian international students make up almost 5% of the overall international student population in the United State, they play significant roles in driving the U.S.

economy, adding $2 billion dollars every year (US-ASEAN Business Council, 2019). As noted in the Institute of International Education's (IIE, 2023) *Open Doors* annual report, Vietnamese students were the sixth largest population of international students in the United States in academic year 2023-2024, which was an increase of 0.80% from the previous year (2022-2023). Vietnam is also the second-largest producer of international students at U.S. community colleges (U.S. Embassy & Consulate in Vietnam, 2023). With only a population of approximately 105.75 million people, Vietnam only trails neighboring countries in Asia like India (current leader), China, South Korea, and Taiwan in sending international students to the U.S. (IIE, 2023).

Despite the growing enrollment of Southeast Asian international students in the United States, existing research has only examined the mental health outcomes facing the broader Asian international student community, particularly focusing on Indian or Chinese students since they are the largest populations. According to a fact sheet created by Hwang (2014) as part of the Asian American Psychological Association (AAPA) Leadership Fellows Program, Asian international students experience unique challenges ranging from first obtaining a student visa to study in the United States, acculturative stress, learning and adapting to cultural differences, language barriers, building a new social network, social isolation, homesickness, and financial constraints. These stressors and challenges can "contribute to their mental distress or access to mental health resources" and lead to deteriorating mental health (Qin, 2019, p. 9). Asian international students may also experience additional adjustment challenges in their acculturation processes, given the different cultural, social, and educational environments at U.S. colleges and universities that can influence their mental health outcomes and intentions to seek out necessary resources (Jin & Acharya, 2022). However, there is limited knowledge of the specific challenges that Southeast Asian students face and the factors that impact their help-seeking behaviors.

Given the complexity of American society and cultural norms, it is evident that Asian international students are more likely to have difficulties adjusting to their new host country. This adjustment period and additional cultural factors can increase their stress and put them at greater risk of having poor mental health outcomes (Ma et al., 2020). Specifically, "depression is one of the major mental health concerns" among international students, and findings from existing literature suggested a positive relationship between acculturation stress and depression (Ma et al., 2020, p. 36). These international students typically come from collectivist Asian cultures, where they are often interconnected and work together in groups to strive towards common goals. Additional stressors deriving from Asian collectivist cultures can also include an emphasis on "family recognition through success," "emotional self-control," and "stigma toward mental illness" (Ma et al., 2020, p. 34). These cultural differences can lead to challenges like acculturation stress for Asian international students, who are expected to adjust to their host country's cultural norms and values. As a result, significant exposure to acculturation stress can worsen their mental health outcomes, particularly leading to depression. In a study conducted by Acharya et al. (2018), international students reported higher depressive symptoms than their domestic peers. International students, particularly those from Asian countries, experience high levels of acculturation stress due to culture shock, language barriers, challenges with socializing, lack of social support, financial constraints, and racial discrimination (Acharya et al., 2018).

In addition to experiencing more depressive symptoms, Asian international students also have higher levels of anxiety, compared to their peers from Europe, Latin America, and the United States (Fritz et al., 2008). Accordingly, higher reports of depressive and anxiety symptoms among Asian international students could be a result of the acculturation process. The study-abroad experience can be a difficult journey, especially the transitional period for Asian

international students who experience a higher degree of culture shock than other international students from Western countries due to different cultural and ethnic backgrounds (Hwang, 2014, p. 1). Asian international students might have higher anxiety levels than European peers because they have a harder time with the new language and to make new friends" (Fritz et al., 2008, p. 251). Other "psychological symptoms" that Asian international students experience during the acculturation process can include "isolation, helplessness, hopelessness, sadness, feelings of loss, anger, disappointment, sense of inferiority, and clinical depression," which can put them at increased risk for anxiety and substance use disorder (American Psychological Association, 2014, p. 2).

In a study conducted by Han et al. (2013) at Yale University, results revealed that 45% of the 130 Chinese students surveyed reported having depression symptoms and 29% were experiencing anxiety symptoms. Other factors that were associated with the higher prevalence of depressive and anxiety symptoms among Chinese international students in this study also included their self-reported poor health, difficult relationships with their advisors, and low exercise levels. Here, these alarming rates raise severe concerns because depressive symptoms can increase the risk of suicide among this vulnerable population. Suicide is the second leading cause of death among college students, according to the Centers for Disease Control and Prevention (2020).

Choi and colleagues (2020), who are physicians in major cities, argued that Asian international students are "less likely to seek and receive mental health services until problems are extremely severe" (p. 1). This underutilization of mental health resources and support is concerning because the issues they are experiencing are going untreated. Maeshima and Parent (2022) also found that Asians, internationals, and men are least likely to seek out mental health

help because it has a higher personal stigma. As further explained by Wang (2024), Asian international students tends to be more "hesitant" when it comes to mental health help-seeking because of the high levels of stigma associated with those who are mentally ill, where Asian cultures often label these individuals as "psychopaths" (p. 187). Overall, the literature has shown that Asian international students significantly underutilize mental health services and resources due to factors including low levels of perceived severity of their issues and higher stigma associated with seeking out help (Choi et al., 2020; Maeshima & Parent, 2022; Wang, 2024).

As evident from the literature, one common factor that plays a vital role in mental health-seeking behaviors among Asian international students is social stigma (Choi et al., 2020). Social stigma is highly prevalent among Asian international students because of the collectivist cultures they come from, which stress "interdependence, harmony, conformity, and reciprocity" (Ma et al., 2020, p. 35). As a result of this, Asian international students are reluctant to seek out help to improve their mental health because of social stigma and cultural norms, which lead them to deal with these issues on their own, only sharing with their immediate family and friends, and not obtaining the support and treatment they need. Thus, discussing psychosocial issues with people other than with their families and friends "may evoke feelings of shame and guilt" due to the "greater stigmatization of psychological distress" and mental health found in Asian cultures compared to Western cultures (Ma et al., 2020, p. 37). It is also important to note that their high levels of anxiety and depression can be attributed to academic pressure, where "their failure is not perceived as an individual one, but rather implicates their whole family" (Fritz et al., 2008, p. 251). As a result, the "collectivistic nature" of Asian cultures and the social stigma may prevent Southeast Asian international students from seeking mental health support, which could leave their issues unaddressed and worsen conditions over time (Fritz et al., 2008, p. 251).

Choudhry et al. (2016) also found that Southeast Asian international students experience higher levels of stigma when it comes to seeking mental health because they "perceive that supernatural forces/phenomena are responsible for mental health issues and consider them the result of wrath or denial of spirit or deities" (p. 2808). This perception is heavily influenced by traditional Southeast Asian cultural, religious, and spiritual beliefs, where individuals may not even be aware of their mental health and do not believe that mental illness is a medical condition; rather, they think it is a spiritual affliction. Additional evidence supporting this cultural and religious perspective among Southeast Asians can be found in a study conducted by Razali et al. (1996). Accordingly, results revealed that Malaysians "attributed the cause of their illness to supernatural agents" and that "witchcraft and possession by evil spirits were regarded as common causes of mental illness" (Razali et al., 1996, p. 229). It is also worth noting that "Malaysian society is multi-racial, with a diversity of cultural beliefs existing among the three major races, namely Malay, Chinese and Indian," culture has been heavily shaped by Hinduism, Islam, and Western civilization (Razali et al., 1996, p. 229). As evident from these studies, cultural and religious beliefs are common in Southeast Asian countries and can influence this population's perceptions of mental health and help-seeking behaviors. Having this cultural knowledge of students' unique attitudes and perceptions is crucial for developing informed mental health resources and services to best serve Southeast Asian international students on college campuses. Therefore, understanding the cultural, religious, and spiritual beliefs that are deeply rooted in Southeast Asian cultures can help us better identify their mental health challenges, help-seeking intentions, and the stigmatization that international students from this region face.

Furthermore, another factor that may impact an individual's decision-making process to seek out or avoid help is not being aware of mental health resources on campus (Han et al., 2013). According to a study by Han et al. (2013), 27% of the Chinese international students who participated had no knowledge of available on-campus mental health and counseling services at Yale University. Here, the lack of awareness and their unfamiliarity with using the healthcare system in the United States can also influence international students' help-seeking intentions for mental health. As a result, Asian international students may be less likely to seek out mental health help if they are not aware of what is available to them, do not know how to access these services, or believe that their diverse needs will not be fully met if they utilize these resources. In a systematic review conducted by Dessauvagie et al. (2021), researchers found that there is a high prevalence of mental health disorders among university students in Southeast Asia, but their "willingness to seek help from professionals is low and many settings lack counseling facilities or student-friendly mental health care" (p. 178).

Problem Statement

Despite the large number of studies reporting on Asian international students' mental health outcomes and their help-seeking intentions, the majority of research has focused primarily on Chinese international students' experiences and outlined recommendations for institutions to meet their specific needs. While Chinese students may be the largest international student population in the United States, the enrollment of Southeast Asian international students is rapidly increasing, and they are currently the second-largest international student group. Given their increasing enrollment, they are also a vulnerable population who faces unique mental health challenges while studying in the United States (Institute of International Education, 2022). As a result of this knowledge gap in the literature, the present study addressed this limitation by

amplifying the specific mental health issues, stressors, and needs of this understudied population. It is important to extend the existing literature and shift the population of interest to study Southeast Asian international students so that higher education institutions and mental healthcare providers will become more informed on how to meet this population's growing needs and increase their mental health uptake.

Significance of the Study

Although the enrollment of Southeast Asian international students is growing on U.S. college campuses, only limited research is available to help us identify the specific mental health issues they experience and how they align or differ with the challenges that the broader Asian international student population faces. This study aimed to fill this gap and inform cues to actions for U.S. higher education institutions to design effective interventions that will increase mental health uptake among college-age (18-30 years old) Southeast Asian international students enrolled at a college or university. Like the broader Asian international student community, Southeast Asian international students are also at high risk for mental health issues like depression, anxiety, and stress (Ma et al., 2020). However, there is insufficient information on the specific mental health challenges and stressors that this subgroup faces throughout the acculturation process. The significance of this present study is to shift the attention in the literature, particularly for scholars and practitioners who are in the fields of higher education, international education, and mental health to better understand the mental health needs of Southeast Asian international students. Given that "mental health has not been given high priority in Southeast Asian countries" and "received comparatively less attention" than the primary public health focus on infectious and tropical diseases for the region, it is important to understand the mental health understanding, perceptions, and help-seeking tendencies of

international students from this region when they study abroad in the United States, a country with varying health goals, resources, and viewpoints surrounding psychological well-being (Tan et al., 2023, p. 1).

As a result, the present study is the first of its kind to examine the mental health outcomes and factors that influence the help-seeking intentions of this understudied population, compared to the broader Asian international student community. Most importantly, this study will strengthen our understanding of the mental health needs of Southeast Asian international students. The significance of the study is that it will contribute to the fields of mental health and higher education to help university administrators, faculty members, mental health professionals, and health educators better serve this diverse population.

Purpose of the Study

Given the lack of research on the unique mental health needs of Southeast Asian international students studying in the United States, it is evident that removing the barriers to accessing resources and designing culturally competent services for this population has not been a priority at U.S. universities and colleges. Thus, this dissertation research can fill this gap in the literature by conducting a mixed-methods study on the diverse experiences of Southeast Asian international students to identify their mental health needs, help-seeking behaviors, perceived beliefs and attitudes, and potential barriers to accessing services or resources. Specifically, the study intends to better understand the mental health issues that Southeast Asian international students face, their self-efficacy beliefs, and the factors that influence their help-seeking behaviors. The findings will help inform the design and implementation of culturally competent mental health services and resources at U.S. colleges and universities that best meet the unique

needs of this vulnerable population to improve their well-being and reduce potential barriers to accessing care.

Specific Aims

The aims of this study are:

1. explore the perceptions, beliefs, and knowledge of mental health, susceptibility, and the severity of these issues among Southeast Asian international students using the Health Belief Model (HBM; Rosenstock, 1966);
2. identify the attitudes and beliefs about the perceived benefits and barriers to seeking help to overcome mental health challenges among Southeast Asian international students based on the Health Belief Model (Rosenstock, 1966);
3. evaluate Southeast Asian international students' self-efficacy level in their ability to access and utilize mental health resources and services confidently, utilizing the Health Belief Model (Rosenstock, 1966);
4. identify the specific demographic factors and psychological characteristics that shape help-seeking intentions (or the lack thereof) among Southeast Asian international students, using the Health Belief Model (Rosenstock, 1966);
5. draw on valuable insights from Subject Matter Experts to translate my findings to help inform cues to actions for U.S. higher education institutions to design effective and culturally competent mental health resources and services that meet the needs of Southeast Asian international students.

Overall, these aims, primarily guided by the HBM (Rosenstock, 1966) framework will help fill the knowledge gap in this understudied population and increase their understanding of mental health and self-efficacy levels in mental health uptake. Most importantly, capturing the

unique experiences, perceptions, and knowledge of mental health among the Subject Matter Experts through the study's quantitative and qualitative approaches will provide a roadmap for addressing the urgent public health crisis facing colleges and universities. My overall goal for conducting this research was to increase my target audience's awareness of mental health resources and services to increase their likelihood of engaging in these health-promoting behaviors that may be impacted by demographic factors or other psychological characteristics. Ultimately, I intend to shine a greater spotlight on the unique mental health needs faced by Southeast Asian international students as well as their identified potential barriers to accessing services and resources. I can then translate these findings to offer cue to action (external cues) for interventions that can increase the likelihood of mental health help-seeking behaviors.

Theoretical Foundation

To study the mental health perceptions, challenges, and benefits of seeking help among Southeast Asian international students, the Health Belief Model (HBM) (Rosenstock, 1966) and the Acculturation Theory (Berry, 2005) are both extremely helpful. Here, HBM and Acculturation Model served as theoretical frameworks to guide this exploration of learning the perceptions Southeast Asian international students have of their own mental health, well-being, and the factors that influence their thought processes and decisions about seeking help or not.

Health Belief Model (Rosenstock, 1966)

As cited by Luger (2013) in the *Encyclopedia of Behavioral Medicine*, Rosenstock's (1966) HBM explains how individuals' perceptions of their health will influence their willingness to engage in help-seeking intentions. The HBM posits that people are more likely to engage in health behaviors, like seeking out preventative screenings or treatments, based on how they view their health conditions (Rosenstock, 1966). Specifically, six vital components

make up the HBM: **perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action,** and **self-efficacy** (Nobiling & Maykrantz, 2017).

Southeast Asian international students' perceptions of susceptibility, severity, benefits, barriers, cues to action, and self-efficacy regarding their mental health can influence their help-seeking intentions. For *perceived susceptibility*, Southeast Asian international students could be more likely to believe they are "susceptible to or at risk for the condition" such as mental health issues (Luger, 2013, p. 907). On the other hand, Southeast Asian international students may not perceive themselves as susceptible to mental health conditions, given the cultural stigma and lack of awareness surrounding mental health. Second, their help-seeking intention "depends on the *perceived seriousness* of the condition," where they believe their mental health issues are severe enough to reach out for professional help (Luger, 2013, p. 907). For example, some students may have a family history of mental health illnesses, so they may be more aware of how serious these threats are to their well-being and recognize the need to seek out treatment. However, Southeast Asian international students may also not perceive their mental health issues as severe enough to reach out for help due to various factors including cultural and religious beliefs or limited knowledge of the consequences of untreated mental health issues. For those who recognize they have mental health conditions and want to get support, it is likely because they understand the *perceived benefits* of effectively resolving their issues with the help of professionals. Students who are hesitant to seek out mental health resources and services may not be aware of the benefits of having professional help to resolve their challenges, or they may engage in other coping mechanisms that align with their cultural and religious beliefs such as praying, relying on their social support systems, or engaging in risky behaviors like substance use. Additionally, they may also *perceive barriers* to getting help like language difficulties, financial constraints, or

negative beliefs surrounding the American healthcare system. As theorized by Nobiling and Maykrantz (2017), *cues to action* in the context of college students seeking out mental health help would involve students asking themselves: "What would persuade me to seek treatment for my mental illness (e.g., advertisement, physician referral)?" (p. 2). Examples of interventions include mental health awareness social media campaigns, advertisements, or direct emails that could serve as potential cues to actions (Nobiling & Maykrantz, 2017). Given the collectivist cultures from which Southeast Asian international students come, referrals from friends or families could also serve as an encouragement to seek out help that will mitigate their mental health issues. While these factors may motivate Southeast Asian international students to engage in help-seeking behaviors, I collected and analyzed data to improve or enhance potential cues to action to increase mental health uptake among this population. Lastly, *self-efficacy* is also a vital component of the HBM; with this, Southeast Asian international students may have strong or weak beliefs in their ability to overcome their mental health challenges, which can influence their help-seeking intentions (or lack thereof).

Table 1 was recreated from Nobiling and Maykrantz's (2017) study to apply the six HBM constructs to mental health perceptions among college students, including the important role that social support plays in their uptake. Their extended theoretical framework based on Rosenstock's (1966) HBM was used to guide the present study in exploring Southeast Asian international students' perceptions of mental health and the factors that influence their help-seeking intentions. This recreation, presented in Table 1, introduces the operationalization of the six HBM constructs to this work, as further elaborated on in Chapter 3.

Table 1

Health Belief Model Applied to Mental Health-Seeking Behaviors (Nobiling & Maykrantz, 2017)

Construct	Application
Perceived susceptibility	How likely am I to become diagnosed with a mental illness?
Perceived severity	How serious would a mental health illness be in my life?
Self-efficacy	How likely am I to control and manage my diagnosis?
Perceived benefits	How successful would mental health services be in helping manage/treat my condition(s)?
Perceived barriers	What stands in my way of utilizing mental health services?
Cues to action	What would persuade me to seek treatment for my mental health illness (e.g., advertisement, physician referral)?
Social support	Who would assist me in seeking treatment for/management of mental illness (e.g., friends, family employer, counselor, teacher/professor)?

Acculturation Theory (Berry, 2005)

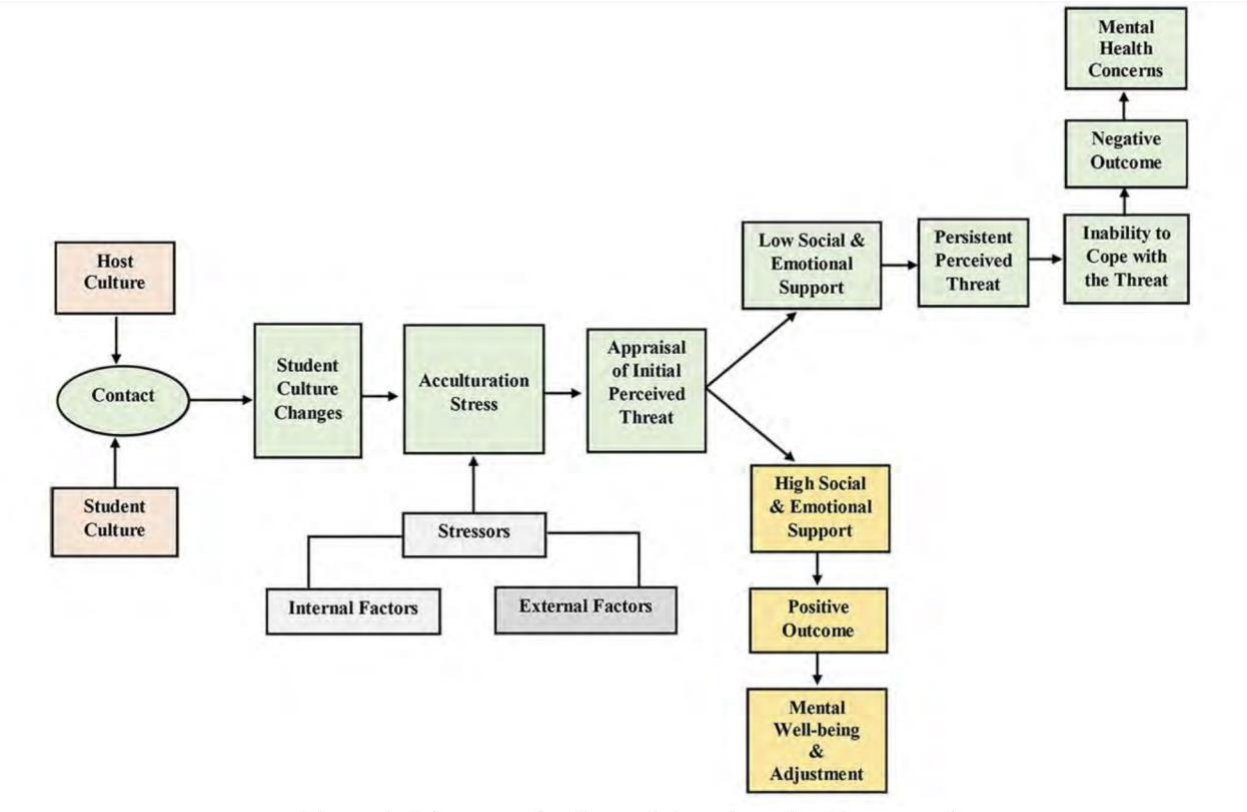
After operationalizing the six constructs of the HBM (Rosenstock, 1966) in this present study's quantitative design to understand mental health help-seeking behaviors, I also considered the additional cultural challenges during acculturation that may shape the mental health and well-being of Southeast Asian international students (Ma et al., 2020). Berry's (2005) acculturation theory offers a broad framework to examine intricacies and challenges, particularly the different types of stressors that arise during acculturation. According to Berry, "acculturation is the dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members" at an individual and group level (p. 698). Berry's acculturation theory provides insight into acculturation stress and four strategies

(integration, assimilation, separation, and marginalization) to overcome cultural and social challenges among immigrants that can also be used in the context of the target population.

Drawing on Berry's (2005) acculturation theory, Ma and colleagues (2020) extended this framework to conceptualize a model (see Figure 1) that "addresses this limitation" and furthers a better understanding of the associations between acculturation stress and mental health challenges among Asian international students who claim significant stress and challenges coming from "collectivist Asian cultures adapting to the individualist American culture" (p. 36). Given that this study's framework was conceptualized to understand the acculturation experiences and stressors among broader Asian international students, drawing on Ma et al.'s (2020) model can help me explore the acculturation stress experienced by Southeast Asian international students and how it impacts their mental health. As Ma et al. (2020) described, "prolonged exposure to acculturation stress may result in a decline in mental health" (p. 34), which can stem from potential stressors like cultural differences, language barriers, discrimination, limited availability of resources, and lack of social support systems). As a result, applying Ma et al.'s (2020) conceptual framework to the present study allowed me to unfurl the experiences of Southeast Asian international students during acculturation and how their mental health and well-being might deteriorate.

Figure 1

Conceptual Model for Applying Berry's (2005) Acculturation Theory to Asian International Students



Source: Ma et al. (2020)

Definitions and Terms

According to the Network of the National Library of Medicine (2020), **mental health** is characterized as an individual's overall "emotional, psychological, and social well-being," which plays a significant role in impacting our thinking, feeling, and behavior as they grapple with daily life (para. 1). In the context of Southeast Asian international students, mental health is the overall well-being of a student who has the necessary coping skills to handle everyday stressors involving academics, socialization, and other daily challenges. Having strong mental health allows Southeast Asian international students to realize their potential to succeed, work

effectively, and contribute to their campuses and communities. Therefore, maintaining one's mental health involves navigating both positive and negative emotions to handle stress, adapt, and overcome challenges.

Given the vital role that mental health plays in our health and overall well-being, it is important to maintain it to ensure positive mental health outcomes that can promote academic success among Southeast Asian international students. Thus, having good mental health helps people cope with daily life stressors and adopt healthy behavior choices such as being physically active, building strong relationships, working productively, contributing to surrounding communities, and realizing their fullest potential (Network of the National Library of Medicine, 2020). This recognition is crucial for our target audience because maintaining one's mental health can help them succeed academically and professionally, build meaningful relationships for strong social support, and better adapt to different cultural and social norms. Some factors that can increase an individual's risk for mental illness can include biological determinants like genetics or brain chemistry, family history of mental health illnesses, life experiences like trauma or abuse, and lifestyle behaviors such as diet, physical activity, and alcohol or substance abuse (Network of the National Library of Medicine, 2020).

A person's mental health can also change over time, depending on various risk factors and life stressors such as working long hours, losing a job, caring for a sick family member, ending a romantic relationship, or not performing well in school (Center for Disease Control and Prevention [CDC], 2023). For example, experiencing **mental illnesses or mental disorders** at any stage in life can also change an individual's thinking, mood, and actions (Substance Abuse and Mental Health Services Administration [SAMHSA], 2023). According to the National Institute of Mental Health [NIMH] (2023), **mental illnesses or disorders** are characterized by

conditions and have different ranges in severity from mild to moderate to severe. Mental illnesses can be categorized as **Any Mental Illness (AMI)** and **Serious Mental Illness (SMI)**, where AMI "encompasses all recognized mental illnesses" and SMI includes "a smaller and more severe subset of AMI" (NIMH, 2023, para. 1). Specifically, AMI is defined as any "mental, behavioral, or emotional disorder" that varies in how it affects individuals from having no impairment to mild, moderate, or more severe conditions (NIMH, 2023, para. 1). Similarly, SMI are also mental, behavioral, or emotional disorders, but they result in more serious impediments in one's life and interfere or limit functioning in one or more daily activities (NIMH, 2023). As defined by Evans et. al (2016) in a Technical Brief (No. 25) published by the Agency for Healthcare Research and Quality (AHRQ), SMI "refers to a diagnosis of psychotic disorders, bipolar disorder, and either major depression with other psychotic symptoms or treatment-resistant depression" that are severe and long-term illnesses (p. 1).

To study the mental health challenges faced by Southeast Asian international students and their intentions to seek or avoid help, it is important to understand their **actions and beliefs** about mental health. **Actions and beliefs** are interconnected and can influence one's self-efficacy and, consequently, their help-seeking behaviors. In this context of mental health, examples of an individual's actions can include gathering information about mental health services and talking to friends and families about one's mental health challenges, which can play a vital role in shaping self-efficacy and help-seeking intentions. Similarly, having positive beliefs about mental health services and trusting mental health professionals can increase the likelihood of an individual seeking help and treatment (Maeshima & Parent, 2022, p. 7). Additionally, Choudhry et al. (2016) emphasized that attitudes and beliefs about mental health "are shaped by personal knowledge about mental illness, knowing and interacting with someone living with

mental illness, and cultural stereotypes" (p. 2807). As a result, people's actions and beliefs influence their "perception of illness [and] explains their help-seeking behavior or lack thereof" (Choudhry et al., 2016, p. 2808).

In the context of mental or physical health, **help-seeking behavior** can be defined as a "problem focused, planned behaviour, involving interpersonal interaction with a selected health-care professional" to address their health concerns (Cornally & McCarthy, 2011, p. 280). Specifically, help-seeking behavior is the process of recognizing the need for additional and professional support to address mental health issues, which also consists of two crucial components. The first component is **subjective appraisal**, which helps an individual recognize that they have "a health problem that is beyond one's abilities to address" (Garrey et al., 2022, p. 2). Specifically, this acknowledgment is a crucial step in initiating help-seeking behavior because the individual understands they will require additional help to resolve their health issue. The second aspect of help-seeking behavior is the **belief in benefit**, where the individual is confident and believes that getting help would improve their overall health and well-being (Garrey et al., 2022).

Cultural competence plays a vital role in working cross-culturally, particularly when aiming to encourage health-seeking behavior among Southeast Asian international students. Cultural competence is defined as "a set of congruent behaviors, attitudes, and policies" that can help individuals, systems, and institutions work effectively with diverse populations from different backgrounds (Cross, 1989, p. 7). Developing culturally competent skills is a lifelong learning process that involves valuing diversity, becoming self-aware of one's assumptions and biases, being sensitive to cultural differences, gaining cultural knowledge of the target population, and adapting services to meet unique cultural needs (Cross, 1989). Cultural

competence is crucial to understand and apply when working with Southeast Asian international students because of the cultural nuances, their overall mental health perceptions, language barriers, and unfamiliarity with the U.S. healthcare system. Therefore, it is important to ensure that support staff, faculty members, administrators, and healthcare providers at universities and colleges are culturally competent because they are responsible for meeting the needs of diverse populations, such as Southeast Asian international students.

In addition to understanding cultural competence, it is also necessary to consider the importance of **acculturation** when studying the common mental health issues that Southeast Asian international students face. According to Berry (2005) who coined the theory, "acculturation is the dual process of cultural and psychological change" when an individual from a different cultural group interacts with another culture and their members (p. 698). During this process, individuals have to navigate between the cultural norms of their home country and host country.

While Berry's (2005) acculturation theory provides a valuable framework, Ma et al. (2020) noted that it is limited because "it focuses mostly on immigrants' adaptation to a new culture such as life pattern change and identity development" (p. 36), which fails to capture the unique experiences of international students who may only be in the U.S. temporarily for academic studies. Ma et al. (2020) expanded Berry's (2005) acculturation theory to identify internal and external stressors like language anxiety, homesickness, loneliness, social isolation, uncertainties of the future, language barriers, internal issues, academic struggles, financial burdens, and discrimination that are specifically prevalent among Asian international students. As a result, understanding the broader acculturation process that Asian international students experience provides a strong foundation to help ground this work and identify the unique

stressors and challenges Southeast Asian international students face. This knowledge would allow further exploration of how acculturation affects Southeast Asian international students' mental health as they adapt to a new cultural, social, and academic environment.

Additionally, the acculturation process is complex and can be a stressor in Southeast Asian international students' academic studies, thus affecting their overall physical and mental health. Specifically, they have to adapt to their new American environment, academic setting, and different cultural norms which can create potential conflicts and challenges. One of the common issues during the acculturation process is **acculturative stress**. This stress "occurs as a result of the acculturation process," given the cultural differences between their home country and host country (Kristiana et al., 2022, p. 1). Thus, acculturative stress can be a result of the challenges and potential conflicts that arise as international students navigate their new social and academic environments. As defined by Nasirudeen et al. (2014), acculturative stress is "induced by the adaptation or acculturation process due to a change in cultural environment where a person has to make a number of personal, social, and environmental changes" (p. 364). Acculturative stress is important to define and understand because it can play a significant role in the overall experience of Southeast Asian international students, their academic performance, and overall physical and mental health. This stress can also be measured using the Acculturative Stress Scale for International Students (ASSIS) created by Sandhu and Asrabadi (1994); this offers a reliable and validated measure of assessing acculturative stress among international students that was also used in this study. The 36-item Likert scale examined potential factors such as "discrimination, homesickness, fear, guilt, perceived hatred, and stress due to change (cultural shock)" (p. 435).

Delimitations

This study included the following delimitations:

1. **Lack of representation of the targeted population:** The use of convenience sampling posed potential limitations, particularly not having a representative sample of the target population of Southeast Asian international students. While their enrollment numbers are climbing, they are still a minority student population on U.S. college campuses, compared to Chinese, Indian, and Korean students. With fewer Southeast Asian international students, this sample suffered from homogeneity because it did not have enough students represented from the 11 target Southeast Asian countries. Thus, this sampling method was flawed and may have failed to capture the uniqueness of Southeast Asian international students' perceptions, mental health challenges, and help-seeking behaviors. To minimize the risk of homogeneity, I employed strong recruitment measures. Specifically, I targeted Southeast Asian international students at different types of colleges and universities (e.g., private, public, community colleges) in varying environments (e.g., urban, suburban, rural) throughout the nation, studying a diverse range of majors, and enrolled in different educational programs (e.g. undergraduate, master's, graduate) to sample a diverse population.
2. **Respondent burden:** With the different demographic and psychological characteristics examined, respondent burden was a significant challenge.
3. **Hesitancy to participate:** Given that Southeast Asians may hold certain cultural and religious beliefs surrounding mental health (e.g. supernatural causes of mental health illnesses, witchcraft, or the possession of evil spirits) they might have been less

willing to participate in the research (Razali et al., 1996). For example, they might have been scared or embarrassed about discussing mental health, given the cultural stigma and how it can be considered taboo in many Asian cultures (American Psychological Association, 2023). Given this cultural context, I reached out to different Asian cultural student organizations, counseling centers, and wellness resources to help potential participants learn more about the research study during the recruitment period. This approach portrayed me as more personable and available to answer questions. It will fostered a sense of collaboration between these different organizations, resources, and services to help increase awareness and understanding of my study.

4. **Biases:** Biases are always a potential risk in the data collection process, particularly with the methods I used—namely, survey questionnaires, one-on-one interviews, and focus groups. Specifically, social desirability bias was a possible threat to this research inquiry to gather students' unique perspectives and true thoughts and beliefs about their mental health and help-seeking behaviors. I was aware that participants could feel embarrassed or nervous about disclosing their perceptions about a potential topic concerning their health and well-being. In fact, they may have been more inclined to answer the survey and interview questions in a way they believed was more socially desirable than I hoped to see and hear. For example, participants could overreport or underreport their mental health challenges and help-seeking intentions rather than sharing truthful perceptions and overall tendencies (or lack thereof) to reach out for resources and support. To mitigate social desirability bias, I ensured the use of anonymous surveys, interviews, and focus groups, and participants' names and

information were de-identified and recorded. Most importantly, I explained the purpose of the research study and asked for consent to ensure that responses from participants were voluntary and confidential. This helped participants understand the aims of the research in order to answer the questions openly. Given the sensitivity of mental health as a topic of conversation, particularly in Southeast Asian cultures, I also used indirect questioning; employed different question types (e.g., Likert scale, open-ended, follow-up, probing); and frame questions in a culturally sensitive manner to be considerate of cultural differences. By taking these necessary steps, I also minimized interviewer bias and followed semi-structured interview guides to ensure that all participants were consistently asked the same questions. This helped as well to increase the validity and reliability of our results.

Implications for Health Education and Higher Education Institutions

Collegiate mental health is a serious public health concern, particularly among international students who experience unique challenges during their acculturation process. Their perceptions of mental health and the underutilization of resources and services are prevalent health education issues that are important to explore and understand. Given the limited research on Southeast Asian international students in the United States, this study attempted to fill this gap and provide valuable insights into students' unique academic and social experiences to identify their mental health challenges, overall perceptions of mental health, and the underlying factors that influence their help-seeking behaviors. Specifically, the findings captured the mental health needs of this population in order to inform cues to action for higher education institutions and health providers to tailor resources, services, campaigns, and health education initiatives that can mitigate these issues. Therefore, this deeper understanding of the diverse needs of Southeast

Asian international students is crucial for the awareness, prevention, and treatment of mental health illnesses among this population because their enrollment numbers are rapidly increasing at U.S. colleges and universities.

Researcher's Prior Experience and Relevance to the Study

As an Enrollment Coach for three consecutive summers with Columbia University's Pre-College Programs for high school students from around the world and current Admissions Coordinator for the School of Professional Studies for their Master's programs, I gained valuable experience working with thousands of international students who reach out with specific questions about admissions and the enrollment process. Here, my one-on-one interactions with these students on the phone and by email provided me with a deep understanding of the unique challenges and concerns that international students face. Some examples included cultural differences, language barriers, academic adjustments, homesickness, social isolation, visas, and financial constraints. These direct experiences helped lay a strong foundation for understanding the complexities of the journeys of international students and the challenges they face when studying in the United States at admissions, enrollment, and pre-arrival.

As a result, I believe that my professional experience in admissions helped me build rapport with my participants because I too am familiar with their concerns and frequently asked questions. As a Vietnamese immigrant and first-generation, low-income college graduate, I have unique experiences and the necessary cultural context to draw on when interacting with this population of Southeast Asian international students. These personal experiences have instilled in me an awareness of the challenges that Southeast Asian international students face when adjusting to a new culture and academic environment. Most importantly, I was mindful of my lived experiences and ensured that they did not lead to any research biases. I believe that my

cultural knowledge prepared me to communicate with my participants sensitively in order to learn about their perspectives on mental health, the specific challenges they experience, and the factors influencing their help-seeking behaviors.

Use of Human Subjects and Ethical Considerations

This study complied with the protocols set forth by Teachers College, Columbia University's Institutional Review Board (IRB). Participants (survey respondents and interviewees) received a copy of the consent form to acknowledge their voluntary participation in the study, along with a summary of the study, research aims, potential risks, benefits, data protection, and confidentiality measures. Interviewees were also asked for consent to allow or decline my request to record the interview. All names and the universities that participants attended were de-identified and re-coded uniquely to protect their identities (e.g., Participant A, B, C). As the researcher, I was committed to ensuring that survey questionnaires, transcripts of interviews, and all other data were protected using strong passwords and two-factor authentication log-ins. I was the only person to have access to these data files and protected participants' information securely and confidentially.

Conclusion

Overall, this chapter introduced the urgent collegiate mental health crisis in the United States. This crisis is particularly concerning for Southeast Asian international students, whose enrollment numbers are increasing, but little knowledge is available on how we can foster the academic success and overall well-being of this population (American International Recruitment Council [AIRC], 2023). As a result, this study can help pave a pathway to improve our understanding of Southeast Asian international students' perceptions and beliefs of mental health, learn more about the specific challenges they face, and identify the common factors that

impact their help-seeking behaviors. This chapter offered a broad overview of the concerning statistics on this mental health crisis and the timely significance of conducting this study to inform culturally sensitive interventions and programs for this understudied population. It also outlined three theoretical frameworks, including Rosenstock's (1966) Health Belief Model and Berry's (2005) acculturation theory, which were used to guide this study. These theories laid a strong foundation for understanding the interplays of perceived beliefs, self-efficacy, and other adjustment factors shaping Southeast Asian international students' attitudes and beliefs around mental health and their help-seeking intentions (or lack thereof). These theories explored learning more about the beliefs, attitudes, challenges, and help-seeking behaviors of this student population. This study is the first to embark on this journey to identify the specific mental health needs of Southeast Asian international students studying in the United States. These findings will inform cues to action to develop culturally sensitive and tailored mental health resources, services, interventions, and campaigns to best meet this population's unique needs.

Chapter 2: Review of the Literature

Overview of Collegiate Mental Health Crisis

Mental health is an urgent public health crisis in the United States, particularly among college students due to all-time high rates of depression, anxiety, and suicidal behaviors found in the recent Healthy Minds survey conducted back in March of 2023 (National Education Association [NEA], 2023). Historical trends have revealed that "mental health symptoms have nearly doubled in college student populations" (Lipson et al., 2022, p. 138). These statistics are not only concerning but also highlight the crucial need to shift our focus and priority to understanding and mitigating these mental health issues among college students with culturally sensitive interventions, resources, and services to help them overcome their challenges at a crucial period in their adulthood. It is essential to recognize that college students are one of the most vulnerable populations when it comes to addressing mental health issues because "roughly half of lifetime mental disorders have first onset by mid-adolescence and three-quarters by the mid-twenties" (Lipson et al., 2022, p. 138). As a result, it is important to address mental health conditions among college students through treatment or other forms of support because prolonged symptoms can lead to poor academic performance, increased risk of dropping out or stepping away, severe chronic diseases, and a decrease in economic productivity (Lipson et al., 2022).

This mental health crisis among college students is particularly concerning for international students, who often are least likely to seek out psychological help despite experiencing significantly higher rates and more severe mental health conditions compared to their domestic peers (Forbes-Mewett, 2020; Fritz et al., 2008). These low rates of help-seeking behaviors, coupled with the high prevalence of mental health conditions and severity, could be

"hindered by a range of structural, social, and cultural factors" (Forbes-Mewett, 2020, p. 1). Southeast Asian students, in particular, are "more vulnerable to mental health problems such as anxiety and depression, which impacted their studies" due to acculturative stress and other sociocultural barriers like stigma and the lack of culturally competent psychological resources and services (p. 1). Despite their high vulnerability to mental health challenges including depression and anxiety, there is limited knowledge of the acculturation process, specific needs, and the potential barriers that Southeast Asian international students face in their help-seeking behaviors. In fact, a dissertation by Chow (2021) noted this gap where "there is very little recent literature on the experiences of international students from Southeast Asia in U.S. higher education," which can be due to often being grouped with East Asian international students, particularly Chinese, Korean, and Japanese students who largely represent the Asian international population. As a result of this limitation in the literature, Southeast Asian international students are an important student group to study and learn more about to understand their perceptions, knowledge, experiences, and challenges surrounding mental health that are often overshadowed by their Asian international peers.

Given that Southeast Asian international students are a rapidly growing population on college campuses in the United States, in this chapter I explore the literature to identify the prevalence rates of mental health challenges such as depression, anxiety, and suicidal ideation and the potential barriers faced by this understudied population in seeking help and support (Asia Society, 2023; Institute of International Education's Open Doors Report, 2023). Despite the gap in the literature on Southeast Asian international students' academic experiences in the United States, this literature review first focuses on the broader Asian international student population because of available studies on Chinese, Korean, and Indian international students' mental health

challenges and stressors, since those students are from the three leading origin countries (Choi, J. Y., 2015; Choi et al., 2020; Han et al., 2013; Jin & Acharya, 2022; Ma et al., 2020; Zheng & West-Olatunji, 2016). With this contextual knowledge of the experiences of Asian international students, it will be possible to identify mental health trends in depression, anxiety, suicidal ideation, and help-seeking behaviors prevalent in this population. Here, relying on "closely related Asian international student groups…who might share similar experiences'" to Southeast Asian international students will lay a solid foundation to draw on and begin to pinpoint the specific mental health issues that Southeast Asian international students might face (Wei et al., 2007, p. 386). Additionally, I also examine in the literature the cultural and religious factors that can influence their help-seeking behaviors, including stigma and potential concerns with using the American healthcare system (Choi et al., 2020; Forbes-Mewett, 2020; Ma et al., 2020; Maeshima & Parent, 2022). Overall, the findings from the literature review can identify the limitations in the current research on Southeast Asian international students and lay the necessary groundwork for understanding how the experiences of East Asian and Southeast Asian international students converge or diverge.

High Prevalence of Mental Health Issues at U.S. Colleges and Universities

According to an article written by Mary Ellen Flannery, a Senior Writer at the National Education Association [NEA] (2023), the latest findings from the 2022-2023 Healthy Minds survey are raising eyebrows for colleges, educators, and mental health professionals. Recent data revealed that 41% of college students reported having major and moderate symptoms of depression, and another 20% revealed they were diagnosed with major depression. Additionally, 36% of the participants reported having anxiety disorders and 14% had suicidal ideation. As Flannery (2023) emphasized, these alarming rates must serve as an urgent call to action for

colleges and universities to reduce psychological distress among their and focus on improving their students' well-being, especially with the growing severity of mental health issues that can take students' lives.

Collegiate Mental Health Crisis and International Students

To best mitigate the mental health crisis ripping through American college campuses, it is important to examine the health disparities that exist in prevalence and severity both within the broader student population and among international students. International students make up 5% of the overall college student population in the United States (Institute of International Education, 2023). Given their large presence at colleges and universities, international students play crucial roles in our higher education system; they add their unique cultural perspectives and intellectual abilities to "enrich the higher education experience" (and are one of the key driving forces in helping advance the U.S. economy (Hwang, 2014, p. 1). Specifically, as cited by the Institute of International Education's Open Doors report (2023), the U.S. Department of Commerce estimated that international students contributed approximately $31 billion to our economy. As a result, understanding how mental health issues are more pronounced among international students will help colleges and universities better serve all their students.

A study conducted by Fritz et al. (2008) revealed that the prevalence and severity of mental health issues are significantly higher among international students compared to their domestic counterparts. As cited by Koo and Tan (2022), Zhang and Goodson's (2011) systematic review found that among 64 studies on international students published in peer-reviewed journals between January 1990 and January 2009, approximately 20% of all international students experienced mental health issues such as acculturative stress and other challenges throughout their adjustment periods to U.S. cultural norms and society. This health disparity between

international and domestic students is concerning and highlights the need to identify the challenges they encounter to design and implement interventions that may help mitigate these mental health issues. Therefore, understanding the diverse needs of this growing population can inform culturally tailored resources and services to support international students in thriving in their academic studies and improving their mental health and overall well-being throughout the acculturation process.

Common Mental Health Issues Among Asian International Students

Given the pervasiveness and severity of mental health among international students, it is important to take a closer look at the challenges and needs of Asian international students who represent more than 70% of the international student enrollment (National Center for Education Statistics, 2021). Among Asian international students, the mental health crisis is even more pronounced because they are particularly vulnerable to depression and anxiety due to the acculturation process (Acharya et al., 2018; Hwang, 2014; Jin & Acharya, 2022; Ma et al., 2020). To date, however, data are limited data on the specific mental health issues facing Southeast Asian international students as well as on their concerns and help-seeking behaviors. One study by Forbes-Mewett (2020) revealed that East and Southeast Asian students are most vulnerable to experiencing anxiety and depression in their host countries; however, this was examined in the context of Australia. While there is no current research on Southeast Asian international students and their mental challenges in the United States, Han and colleagues (2013) found that 45% of Chinese international students at Yale University reported having depressive symptoms, while 29% reported having anxiety. These findings revealed that "a self-evaluation of poor current health, a poor relationship with one's advisor, and a low exercise regimen were associated with a higher prevalence of depression and anxiety symptoms" (Han et

al., 2013, p. 1). As evident, depression and anxiety are highly prevalent among Asian international students, particularly the Chinese, which can inform a deeper understanding of how these mental health issues could also be similar to the challenges that Southeast Asian international students experience.

Higher Depression Rates Among Asian International Students

Accordingly, "depression is one of the major mental health concerns for international students'' (Ma et al., 2020, p. 36). As cited in Ma et al. (2020), Asian international students are at higher risk for experiencing depressive symptoms due to the additional challenges and stressors they face during the acculturation process. Additionally, counseling centers at universities list depression "as one of the top presenting concerns among international students" who recognize their mental health struggles and seek support and help (Wei et al., 2007, p. 386). This positive association between depression and acculturative stress can result in additional academic pressures that Asian international students put on themselves, where they "commonly equate their self-worth with academic success and find it difficult to cope with the idea of failing" (Ma et al., 2020, p. 36). Specifically, the stress and pressure Asian international students experience is not only having "personal pride," but also meeting expectations of "bring[ing] honor to their family"; these stresses can take a toll on their mental health and well-being and place them at increased risk for depression (p. 36). Additionally, a study conducted by Fritz et al. (2008) cited findings by Hiott et al. (2006), where depression seen among Asian internationals students have been linked to being far from their families. Separation from their families and added academic pressures students put on themselves to honor their families and make them proud can increase their vulnerability to depression (Wei et al., 2007). Therefore, the common perception among Asian international students that links their "self-worth" to "academic

success" can increase their stress levels and make it harder for them to recognize underlying mental health problems and prioritize their well-being (Ma et al, 2020, p. 36).

Depression and Maladaptive Perfectionism

Research has shown that Asian international students who strive for perfect academic performance to validate their self-worth are at increased risk for depression (Ma et al., 2020; Wei et al., 2007). This perception of high academic achievements and making their families proud is often known as maladaptive perfectionism. Maladaptive perfectionism is very common among Asian international students because of the "cultural values concerning honoring familial expectations, conformity, and fulfilling obligations for scholastic achievement" (Jun et al., 2022, p. 649). Given that Asian international students typically come from collectivist cultures that stress family and community responsibilities, these cultural standards shape their thought processes and actions, which can lead to setting high expectations for academic achievement and placing significant pressure on themselves to succeed in their academic studies in the United States (Nilsson et al., 2008). Specifically, findings from Wei et al.'s (2007) hierarchical regression revealed "significant main effects of acculturative stress and maladaptive perfectionism on depression…and a significant three-way interaction, indicating that acculturative stress, maladaptive perfectionism, and length of time in the United States interacted to predict depression" (p. 385). Although the results were derived from a sample of 189 Chinese international students from China and Taiwan who attended university in the Midwest, Southeast Asian international students might also be maladaptive perfectionists, share similar cultural values, and set high academic expectations for themselves. Therefore, these findings suggested that maladaptive perfectionism, which is defined as the "perceived discrepancy" between not meeting one's expectations for perfect performance and being a failure, is highly prevalent

among Asian international students and can be a factor that increases their risk of depression (Wei et al., 2007, p. 386). A study conducted by Maffini (2018) also found that Asian international students with "lower grades were more likely to report depression than people who had higher average grades" (p. 105). Given the strong links between depression and maladaptive perfectionism in the literature, it is vital to consider how these links can lead to other mental health issues including anxiety, acculturative stress, poor self-esteem, and eating disorders (Huang & Mussap, 2018; Jun et al., 2022; Kim, 2013; Maffini, 2018; Nilsson et al., 2008).

Acculturative Stress, Maladaptive Perfectionism, and Mental Health Outcomes

Additionally, maladaptive perfectionism can increase Asian international students' stress throughout the acculturation process and contribute to depressive symptoms (Nilsson et al., 2008; Wei et al., 2007). Accordingly, research has shown that maladaptive perfectionism is positively associated with acculturative stress and is "one of the vulnerability factors related to depression" among Asian international students, particularly Chinese international students (Nilsson et al., 2008, p. 386). Specifically, those with maladaptive perfectionism are likely to set high academic standards that may be difficult to achieve and can create additional challenges as they adjust to their new academic and social environment. As a result, maladaptive perfectionism is prevalent among Asian international students. It can put them at increased risk for failure and depression because they will set high expectations for themselves to adapt quickly and succeed in the United States. However, the acculturation process is complex, and experiences can vary for every Asian international student; thus, this population has specific needs as they adjust to their new institution, the social environment, and life in the United States, where there may be other external stressors such as language barriers and discrimination. Therefore, maladaptive perfectionists like the Chinese students in Nilsson et al.'s (2008) study are more likely to

experience acculturative stress and fixate on the negative aspects of their experiences, which can also put them at increased risk for depression.

Consistent with the results found by Nilsson et al. (2008) and Wei et al. (2007), Ma et al. (2020) also concluded that "Asian international students are often more likely to experience high levels of adjustment difficulties due to additional stressors imposed by different cultural expectations" (p. 37). Specifically, a stressor that Asian international students experience that is significantly influenced by cultural standards of high achievement is parental pressure. These cultural expectations for Asian international students to excel academically in order to make their families proud can cause mental distress and unrealistic standards of perfectionism (Nilsson et al., 2008). This academic pressure placed on Asian international students derives from cultural beliefs and family expectations and may be prevalent among Southeast Asian international students, who also share similar collectivist backgrounds and values on education and family, as did the Chinese students who were studied. As a result, findings from Nilsson et al. (2008), Wei et al. (2007), and Ma et al. (2020) captured the broader experiences of Asian international students. The results raise further questions on whether Southeast Asian international students may also be at risk for experiencing maladaptive perfectionism, acculturative stress, and parental pressure to achieve high academic performance in their studies in order to meet their families' expectations. Moreover, these findings suggested that maladaptive perfectionism not only complicates the acculturation process and poses a significant health burden for this vulnerable population, but also creates additional stressors such as language barriers and anxiety (Wei et al., 2007).

Language Anxiety/Barriers, Maladaptive Perfectionism, and Depression

According to Fritz et al. (2008), another stressor that is prevalent among Asian international students during the acculturation process is language difficulties. Their results revealed that Asian international students were significantly more anxious than their European counterparts because of language barriers and the challenges of establishing a strong support system. As reported by Hwang in a fact sheet created for the Asian American Psychological Association (AAPA) Leadership Fellows Program (2014), "language barrier is a major acculturative stressor for a majority of Asian international students as English is often their second or third language" (p. 2). Given that English is likely not the native language for most Asian international students, they may experience discomfort, difficulties, and mental distress when communicating and seeking to connect with those in the United States (Asian American Psychological Association [AAPA], 2014, p. 1). Specifically, East and Southeast Asian students are "less well connected in the host country and therefore more vulnerable to mental health problems such as anxiety and depression which impacted their studies" (Forbes-Mewett, 2019, p. 7). Adapting to a new language and culture can increase anxiety levels, particularly among Asian international students who often set high standards for themselves that may be unrealistic in the early stages of their acculturation. For example, Asian international students' "fear of inadequate performance in evaluative situations"—such as communicating with their professors, participating in class, or conducting presentations—can "elevate psychological discomfort" and "increase negative emotions" (Ma et al., 2020, p. 38). For example, in a study conducted by Will (2016), Chinese international student interviewees revealed that they identified language barriers as a "prominent challenge" because of their inability to articulate their thoughts during classroom discussions, where "many instances of meanings [were] lost in translation or they had found

themselves unable to deliver what they really wanted to express" (p. 1072). Other interviewees shared that they believed speaking "perfect English" without a foreign accent is "overly powerful" and can prevent the discrimination that some students experience (p. 1072). As evident from the literature, Asian international students can experience anxiety, feelings of insecurity over grappling with the English language, depression, and loneliness or social isolation because of not being able to communicate and connect with others in their new academic and social environment (Acharya et al., 2018; Asian American Psychological Association [AAPA], 2014; Forbes-Mewett, 2019; Fritz et al., 2008; Ma et al., 2020; Will, 2016). Most importantly, "English deficiency may also cause feelings of inferiority, loneliness, homesickness, shame, shyness, embarrassment, and perceived discrimination, among others"' (Zhang et al., 2022, p. 58).

Maladaptive Perfectionism and Suicidal Ideation Among Asian International Students

The high prevalence of maladaptive perfectionism among Asian international students can also put them at suicidal risk. According to Wang et al.'s (2013) study, maladaptive perfectionism and discrimination were identified as positive indicators of suicide ideation among the 466 Asian international students sampled, including Southeast Asians who were represented: Vietnamese (6.4%), Thai (2.1%), Indonesian (1.5%), Malaysian (1.1%), and Filipino (.9%). Results revealed that feelings of falling short of familial expectations and damaging both their own and family's reputations, coupled with a lack of belonging, can place them at increased risk for suicide ideation. Moreover, perceived discrimination and inadequate social support can also increase suicidal risk among Asian international students (Wang et al., 2013; Wei et al., 2007). Accordingly, discriminatory experiences and feeling isolated from others without a support

system leads to a “sense of alienation” and a “pernicious suicide ideation risk factor” among Asian international students (Wang et al., 2013, p. 375).

Acculturation and New Academic Environments Among Southeast Asian International Students

In a dissertation, Chow (2021) cited a study by Mukminin and McMahon (2013) on 12 Indonesian doctoral students studying in the United States, which revealed unique academic and social challenges that can impact mental health and well-being. Specifically, the researchers found that their interviewees identified five common challenges, including the abundance of academic responsibilities, a lack of knowledge of U.S. classroom environments, unfamiliarity with navigating professor and student relationship dynamics, personal conflicts with or unfair treatment by professors, and language barriers. Feelings of navigating the differences between the Indonesian and American higher education systems may be similar to the experiences of other Southeast Asian international undergraduates and graduate students. Additionally, the 12 participants reported feeling overwhelmed and experiencing stress in their first semesters from adjusting to a new academic environment. They feared that their English language proficiency skills were weak and made it difficult for them to keep up with the demanding and fast-paced academic workload that required significant reading and writing. Given their language barriers and lack of confidence in speaking English, the Indonesian doctoral students in this study struggled to meet classroom expectations (e.g., presenting and participating in discussions and building relationships with their professors, advisors, and peers) that would help them feel supported and have the resources to thrive in a new academic environment. Although the study focused only on a small number of Indonesian doctoral students, it was one of the few studies that offered further insights into the academic challenges faced by Southeast Asian international

students. Most importantly, these findings from Mukminin and McMahon (2013) help clarify the acculturation stress they experience and its impacts on their mental health and well-being while navigating new academic endeavors in the United States. These results also aligned with Andrade's study (2006) as cited in Young's (2017) work, where Southeast Asian international students "coming from an entirely different educational pedagogy" will experience "mild to moderate psychological distress" levels due to the acculturation process with new academic environments, learning approaches, and study habits (Young, 2017, p. 441).

Similarly, Chow's (2021) dissertation also cited Nguyen and Larson's (2017) study which examined how 10 Indonesian graduate students utilized student affairs support services to help them adjust to college life. According to qualitative interviews, student affairs departments helped break down the stereotypes and "preconceived images of graduate education" in the United States for the Indonesian graduate students, which enabled them to learn and develop strategies "to feel more welcomed and included" (p. 1018). Participants also noted that cultural student organizations, inclusive campus environments, and religious centers helped support them in their transition processes to collegiate life. These safe places provided opportunities for them to connect with others, participate in campus life and classes, and discuss and solve various international student issues. Other recommended programming can also include social community-building events like monthly potlucks to help provide "opportunities to engage in academic exchanges within a relaxed, non-threatening environment" that would ease their transition into discussion-based learning in U.S. higher education classrooms (p. 1024). Some of the acculturation challenges the students experienced included culture shock, adjusting to rigorous and demanding academics, and dismantling their misconceptions of American culture and academia. These findings revealed the important role that student affairs support services

play in ensuring that international students transition smoothly into their new academic environments in the United States. In fact, the results suggested that student affairs professionals can build partnerships and work closely with those who support international students in their home countries to share "reliable information, lessening disorienting conflicts between expectations and realities" during the pre-arrival phase in order to reduce the culture shock that the participants mentioned (p. 1024). As a result, Nguyen and Larson's (2017) work provided a needed starting point to identify suggested cues to action for institutions, with which programs and initiatives should be designed to consider all stages of acculturation journeys of international students, focusing particularly on pre-arrival and arrival in order to increase their awareness of available support services and resources for mental health. Such work would also support the broader Southeast Asian international student population.

Perceived Discrimination and Mental Health Outcomes

Discrimination is not only a common stressor that impacts an individual's well-being and mental health; it is also a significant "risk factor for predicting Asian international students' suicide ideation" (Wang et al., 2013, p. 368). According to Wang et al. (2013), Asian international students experience more discrimination and prejudice compared to their European peers. Moreover, Fang et al. (2022) found that Asian international students are at high risk of experiencing discrimination due to their perceived "English proficiency, skin color, or race" (p. 486). Similarly, Wang et al. (2013) found that this perceived language discrimination was linked with suicide ideation. To Asian international students, the English language barrier is a significant challenge, as are their skin color and race, given that the majority of them do not experience racism in their home country or "come from a society where race is not a salient social category" (Fang et al., 2022, p. 487). Their perceived discrimination can lead to severe

mental health outcomes and other adjustment challenges that can impact their academic performance (Acharya et al., 2018; Asian American Psychological Association [AAPA], 2014; Forbes-Mewett, 2019; Ma et al., 2020; Sandhu & Asrabadi, 1994; Will, 2016; Zhang et al., 2022). Accordingly, Asian international students often experience higher levels of discrimination compared to European international students and domestic students, which can put them at higher risk for mental health issues like depression (Asian American Psychological Association [AAPA], 2014). Discrimination can manifest in different ways including xenophobia, stereotypes, microaggressions, or other unfair treatments that deteriorate one's mental health and well-being (Yeo et al., 2019).

Yeo et al.'s (2019) study explored the "racialized experiences of Asian international students," where Asian American students often were mistaken as international students and shared similar encounters (p. 57). Specifically, the students revealed that they experienced "similar types of racial microassaults, microinsults, and microinvalidations" as Asian international students which included intentional verbal or nonverbal direct attacks with different English accents (p. 58). Asian American students also alluded to other examples like microinsults that targeted Asian identity and heritage, model minority myths and stereotypes, regular assaults of "xenophobic statements and ridicule about their English accents and physical features," and microaggressions (p. 51). These findings are consistent with current research on Asian international students and the stereotypes that are rooted in American society and prevalent on college campuses, such as "model minority" and "crazy rich Asians'' (Xie et al., 2021), and depict this population as "oblivious, bad at English, and unsocial" (Jun et al., 2022). Consequently, this prevalent racial discrimination could derive from the students' "distinct phenotypic characteristics, English accents, nationality, international student status, and religion"

(Yeo et al., 2019, p. 40). Overall, the racialized experiences of Asian international students on U.S. college campuses raise significant concerns for higher education institutions and public health professionals. The discrimination they face reflects the systemic racism prevalent in the United States that people of color experience. Its detrimental impact on people's well-being and mental health exacerbates mental health issues, including acculturative stress, depression, anxiety, social isolation, and suicidal ideation (Han et al., 2013; Lian et al., 2020; Maleku et al., 2022; Sun et al., 2021).

COVID-19: Rise in Xenophobia and Racial Discrimination

The racial discrimination that plagued Asian international students hit its peak during the COVID-19 pandemic in 2020. Although Asian international students had experienced discrimination in the United States before the onset of the public health crisis, COVID-19 exacerbated anti-Asian racial sentiments and violence, increasing fear, anxiety, and stress among the Asian Pacific Islander (AAPI) community (Dong et al., 2023). While it is important to consider the unique mental health challenges faced by Southeast Asian international students amidst the rise of xenophobia and racial discrimination in the broader AAPI community, the current literature has failed to capture these experiences in this understudy population. Instead, research has primarily focused on the difficulties faced by Chinese international students due to their large enrollment numbers at U.S. universities and how the origin of the novel COVID-19 pandemic has been traced back to Wuhan, China (World Health Organization [WHO], 2020). As a result of this gap in the literature, this section reviews the racial discrimination faced by Asian international students during COVID-19 to understand how the rise of xenophobia and anti-Asian hate crimes have affected mental health outcomes.

An annual report by the California Department of Justice (2021) revealed that anti-Asian hate crimes rose from 89 incidents in 2020 to 247 incidents in 2021—a drastic increase of 177.5%. This rise in anti-Asian sentiments resulting in microaggressions, blatant discrimination, and violence was "fueled by Trump's "China virus" and "'kung flu' rhetoric" that politicized the pandemic and pinned the AAPI community as scapegoats for the virus (Maleku et al., 2022, p. 2420). Similarly, Koo et al. (2023) emphasized that the media and new sources encouraged racism and discrimination towards Asians, with "xenophobic terminology such as 'Wuhan virus' and 'killer virus' to increase fear and panic and thereby stoke prejudice, xenophobia, and discrimination" among "Chinese people, or those from Asian countries who appear Chinese" (p. 9). As Yao and Mwangi (2022) noted, "Asian international students were simultaneously positioned as scapegoats, bearers of disease, cash cows, and political pawns" during the pandemic, contributing to increased levels of anxiety, stress, and fear (p. 1027). Seven of the eight participants interviewed by Dong and colleagues (2023) reported racial discriminatory incidents they experienced which ranged from being called "Hey Chinese" to being told to "be more vigilant about the situation around them to keep themselves safe" (p. 118). Therefore, the racial discrimination and xenophobia prevalent in the United States during the COVID-19 pandemic put those of Asian descent at risk for racism and violence on and off college campuses.

An article written by Lowrey (2020) from the Giffords, a gun violence prevention and awareness nonprofit organization, noted that the FBI issued warnings that Asian hate crimes against Asian Americans could surge. They cited these claims "based on the assumption that a portion of the U.S. public will associate COVID-19 with China and Asian American populations" (para. 4). Accordingly, the rise in racism and xenophobia among Asians could have played a role in "driving the largest spike in gun purchases in recent history" (para. 6). Given

that firearms are frequently used to perpetuate violence and extremism in the United States, one particular tragedy exemplified this surge in hate crimes: In March of 2021, six Asian women were killed at three massage spas in Atlanta, Georgia. This tragedy highlighted the devastating effects of racial stereotypes, discrimination, xenophobia, and "othering" (Hahm & Hsu, 2021, para. 3). More specifically, people of Asian descent in the United States have been "perceived as threats" and "scapegoated for spreading the virus" simply through a skewed view of simple actions such as wearing a mask to protect themselves and others from contracting the virus, not wearing a mask, or working at jobs to earn a living (Chen et al., 2020, p. 1). As Yu (2023) described, these "countless anti-Asian hate crimes have demonstrated that the 'yellow peril' and 'model minority' ideologies of Asians as Others" have exacerbated racial discrimination and violence to the point of threatening the health and safety of the AAPI community, including Asian international students (p. 111).

Maleku et al. (2022) cited a study conducted by Mittelmeier and Cockayne (2020) who found that the COVID-19 pandemic increased hostility and discrimination towards Chinese and East Asian international students on and off college campuses worldwide. The researchers also found that Twitter posts targeted Asian international students with racial stereotypes and depictions of them as "disease carriers"' and other problematic xenophobia sentiments (p. 9). Similarly, alarming findings found by both Maleku et al. (2022) and Chen et al. (2020) revealed that not only were Asian communities in the United States crippled by the rise in anti-Asian hate, racial violence, and pandemic othering, but they also raised significant concerns for further exploration into the vulnerability and mental health outcomes of Asian international students, particularly the Chinese since the majority of international students is from China.

COVID-19: Alarming Rates of Xenophobia and Racial Discrimination on Mental Health

For Asian international students, the COVID-19 pandemic exacerbated mental health challenges because of the alarming rise of xenophobia and racial discrimination in the United States. Severe depression increased by 16% and severe anxiety by 12% among Asian international students (Zhou, 2023b). These concerning rates also aligned with findings from a study by Lin et al. (2022), in which the higher prevalence of depression and anxiety among Asian international students was related to associated with traumatic events, academic stress from heavy workloads, financial constraints, remote learning (e.g., staying up late for online classes), and maintaining personal relationships.

Although most of the literature has focused on Chinese international students and their academic and mental health challenges since the onset of the COVID-19 pandemic, it is important to understand their unique experiences since they are the largest international student population in the United States (Lin et al., 2022; Xu et al., 2021; Yu, 2023a, 2023b; Zhou, 2023b). This mental health burden among Chinese student offers further insight into their unique challenges and allows us to consider how "the extent varies due to sociocultural, economical, and political implications for different groups of international students"' like Southeast Asian international students (Xu et al., 2021, p. 535). Interestingly, Dong et al. (2023) found that East Asian students reported experiencing more challenges from anti-Asian racism than Southeast Asian students.

Accordingly, Xu et al. (2021) found that COVID-19 deteriorated international students' mental health, particularly among Chinese students, due to the shift from in-person to remote or hybrid courses, changed visa policies, travel restrictions and bans, and social isolation. The uncertainties of the format and grading of their academic studies, shifting governmental policies,

restrictive mobility, and lack of socialization caused significant stress and anxiety among Chinese international students (Xu et al., 2021). Similarly, Zhou (2023b) found that seven of the eight Chinese international students interviewed for the study cited that their biggest stressor was the risk of getting infected because this would prevent them from hanging out with friends or going out for meals. In addition to the risk of infection, the majority of participants also reported other sources of stress, such as restrictive travel preventing them from going to China to see their family and friends, difficulties with academic life particularly with online courses, planning for an uncertain future, and experiencing a shortage of medical supplies (e.g., masks and hand sanitizers). Interestingly, the students also shared that their parents from China were highly concerned and worried about them being discriminated against in the United States by the rampant xenophobia and anti-Asian racism. Specifically, their parents feared that Chinese students and others from the broader AAPI community were "under the high risk of being attacked" (p. 19). The anticipatory anxiety that participants reported derived from three sources: (a) anxiety over being into contact with people such as interacting with deliverers, (b) anxiety from anti-Asian hate crimes and Asians being stigmatized because of the pandemic, and (c) differences in how the United States and China handled the pandemic response (Zhou, 2023).

Social Isolation

Prior to the COVID-19 pandemic, Asian international students were vulnerable to discrimination and social isolation. Accordingly, Asian international students were already experiencing discriminatory behaviors and maltreatment during their studies in the United States before the onset of the public health crisis. Daily racial discrimination faced during the pandemic and quarantine measures contributed to poor mental health outcomes among Asian international graduate students in the United States, especially high levels of depression, anxiety, and

loneliness (Dong et al., 2024). In a study conducted by Dong et al. (2024) on Asian international graduate students, findings revealed that higher levels of loneliness were associated with increased anxiety symptoms.

According to an article in *Psychiatric Times* written by Dr. Qi from the New York University School of Medicine, social isolation is one of the "most frequently encountered psychological and psychiatric issues" found among Chinese students during the acculturation process; it was further exacerbated during COVID-19 (para. 15). With the switch to remote learning during the pandemic, Asian international students and those around the world were forced to isolate and follow social distancing or stay-at-home protocols both in the United States and their respective home countries. In addition to "being blamed for the virus and aggravated anti-Asian racism," the social isolation from peers, classmates, professors, and, most importantly, their families and friends from home also played a significant role in shaping their mental health outcomes (Dong et al., 2023, p. 120). The majority of Chinese international graduate students interviewed in Dong et al.'s (2023) study identified social isolation as "one of the most challenging parts of living through the COVID-19 as international students" (p. 117). Accordingly, social isolation during the pandemic made them feel that they did not belong, were lonely and homesick, and lacked a support system—in short, they would feel stranded and alone during COVID-19 if they remained in the United States. According to Professor Hyeouk "Chris" Hahm at Boston University and Kelly Hsu (Tufts University student,) 2021) who wrote an article for the Mary Christe Institute, students who returned home to Asia had experienced social disconnectedness and cultural isolation from U.S. society and politics, given shifting immigration policies for student visas and new class formats that forced them to leave the host country.

Mental Health-Seeking Intentions

Despite their unique challenges of acculturation stress, language anxiety, discriminatory acts, social isolation, homesickness, visas, financial constraints, and job prospects, Asian international students are least likely to seek out mental health treatment and support to overcome these difficulties (Chen et al., 2020; Maeshima & Parent, 2022; Xiong & Yang, 2021; Zhou, 2023b). Specifically, Asian/Asian American students have the lowest mental health uptake compared to other racial groups (Dessauvagie et al., 2021; Goodwill & Zhou, 2020; Lipson et al., 2018; Lipson et al., 2022). This underutilization of mental health services is highly concerning because Asian international students do not seem to be seeking the necessary treatments and support, they need to thrive academically and improve their overall well-being. According to Lipson et al. (2018), "Asian/Asian Americans have the lowest prevalence of treatment, at only 20% among those with apparent mental health conditions'' (p. 348). These low rates of mental health-seeking behaviors among Asian international students not only threaten their well-being and impact their academic performance, but also reveal an alarming health disparity in the collegiate mental health crisis that requires additional attention and solutions.

Stigma and Cultural Beliefs Surrounding Mental Health

The stigmatization of mental health is highly prevalent among Asian international students, playing a crucial role in decreasing their uptake of services and support (Cogan et al., 2023; Lipson et al., 2018; Lipson et al., 2022; Maeshima & Parent, 2022). A study conducted by Lipson et al. (2018) revealed that Asian international students face high levels of stigma when it comes to utilizing mental health services and other resources. Accordingly, "Asians also have the lowest levels of perceived need (47%)" for mental health treatment and support because of having significantly high levels of personal stigma of 35% (Lipson et al., 2018, p. 350). This

stigmatization of mental health and help-seeking behaviors among Asian international students can also be influenced by existing cultural beliefs in Asian countries. Given that "Asian cultural values stress the importance of restraining emotions, avoiding shame, and saving face," these beliefs are underlying factors that can play crucial roles in the decision-making process and highly discourage mental health-seeking behaviors (Maeshima & Parent, 2022, p. 3). It is important to note that cultural beliefs from Asian countries often emphasize collectivism, which also could explain the underutilization of mental health services and support. Here, Asian international students may rely more on their social network for help to overcome their challenges. As Ma et al. (2020) noted, collectivist cultures allow people to "have a strong emotional attachment to their in-groups and tend to subjugate their interests for the good of the group," thereby creating a reliance on social support instead of encouraging the request for professional mental health services or other forms of help. As a result of these cultural beliefs and stigmatization surrounding mental health, Asian international students are likely to refrain from obtaining the necessary professional treatment or support they need because they are either leaning on their social networks or keeping to themselves for fear of bothering others with their mental health issues.

Additionally, this cultural stigma can also contribute to negative perceptions of seeking out mental health treatment and support, which may isolate Asian international students further by making them feel more ashamed or embarrassed by their challenges and more reluctant to seek help. Based on research by Maeshima and Parent (2022) and Li et al. (2012), Asian international students are more reluctant to seek mental health services and resources because these health-seeking behaviors are often highly stigmatized in Asian cultures. Due to Asian cultural beliefs and the negative perceptions associated with getting help, Asian international

students are less likely to engage in mental health-seeking behaviors because they may perceive them as signs of failing or potential weaknesses in their academic and personal journeys in the United States. Maeshima and Parent (2022) particularly noted that reaching out for mental health services and support in Asian cultures can be viewed as a "source of shame in the family system" (p. 3). Given the fear of failing to bring honor to their family and the resulting shame over this, Asian international students are less likely to seek out mental health help, compared to their peers because of high levels of stigma, cultural viewpoints, and religious and spiritual beliefs (Lipson et al., 2018).

Perceived Need, Accessibility, and Affordability of Mental Health Services

In addition to Asian cultural beliefs and stigma, a study conducted by Jang (2021) revealed that Korean international students studying in New York City are unlikely to use health care services because they have negative perceptions of the American healthcare system, which clearly plays a vital role in their help-seeking behaviors. Specifically, Korean international students refused to access healthcare services in the United States and waited to go home during school breaks to address their health needs. Accordingly, they "passively utilized U.S. healthcare by minimizing, avoiding, or delaying needed healthcare" because of negative perceptions and confusion over how to navigate this complex system (Jang, 2021, p. 1804). Similar to Korean international students, Southeast Asian international students may also hold negative perspectives such as mistrust of or no trust in the healthcare system, unfamiliarity with how to access healthcare services, and misperceptions of not needing medical attention. According to Zhou (2023a), Asian international students like Koreans have unique health behaviors, and their tendencies to find help can be impacted by "various personal concerns, such as distrust of certain health services, fear of privacy breaches, language barriers, cultural differences, and

discrimination" (p. 6). Specifically, Korean international students reported a knowledge gap in understanding how to utilize the U.S. healthcare system, which is often perceived as "unpredictable and complicated" (Zhou, 2023a, p. 3). Much like Korean international students, Southeast Asians may also be unfamiliar with the U.S. healthcare system and think of it as causing discomfort, distrust, and other negative preconceptions around mental health services and resources; thus, their help-seeking behaviors are negatively influenced. The results found by Jang (2021, cited in Zhou, 2023a) also raised significant concerns over healthcare access and affordability among all international students. The U.S. Department of Health and Human Services (2020) cited some overarching barriers to utilizing services for minority populations like Southeast Asian international students. These challenges included individuals being "burdened with large medical bills and out-of-pocket expenses," unfamiliarity with the American healthcare system, and limited knowledge in accessing mental health counseling (para. 1).

Religious and Spiritual Beliefs Impacting Help-Seeking Intentions Among Southeast Asians

In addition to cultural factors that contribute to the stigmatization of mental health, religious and spiritual beliefs can also impact Southeast Asian international students' perceptions of mental health and their mental health-seeking intentions. According to Choudhry et al. (2016), Southeast Asians believe that mental illnesses can derive from "negative forces or the result of the anger of God" (p. 2813). These notions aligned with the findings from Schultz (1980), who revealed that Vietnamese refugees in the United States perceived strong connections with their ancestral and other spirits and believe they can be either protective or the cause of psychological illnesses. Schultz noted that sorcerers are often the individuals "treating supernatural causes of insanity" instead of mental health practitioners among Vietnamese people (p. 12). Additionally, monks are also tasked with helping Vietnamese people treat their mental health issues through

prayers at temples. As a result of these strong religious and spiritual beliefs, Vietnamese people are least likely to believe in "Western concepts of mental health (for example, psychiatry)"; instead, they will perceive illnesses being the result of "supernatural causes'' rather than "psycho-social developmental causes (such as are adhered to in Western psychiatry)" (p. 12). It is also worth noting that Schultz (1980) found that among Vietnamese people, "family members and neighbors knowledgeable in folk medical procedures are, in a sense, practitioners of traditional Vietnamese medicine" (p. 6). Given the vast options, Schultz claimed that the Vietnamese will have access to at least three systems in their home country: traditional Vietnamese (healers, sorcerers, and monks), Chinese-influenced Vietnamese version (Chinese doctors and pharmacists), and Western medicine (pharmacists, physicians, public health professionals, and those on the black-market who are selling antibiotics) (Schultz, 1980, p. 6).

Similar to the Vietnamese, Laotians also perceive "supernatural interferences (ghosts and magic)" are the "cause of mental illness"; that is, people are "believed to have contracted ghost sickness" and require the consultation of a Buddhist monk to perform rituals using flowers, incense, candles, coconuts, and money offerings to the temple to help these individuals (Schultz, 1980, p. 12). Interestingly, a spiritual procedure that the monk performs involves cutting a banana tree, where the "blood," often referred to as the "sap, flowing from the tree, indicates the spirit's death" (p. 12). This ritual may be carried out in place of a visit to a Western doctor for Laotians who suffer from mental illnesses. Additionally, Laotians also take other protective measures against supernaturally-caused illnesses in addition to ensuring general good luck by wearing amulets around their wrists or necks which contain written messages obtained from monks (p. 12). Like the Vietnamese, Laotians seek out monks and sorcerers to help them cast strong spells or magic to cure their mental health conditions (Schultz, 1980).

Among other Southeast Asians, the Mien, Hmong, and Cambodians also share the same spiritual beliefs as the Vietnamese and Laotians in viewing mental illnesses as causes of supernatural ills (Schultz, 1980). The Mien believe that "invisible spirits live everywhere" and have the ability to "invade the bodies of the living" (p. 12). The Hmong also share similar supernatural beliefs and "treat ghost sickness with loud noises, hoping to frighten the spirit out of the body and away" (p. 12). "Cambodians believe that a spirit can invade the body of a living human" and will seek out professional healers to visit the homes of the "afflicted" and only "examine the patients alone" to "rid the patient of the spirit" (p. 12). Here, performing these ceremonial procedures would remove the spirit and help return the bodies back to Cambodians who were previously seeing symptoms such as "high fever," having "stomach cramps, abscesses, loss of weight, and vomiting" (p. 18). Similar to the beliefs of the Vietnamese people, monks were also often asked to treat illnesses that are thought to be caused by supernatural forces among Cambodians (Schultz, 1980).

Overall, Choudhry et al. (2016) and Schultz (1980) found that Southeast Asians have strong religious and spiritual beliefs surrounding mental health illnesses, particularly the perceived notion that supernatural forces are the root causes of psychological diseases. These health beliefs among Southeast Asians like the Vietnamese, Cambodians, Laotians, Mien, and Hmong offer further insight into the unique perceptions of mental health and help-seeking behaviors that align with this population's religious and spiritual values and practices. Although these common religious and spiritual beliefs were identified among Southeast Asian refugees in the United States, this population closely aligned with international students hailing from the same region that is the focus of the present study. Southeast Asian international students may have similar viewpoints as their refugee counterparts regarding mental health, practices, and

behaviors that could be deeply rooted in their culture or religion. Most importantly, Jin and Acharya (2022) noted that it is crucial to "recognize cultural and ethnic diversity among [Asian international students] and the complex nature of behaviors they display" that may be shaped by cultural and religious beliefs (p. 820).

Interventions Needed to Address Collegiate Mental Health Crisis: Culturally Tailored Messages

Given the cultural differences, perceived stigma, and varying spiritual and religious beliefs surrounding mental health, mitigating the mental health crisis among Southeast Asian international students will require multifaceted interventions. As noted by Jin and Acharya (2022), tailoring health messages that are culturally sensitive and mirror the unique backgrounds of the intended population would be a pivotal first step in raising mental health awareness and encouraging help-seeking behaviors among Southeast Asian international students. Accordingly, tailored health messages can be pushed by colleges and universities to effectively promote increased mental health uptake and mitigate cultural beliefs and stigma among Southeast Asian international students. The benefits of tailored messages include attracting more attention, omitting unnecessary words, and will be better received. Given these advantages, tailored health messages that are geared toward the target population's "spoken language, shared health beliefs, norms, expectations, specific barriers, social practices, and other characteristics'' are more likely to promote behavior change (p. 820). Cultural tailoring messages would be effective in helping Southeast Asian international students learn more about the risks of mental health problems and available resources or services that would meet their unique needs. This strategy can be highly effective when employing health promotion efforts aimed at minority populations because "health behavior is rooted in culture, and that consideration of cultural factors" can help combat misconceptions of mental health and potential stigma (p. 821). As a result, it is important for

colleges and universities to play active roles in the design and dissemination of health messaging that centers around Southeast Asian international students' perceived cultural and religious beliefs, knowledge (or the lack thereof) surrounding mental health, and preferences for help-seeking behaviors to promote mental health uptake effectively. By cultural tailoring, colleges and universities can promote open dialogue about mental health, the importance of taking care of one's well-being, and recognition of when and where to seek out the necessary services and support among Southeast Asian international students. These culturally tailored health messages can be disseminated in email listservs, flyers, weekly announcements, and partnerships with mental health-related student organizations to inform all college students, particularly the intended population of Southeast Asian international students, to make them aware of available resources and services (Jin & Acharya, 2022).

A study conducted by Prince (2015) found that international students "often seek assistance from physicians and nurses rather than from mental health professionals" due to the stigma associated with seeking out mental health services (p. 8). As evident from other research studies on Asian international students, stigma towards mental health help-seeking is highly prevalent among this population, given varying cultural beliefs and feelings of shame or embarrassment (Choi et al., 2020; Choudhry et al., 2016; Forbes-Mewett, 202; Fritz et al., 2008; Ma et al., 2020; Maeshima & Parent, 2022). Given that stigma is also salient among Southeast Asian international students and plays its crucial role in influencing their mental health-seeking behaviors, it is important to address these negative attitudes and hesitancy in order to increase their mental health uptake. Similar to the suggestion made by Jin and Acharya (2022), colleges and universities can play key roles in fostering supportive campus environments with open dialogue and culturally sensitive messaging about the importance of mental health to

destigmatize professional resources and services. For example, counseling centers can host bi-weekly open office hours dedicated to addressing international students' mental health and wellness. Specifically, some programming ideas can include having a speaker series with Asian mental health professionals to discuss relevant challenges that Southeast Asian international students often experience. As noted by Maeshima and Parent (2022), these outreach efforts can help "reduce barriers to help-seeking in the Asian student population," particularly mitigating traditional Asian cultural values and attitudes surrounding professional mental health services and resources (p. 8).

Culturally Competent Mental Health Resources, Services, and Interventions on Campus

In addition to closing the awareness gap surrounding mental health, colleges and universities can also ensure that there are culturally competent services, resources, and interventions available on campus. In a study conducted by Liu et al. (2020), researchers found that a third of the participants interviewed reported their mental health counselors lacked cultural competence. Specifically, they noted cultural differences in mental healthcare, where American therapists over-express "warmth and care" during their counseling sessions (p. 13). They are often "important ingredients of a strong therapeutic relationship," which disappointed some participants because they felt these approaches were non-genuine and unprofessional, as if "all of their problems could be repaired by comforting and caring" rather than more focus on treatment (p. 13). Additionally, cultural differences in counseling and values between the West and East also impacted the experiences of the nine East Asian international students interviewed because counselors were not trained to be sensitive to the perceptions, beliefs, and help-seeking behaviors of the students with whom they were working. Given these negative accounts of mental health services, it is important for colleges and universities to recognize the unique needs of all

students, particularly Asian international students who come from different cultural backgrounds, have varying beliefs and behaviors regarding mental health, and experience acculturation challenges. For example, Chinese people "have distinct racial identities…there are 56 native Chinese ethnicities in the country, all with their own histories and belief systems" which highlight the "rich diversity" of Asian international students and the need for culturally competent counselors (American Counseling Association, 2011, p. 2). Liu et al. (2020) provided a roadmap for colleges and universities to address concerns expressed by Asian international students to better recruit, train, and retain culturally competent counselors who are equipped to work with minority populations in order to meet their mental health needs and acculturation difficulties and be understanding of their cultural beliefs. These results are also in line with the recommendations made by Dr. Garry R. Walz and Dr. Jeanne C. Bleuer in their *VISTAS Online* publication by the American Counseling Association (2011), in which they argued that "an effective counselor is competent in diversity…viewing the world through the client's eyes" (p. 2). Beyond understanding cultural differences, the American Counseling Association (2011) also called for the need for counselors to create peer groups among Asian international students. Peer support can reduce acculturative stress during students' transition to the United States.

Walz and Bleuer cited successful examples of these peer groups, including one only for Asian international women at Western Michigan University (Carr et al., 2003). This support group's goal was to "provide opportunities for group members to network with other Asian students as they build a multicultural community…socializing; practicing English, addressing academic, personal and social concerns, and acculturation stress; and receiving support from culturally sensitive counselors" (p. 132).

Culturally competent college campus counselors can build on the early successes of this peer group and carry on the momentum to target Southeast Asian international students on other campuses across the country. Specifically, they can play active roles in facilitating workshops and informational sessions covering topics like academic and family pressure, acculturation stress, homesickness, financial concerns, visas, making friends, dating, and other relevant challenges to help with their transitions to the United States and college life (American Counseling Association, 2011). Most importantly, they can also build partnerships with different departments and student organizations on campus to recruit participants and facilitators, while also increasing awareness of the importance and availability of peer groups. Additionally, mental health counselors and other university staff can foster supportive peer networks, where Southeast Asian international students are placed into smaller groups based on specific interests, academic programs/majors, class year, and other relevant factors. It is also important that clinicians also get the support they need to help address the mental health issues prevalent on college campuses. If professionals identify as an Asian mental health provider, there are free virtual support spaces every Saturday at 10AM Pacific Time or 1PM Easter Time provided by the Asian Mental Health Collective (AMHC) that seeks to offer culturally-tailored clinical services and communities to help guide them.

Given the successes of the peer groups at Western Michigan University, the recommendations set forth by the American Counseling Association (2011) highlighted the importance of training and retaining culturally diverse and sensitive mental health counselors at U.S. higher education institutions to best meet the unique needs of all college students. They also need to have a solid "understanding of the importance of peer groups in assisting with the ease of transition to the U.S." (n.p.), which can also be helpful to bear in mind when working with

Southeast Asian international students who experience acculturation challenges and will continue to need certain mental health services and resources as they matriculate to U.S. college campuses.

Additionally, colleges and universities can have different departments and programs partner together, such as counseling centers, international students support services, and dean's offices, to organize health fairs, educational workshops, and awareness campaigns. These offerings can educate Southeast Asian international students about mental health issues like stress, anxiety, and depression and the importance of engaging in healthy behaviors such as self-care, sleeping, drinking water, or exercising. Fostering strong partnerships with relevant departments and programs can help institutions promote on-campus initiatives and workshops to inform Southeast Asian international students of the importance of taking care of their mental health, using available services and resources, and deriving benefits from seeking help. Therefore, cross-collaboration efforts can be vital in closing the knowledge gap in mental health, increase awareness of available support, and mitigate existing cultural beliefs and stigma among Southeast Asian international students (Lee et al., 2014).

CCCSEW Consortium and Virtual Partnerships

Aside from cross-collaboration on campuses, Lim and Chen (2021) described a virtual partnership, CCCSEW Consortium, that is year-long and would benefit colleges and universities once they participated. The CCCSEW Consortium provides higher education professionals with the opportunity to learn more about mental health and identify the culturally competent tools and resources that can help them meet the needs of their Southeast Asian international students on campus. The CCCSEW Consortium was developed by the Massachusetts General Hospital Center for Cross-Cultural Student Emotional Wellness (CCCSEW) in 2018 to create a

partnership between a nonprofit organization, large academic hospital, and other higher education institutions. Colleges and universities would benefit from participating in a unique year-long virtual program like the CCCSEW Consortium, so that higher education personnel can be trained by faculty who are practicing clinicians identifying as Asian American or having an Asian international background with extensive cross-cultural mental healthcare experience. With remote sessions covering "cross-cultural approaches to depression and anxiety, discrimination, cultural assimilation, and cultural perspectives on perfectionism," higher education staff have the opportunity to join for monthly meetings via Zoom, where the last 15 minutes of the hour workshop is dedicated to questions and case discussions (p. 737). These remote sessions not only provide flexibility for higher education professionals to learn more about mental health and the importance of cross-cultural care from the clinicians, but they also allow participants to learn from other delegates at other participating colleges, universities, nonprofits, and hospitals. Additionally, the CCCSEW Consortium provides an online forum throughout the year for questions, suggestions, and helpful clinical case materials shared among all faculty members and delegates at participating institutions to address unique mental health needs at varying campuses. According to Lim and Chen (2021), the mean±standard deviation that members gave in the first year was 6.55±0.5 (based on a scale from 0 to 7, with higher scores indicating greater satisfaction with the program). This revealed the success of the program and its potential to mitigate the mental health crisis at U.S. colleges and universities.

Chapter 3: Methodology

This chapter presents the methods and procedures employed in this dissertation that involved two distinct data collection approaches: a quantitative data collection approach using a survey questionnaire, and a qualitative data collection approach conducting student interviews. The purpose of this study was to explore the perceptions of Southeast Asian international students regarding mental health and their unique experiences during their academic studies in the United States to analyze the complex factors that influence their help-seeking behaviors (or lack thereof. Additionally, I drew on the Health Belief Model (HBM) to gain a comprehensive understanding of their attitudes, preparedness, and self-efficacy beliefs surrounding mental health and the factors that motivate or prevent them from seeking out services and support. Both the quantitative and qualitative approaches include a detailed description of the participants to understand their demographic information, data collection methods, study settings, research questions, and procedures for treating and analyzing the study data. The chapter also highlights participant recruitment efforts, study design for data collection, descriptions of the research instrument, and treatment of the data plan.

Participant Recruitment

Participants (N = 176) were recruited using a social marketing campaign drawing on snowball and convenience sampling methods and using platforms such as Facebook, Instagram, LinkedIn, and email listservs. The following dissemination message was asked:

> Are you a Southeast Asian international student enrolled at a community college or a 4-year college/university who is interested in learning about their mental health and available resources? GO TO <LINK> to take the Southeast Asian International Student Survey on mental health perceptions, challenges and concerns, and help-seeking behaviors for a chance to win a $300, $200, or $100 Amazon Gift Card.

Data Collection

A cross-sectional data collection design was used to gather demographic information, self-reports of mental health challenges, perceptions of mental health, and the use of services and resources. This method captured a full picture of current mental health outcomes among Southeast Asia international students at a single point in time. Thus, it provided deeper insights into their unique mental health challenges, concerns, and factors that impacted their decision-making process to seek mental health help. The demographics and psychological characteristics collected also helped to identify the factors that drive students' recognition for support to meet their mental health needs and delineate common trends in mental health help-seeking behaviors among this target population.

Description of Participants

Study participants included a convenience sample of 176 Southeast Asian international students. Inclusion criteria for the present study included that participants attend full-time at a 2-year community college or 4-year college or university in the United States. To be eligible to enroll in the study, participants must be between the ages of 18 and 40. A social marketing campaign was used to assist with recruitment efforts; I employed convenience and snowball sampling methods to recruit participants. Platforms including Instagram, Facebook, Twitter, LinkedIn, and Craigslist helped disseminate the message and recruited a diverse range of Southeast Asian international students with different backgrounds and from varying origin countries. Email listservs and student organization groups were also reached to help with recruitment efforts to diversify the sample. These recruitment efforts ensured that the sample was representative of the intended population and included a wide range of Southeast Asian

international students with unique lived experiences, including the different universities and colleges they attend, different majors and programs, and various living arrangements.

Description of Research Instrumentation

The quantitative position of this study utilized a survey questionnaire (see Appendix G). These measures, including relevant domains, scales and applicable subscales for the study, are described below.

Participant Survey

The survey instrument consisted of seven domains that assess the perceptions of mental health, unique needs, and concerns among Southeast Asian international students. The domains were: (a) modifying factors, (b) psychological characteristics, (c) perceived severity, (d) perceived susceptibility, (e) perceived benefits, (f) perceived barriers, and (g) self-efficacy (see Appendix G). For the individual items contained within each scale, participants were asked a variety of questions with answer choices structured on several Likert-type scales ranging from Strongly Disagree to Strongly Agree. Each statement in the survey provided participants with the opportunity to share their level of agreement or disagreement as related to each domain. These validated scales are described below:

The General Health Questionnaire—12 (GHQ-12). The GHQ-12 is a shorter version of the General Health Questionnaire (GHQ) established in 1972 by Goldberg, which originally contained 60 questions and serves as a screening measure to detect the current mental state of respondents (Montazeri et al., 2003). The GHQ-12 has been widely used in "different settings and different cultures," given that it serves as a "brief, simple, easy to complete" as a screening tool to get a baseline understanding of study participants' current mental health (Montazeri et al., 2003, pp. 1-2). Specifically, the validated measure helps identify mental health issues including

anxiety, depression, somatic symptoms, and social isolation among different populations; this was considered useful for application among Southeast Asian international students.

The GHQ-12 was used to assess Southeast Asian international students' self-reporting of their mental health that would help reveal potential psychological issues. The GHQ-12 consists of 12 questions that assessed the current mental state and well-being of the target population. Respondents were given 12 statements asking about the recency of engaging in particular behaviors or symptoms. These questions targeted concentration levels, the possibility of losing sleep over worrying, a sense of purpose in everyday life, the capacity to make decisions or feel strained, fear of not being able to overcome challenges, satisfaction with daily life activities, the ability to face difficult situations, level unhappiness or depression, level of confidence, sense of self-worth, and sense of happiness. Respondents rated these statements on a 4-point Likert scale that included better than usual, same as usual, less than usual, and much less than usual. Overall, the GHQ-12 scale measure is a validated tool that assessed the psychological state of Southeast Asian international students by asking them to recall the recency of certain symptoms or behaviors relating to their well-being (Goldberg, 1972).

Acculturative Stress Scale for International Students (ASSIS). Given that I sought to understand the unique mental health challenges faced by Southeast Asian international students, the use of the ASSIS (Sandhu & Asrabadi, 1994) helped to identify stressors that arise and different levels of acculturative stress among the target population. The initial ASSIS consisted of 125 items, but I used the new scale of 36 items in a 5-point Likert format to study the acculturative stress of international students. Respondents were asked to rank their responses, and the format ranged from 1 for strongly disagree to 5 for strongly agree, with 3 being unsure. As Sandhu and Asrabadi (1994) noted, "higher scores on each item meant higher acculturative

stress" (p. 438). The 36-item scale measured acculturative stress by assessing respondents' "perceived discrimination, homesickness, fear, guilt, perceived hatred, and stress due to change (cultural shock)" (p. 435). Some sample items included "I feel that I receive unequal treatment" and "Due to language difficulties, I feel unable to express myself fully" (p. 437). Overall, the recurrent themes found in the ASSIS scale helped to identify common adjustment challenges faced by international students during the acculturation period. This validated measure captured a full picture of the unique experiences of Southeast Asian international students and how the stressors that arise during acculturation can impact their academic experiences and overall well-being.

Mental Health Belief Model Assessment (MHBMA)—Version 3. This portion of the survey used a validated "self-report instrument" called the Mental Health Belief Model Assessment (MHBMA). The MHBMA was developed by Greene (2018) and includes 76 items. The scale was designed to examine individuals' level of preparedness to seek professional mental health services. The survey categories align with the six domains of the HBM: Perceived Susceptibility, Perceived Fears, Perceived Severity, Perceived Benefits, Perceived Barriers, and Self-efficacy. Respondents were asked to share the level of agreement or disagreement with each statement with response options on a 4-point Likert scale. The MHBMA ranges from 0 to 4 (Strongly Disagree = 0, Disagree = 1, Neither Agree or Disagree = 2, Agree = 3, Strongly Agree = 4). Overall, the MHBMA was incorporated into the survey questions to measure Southeast Asian international students' perceptions of how susceptible they are to having a mental health problem, how severe their issue is, whether they believe there are benefits to getting help, what are potential barriers, and how their levels of self-efficacy engage in help-seeking behaviors.

The first construct of the HBM was represented in the MHBM, where the scale assessed respondents' perceived susceptibility and fears associated with mental health (Greene, 2018). The Perceived Susceptibility and Fears scale asked participants to read 12 statements to rate their agreement or disagreement with each question that targeted how behavioral or emotional issues may affect their lives if they imagined they were experiencing mental health problems. Respondents were asked to rate their answers on a 4-point Likert scale from Strongly Disagree to Strongly Agree. The Perceived Susceptibility and Fears scale measure assessed individuals' perceptions of how susceptible they were or their levels of fears of experiencing mental health problems in the past, present, and future. As Greene (2018) noted, the Perceived Susceptibility and Fears scale intends to capture "an individual's acceptance of a mental health diagnosis" (p. 2). Accordingly, respondents with low scores were less likely to experience a mental health problem and also may not be anxious when thinking about the possibility, while those who scored higher were likely to feel more anxious and worry about the risk of experiencing mental health issues. Specifically, individuals who had high scores based on their responses may have "experienced a mental health problem in the past or is experiencing one currently…may also feel uncomfortable talking about a mental health problem with a mental health professional, and may be embarrassed if their friends or family knew they were receiving services" (Greene, 2018, p. 81).

The second construct of the HBM was represented in the MHBM, where the scale measured individuals' perceived severity of their mental health issues. The scale developed by Greene (2018) assessed how individuals perceived their overall well-being, particularly the potential impacts of these mental health problems based on their levels of agreement and disagreement on a 4-point Likert scale from Strongly Disagree to Strongly Agree. The

Perceived Severity scale contained 11 questions targeting how experiencing a mental health issue might impact one's day-to-day life, family, social life, relationship with a significant other, work, or education. Thus, this scale captured an individual's perceived severity of mental health issues that may impair their overall functioning. Specifically, the question captured how severe an individual believes their mental health symptoms are in disrupting their daily functioning. Respondents with low scores may have perceived that experiencing a mental health problem would not impact their lives, while those with higher scores were more likely to believe that a mental health issue would disrupt their everyday lives (Greene, 2018).

The third construct of the HBM was represented in the MHBM developed by Greene (2018), where the Perceived Benefits scale assessed an individual's perception of the advantages of seeking professional help with a therapist, psychiatrist, social worker, or counselor for a mental health problem. The scale included 22 questions; the statements asked the respondents to imagine themselves experiencing a mental health issue and rate their perception of how going to therapy may or may not benefit them in addressing their problem. The rating was based on a 4-point Likert scale from Strongly Disagree to Strongly Agree. The questions on the Perceived Benefits scale assessed an "individual's expectation that seeking mental health services reduces the risk of experiencing a mental health problem or the consequences of mental health problems" (Greene, 2018, p. 82). Those with high scores on this scale believed that mental health services were beneficial and effective, leading them to have positive attitudes towards professional help-seeking behaviors. Specifically, these beliefs helped them recognize that going to therapy can improve their day-to-day functioning, minimize symptoms, and enhance well-being. On the other hand, those with lower scores may have believed that mental health services were inefficient and would not help them address their

emotional or behavioral issues. As a result, these individuals were least likely to seek out mental health help because they did not believe there were benefits to using these services. Overall, the Perceived Benefits scale provides a measure that assesses an individual's beliefs or attitudes surrounding mental health services and whether they find them effective and helpful in addressing their emotional or behavioral issues (Greene, 2018).

The fourth construct of the HBM was represented in the MHBM developed by Greene (2018), which is the Perceived Barriers scale. Similar to the Perceived Benefits scale, the Perceived Barriers also contains 22 questions that capture an individual's beliefs and attitudes about the potential roadblocks that can prevent them from getting treated for mental health issues. The statements asked respondents to consider them going to therapy and to report their levels of agreement or disagreement on a 4-point Likert scale from Strongly Disagree to Strongly Agree. The questions assessed potential barriers in seeking mental health services, including comfortability levels, fears and stressors, and embarrassment. Individuals with higher scores based on their responses were more likely to perceive barriers and obstacles in seeking help for their mental health problems. These individuals may be more reluctant to go to therapy because of various factors, including having high levels of discomfort, potential invasion of their privacy, preference to seek support from families and friends, and fear of being judged or mistreated by a therapist. Given these perceived barriers, individuals with higher scores on this scale were unlikely to receive treatment because they may delay or be in avoidance of their mental health issues, which can deteriorate their overall health and well-being. On the other hand, those with lower scores on the Perceived Barriers scale had more positive outlooks on help-seeking behaviors like going to therapy and viewed them as accessible when needed. These individuals perceived mental health services as available options and were more likely to

seek them out. Overall, the Perceived Barriers scale measured the perceived obstacles that individuals may face when seeking mental health help, contributing to a better understanding of the unique factors and stressors that may prevent people from going to therapy or reaching out for other support (Greene, 2018).

The last measure in Greene's (2018) MHBMA is the Self-efficacy scale, which measures an individual's belief in their ability to engage in health behaviors like going to therapy for their mental health issues. Unlike the other scales in the MHBMA, only nine statements assess respondents' self-efficacy. The questions asked respondents to rate their level of agreement or disagreement on a 4-point Likert scale from Strongly Disagree to Strongly Agree. The nine statements asked individuals to report their willingness to open up to a therapist, make necessary behavior or cognitive changes to improve their lives, put in work to get better, complete assignments, attend therapy appointments regularly, and find it easy to incorporate therapy in their schedules. Those with high scores on this scale had more self-efficacy due to feeling more confident in their abilities to seek out mental health help because they recognized that those services can help improve their well-being. Thus, these individuals were more likely to engage in help-seeking behaviors because they felt more comfortable with going to see a therapist to help address their problems. On the other hand, individuals who obtained low scores on this scale had lower self-efficacy and may lack confidence in their ability to use mental health services, such as potential logistical barriers preventing them from attending therapy sessions regularly or feeling a sense of discomfort when engaging in help-seeking behaviors. Overall, the Self-efficacy scale provided a valuable measure to assess Southeast Asian international students' self-efficacy and their attitudes toward help-seeking behaviors like using mental health services (Greene, 2018).

In addition to the Self-efficacy scale developed by Greene (2018) in the MHBMA, I included the 9-item Self-Efficacy in Seeking Mental Health Care (SE-SMHC) measure (Moore et al., 2015). The SE-SMHC consists of nine questions that evaluate an individual's self-efficacy in seeking out mental health help. Respondents rated their perceived abilities to use mental health services on a 10-point Likert response scale ranging from 1 = no confidence to 10 = complete confidence. Examples of these behaviors included being confident in their ability to seek out mental health care, having reliable transportation to go to appointments, understanding the information provided during the sessions, adhering to recommendations, coping with the consequences of receiving treatment, navigating the attitudes of their loved ones and staff's reactions to them receiving treatment, and overcoming embarrassment. Using the SE-SMHC scale offers better understanding of Southeast Asian international students' self-efficacy, their overall confidence in seeking mental health treatment, and their handling of the underlying social and health consequences of using these services. Thus, obtaining higher scores on the SE-SMHC scale represented greater confidence and self-efficacy beliefs in one's ability to identify, use, and benefit from mental health services and resources. These individuals were also more equipped with strong coping skills to handle potential reactions and attitudes from the family, friends, and staff of those seeking mental health treatment. Overall, the SE-SMHC scale developed by Moore et al., (2015) captured the uniqueness of the population of interest, particularly the relationship between their self-efficacy beliefs and how they can impact their help-seeking behaviors.

Similar to the Perceived Barriers scale (Greene, 2018), I also employed Clement et al.'s (2012) Barriers to Access Care Evaluation Scale (BACE) to identify the potential barriers unique to this population's interest when accessing mental health treatment. The scale has 13

items that assess respondents' knowledge of available mental healthcare, transportation challenges, financial constraints, alternative care preferences, mistrust with providers, lack of social support, and other logistical issues that may prevent them from seeking out treatment. Respondents were asked to rate their level of agreement or disagreement based on response options ranging from Strongly Disagree to Strongly Agree. The BASE scale also measured stigma regarding the use of mental health services such as "embarrassment/shame, about others' disapproval, disclosure concerns, desire to avoid a stigma stereotype, and anticipated discrimination" (p. 2). Overall, incorporating the BACE scale in this study identified common barriers to accessing mental healthcare, including stigma among Southeast Asian international students (Clement et al., 2012).

Given that the existing literature revealed high levels of stigma surrounding mental health and treatment among Southeast Asian international students, I also incorporated the Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) Scale developed by Vogel et al. (2013) to understand their perceptions of help-seeking behaviors and how these beliefs made them feel if they received psychological support. Respondents were asked to use a 5-point Likert scale that ranged from 1 = Strongly Disagree to 5 = Strongly Agree to rate how they would react to each situation presented in 10 statements. These questions captured how respondents perceived themselves and their feelings when seeking mental health help. Some examples of feelings described included the individual's perceived adequacy level, self-confidence, intelligence, and self-esteem when seeking out mental health help. Overall, the SSOSH Scale is a validated and reliable measure that has been used in samples from six different countries (England, Greece, Israel, Taiwan, Turkey, and the United States) and

promised to be helpful in accounting for cultural differences within our target population and their perceived stigma regarding mental health (Vogel et al., 2013).

The qualitative portion of the study utilized a participant interview guide. The protocol for the qualitative portion of the study is described below.

Participant Interview Guide

This semi-structured interview guide followed a protocol of six questions guided by the HBM framework. Interview questions, with their corresponding probes, addressed perceptions of mental health, help-seeking behaviors, barriers to accessing services or resources, and other factors that may prevent individuals from getting support or adhering to their treatment.

Description of Procedures

Institutional Review Board Approval

I obtained approval from the Institutional Review Board (IRB) at Teachers College, Columbia University. The IRB-approved recruitment protocol included a social media campaign on Facebook, Instagram, LinkedIn, Twitter, Craigslist, and email listservs. The sampling frame contained a representative sample of Southeast Asian international students who attended a 2-year community college or 4-year college or university in the United States.

Students interested in survey participation were asked to provide informed consent and sign electronically to acknowledge their understanding and voluntary participation. The consent form was accessible to students before they received the survey link and prior to the start of each interview.

Interviews were conducted via Zoom in a secured manner that was intended for the invited participant only. To strategically recruit interviewees, I asked survey participants a question about their willingness to participate in interviews to help me determine their interest

and availability. Including this question at the beginning of the survey identified participants who expressed continuous interest in study-related activities. These potential interviewees were invited to schedule their one-on-one interviews with me to provide further insights into perceptions of mental health services and support, potential challenges they faced in seeking out help, campus culture and dialogues on mental health and psychological well-being, and coping mechanisms or alternative strategies they employed to address their concerns or problems. Interview sessions began a review of the IRB-approved consent form that explained to the participants the nature of the study, the interview structure, and permission to record if allowed. The Zoom recording of the sessions was voluntary and confidential to ensure the protection and confidentiality of the interviewees. Following the review of the consent form and asking for permission (or not) to allow recording of the session with closed captions, the participants had the opportunity to ask questions for further clarification. Once participants felt comfortable to proceed, the session began with the recording (if allowed) and the answering of participant questions by the interviewer (me). Each interview was guided by a series of five to six questions with corresponding probes that could be completed in 60-90 minutes.

Treatment of the Data

The quantitative portion of this data analysis assessed the following research questions. The statistical procedures used to analyze the study-related data are also provided below:

Characteristics of the Population

Research Question 1: What are the perceived threats to mental health among Southeast Asian international students?

Research Question 2: What is the perceived self-efficacy level to seeking mental health treatment and stigma associated with getting help?

Research Question 3: What are the perceived benefits and perceived barriers to seeking out mental health care among Southeast Asian international students?

Research Question 4: What are specific stigmas (e.g., cultural or religious) regarding mental health that Southeast Asian international students hold, and how do these beliefs and attitudes influence their help-seeking intentions?

Research Question 5: What are specific barriers preventing Southeast Asian international students from getting mental health care?

Research Question 6: What is the relationship between the barriers to accessing mental health care (BACE) across demographic characteristics and the Health Belief Model (HBM) construct factors?

Research Question 7: *What are the significant differences in the barriers to accessing mental health care (BACE) scores based on the correlations with demographic characteristics and the HBM construct factors?*

Research Question 8: How do various sets of demographic characteristics and HBM construct factors contribute to the variance in the barriers to accessing mental health care (BACE) model?

Research Question 9: What is the relationship between the self-stigma associated with seeking mental health help (SSOSH) across demographic characteristics and the HBM construct factors?

Research Question 10: What are the significant differences in the self-stigma associated with seeking mental health help (SSOSH) scores based on the correlations with demographic characteristics and the HBM construct factors?

Research Question 11: How do various sets of demographic characteristics and the HBM construct factors contribute to the variance in the self-stigma associated with seeking mental health help (SSOSH) model?

Study Design

1. I generated summary scores for each domain scale and any relevant subscales to examine Southeast Asian international students' perceptions of mental health, stigma, self-efficacy beliefs, and help-seeking behaviors. Summary scores were calculated based on a predetermined criterion, where higher scores indicated greater agreement with the measured construct in each of the scale measures. For example, higher scores revealed the presence of mental health symptoms (e.g., anxiety, depression, somatic issues, social isolation), acculturative stress, perceived susceptibility and fears, perceived severity, perceived barriers, perceived benefits, self-efficacy, and stigma. Thus, higher scores in each domain suggested higher prevalence of mental health symptoms, negative perceptions of the stigma associated with treatment, potential barriers, and ineffectiveness of using mental health resources and services among Southeast Asian international students. With the exception of self-efficacy, higher scores on Moore et al.'s (2015) Self-Efficacy in Seeking Mental Health Care (SE-SMHC) scale suggested that individuals were more confident in their abilities to engage in help-seeking behaviors.
2. Descriptive and inferential statistics examined the sample demographics, psychological characteristics, and other related topics of the survey. Significant results were reported at a p-value of .05 or less.
3. Internal consistency reliability was computed using Cronbach's alpha for subscales. Cronbach's alpha is a number expressed between 0 and 1 that helps identify how the set

of items is closely related to each other and the overall strength of that reliability. According to Chelsea Goforth (2015), a statistical consulting associate at the University of Virginia Library, "many methodologists recommend a minimum alpha coefficient between 0.65 and 0.8 (or higher in many cases); alpha coefficients that are less than 0.5 are usually unacceptable, especially for scales purporting to be unidimensional" (n.p.). As a result, I used the following scale to determine Cronbach's alpha values:

   a. 0.65 to .8 or higher: acceptable reliability;
   b. 0.60 to 0.65: questionable reliability;
   c. Below 0.65: poor reliability.

4. Means and standard deviations were calculated for continuous items within each of the relevant above-mentioned domains for our descriptive statistics. These values provided measures of central tendency and the distribution of the data obtained. Calculating the means and standard deviations offers valuable information about the patterns and characteristics of the continuous variables within each domain.
5. Percentages were calculated for categorical items within each of the relevant abovementioned domains for descriptive statistics. These values support interpretations and allow for drawing easier comparisons and conclusions. Percentages also captured the trends within each domain in order to analyze the data obtained more quickly.

The qualitative portion of the data analysis addressed the following five research questions:

1. What are the perceived barriers and potential risks to seeking out mental health services or resources among Southeast Asian international students?

2. How do Southeast Asian international students perceive the current offerings of campus mental health services and resources and how well are they doing in meeting their mental health needs and concerns?
3. How can mental health services and resources on campus be tailored to align with the perceived cultural beliefs and attitudes of Southeast Asian international students to meet their specific needs and concerns?
4. What are the specific factors that influence mental health uptake among Southeast Asian international students?-What roles can families, friends, classmates, and professors play in encouraging help-seeking behaviors such as the recurring use of campus mental health services?
5. What are the identified alternative coping mechanisms that help Southeast Asians maintain their well-being?

Zoom recordings of the interviews and closed captioning transcripts were assessed and analyzed using NVivo 14.0 software to identify important and recurring themes related to how Southeast Asian international students perceived mental health, their cultural beliefs surrounding this topic, their help-seeking behaviors, and any potential barriers they may face when accessing or utilizing these services and resources. Interviewees were assigned unique identifiers like Interviewee #1, #2, #3, and so on. The data were thematically coded based on a priori themes from the HBM and themes that originally emerged inductively during the coding process. This approach allows me to gain a comprehensive understanding of interviewees' perspectives based on the established HBM. Specifically, I could capture the unique experiences and concerns that Southeast Asian international students have. Coding schemes were also reviewed for accuracy and reliability. Data analysis reflected the cultural barriers and facilitators to mental health treatment experienced by Southeast Asian

international students. Qualitative data were synthesized across interviews and stratified by country of origin, academic year, and type of institution (e.g., community college, private or public 4-year university). This approach delineated certain demographic characteristics in mental health needs and concerns, accessibility of services and resources, and the cultural forces that can influence help-seeking behaviors among Southeast Asian international students. Overall, coding and synthesizing the qualitative data offered further insights into the diverse experiences, specific mental health needs, and potential barriers to accessing and using services and resources among Southeast Asian international students. The qualitative interviews captured the full spectrum of mental health perceptions and beliefs on help-seeking behaviors. Findings from the interviews informed cues to action for colleges and universities in order to design and implement culturally sensitive mental health services and resources that meet the diverse needs of Southeast Asian international students, and, ultimately, promote open dialogue on college campuses about the importance of mental health and overall well-being.

Sample Size Calculation for Quantitative Data

Table 2 presents the sample size calculation for the survey used in the quantitative data portion of this study. The desired sample size (N = 358), critical value, and expected prevalence based on the existing research was calculated below:

Table 2
Sample Size: Survey

Term	Value	Description
n	358	Desired sample size
$\mathbf{Z_{1-\alpha/2}}$	1.96	Critical value and a standard value for the corresponding level of confidence. (At 95% CI or 5% level of significance (type-I error)
P = Expected prevalence or based on previous research	0.37	37%
q = 1-p	0.63	63%
d = Margin of error or precision	0.05	5%

Quantitative Sample Size. For a moderate effect size (0.5) with a power of 0.8 ($\alpha = 0.05$), the estimated sample requires a minimum of N = 358 to ensure data reliability and validity. Using the calculated minimum sample size ensured that the intended population was represented in this study, also reducing the risk of having Type II error. Based on findings by Han et al. (2013), 45% of Chinese international students at Yale University reported having experienced depressive symptoms, and another 27% experienced anxiety. These alarming depression and anxiety rates among Chinese international students were combined and used as the expected prevalence in calculating this desired sample size for Southeast Asian international students. Here, combining the rates of prevalence for depression and anxiety among Chinese international students attending Yale for calculations helped ground the present study by drawing on existing literature, given similarities in cultural backgrounds and reporting of mental health symptoms among the two populations. The similarities in demographic characteristics may lead to related mental health challenges for the intended target population with the use of the two prevalence rates found in the literature (Han et al., 2013).

Purposive sampling was also used in the quantitative data collection, referring specifically to intentionally selecting participants based on their characteristics, knowledge,

experiences, or other relevant criteria. Additionally, setting the power at 80% helped to detect associations across the HBM. A .80 power allowed the identification of relationships between the independent and dependent variables, while ensuring that the sample size was representative of the target population of Southeast Asian international students who have unique mental health beliefs and help-seeking behavior tendencies (or the lack thereof). Purposive sampling was helpful in gaining deeper insights into Southeast Asian international students' perceptions of mental health and unpack the underlying forces that influence their behaviors. Using a minimum sample of N = 358 also provided sufficient power to detect even relatively weak associations. These weak associations were helpful to capture because they can provide how underlying forces such as culture, religion, social, and other relevant factors shape beliefs about mental health and help-seeking behaviors, even though they may be statistically significant with smaller effect sizes. Detecting strong relationships between different variables requires a sufficient sample size and ensures adequate statistical power set at .80. According to Statistical Solutions (n.d.), effect size is the strength of the relationship between two variables on a numerical scale. The primary purpose underlying power analysis is to determine the minimum sample size suitable to detect the effect of a given test at the desired level of significance (Statistical Solutions, n.d.).

Qualitative Sample Size

Similar to our quantitative sampling approach, purposeful sampling was also used to gather the qualitative data. As described by Creswell (2007), a purposive sample intentionally "selects individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon"(p. 125). By using this approach, I ensured that the study had a representative sample of the target population to capture rich data with diverse perspectives, varying levels of understanding, varied experiences, and help-seeking behaviors

regarding mental health. A total of 20 participants were recruited. As recommended by Aguboshim (2021), a qualitative study should contain a minimum of 15 in-depth interviews to meet the standard of saturation for the potential range of responses. Given that this present study was the first of its kind to conduct mental health research on Southeast Asian international students, the sample size exceeded the minimum and almost doubled the anticipated amount. Specifically, 29 participants were interviewed to help us gain a comprehensive understanding of their unique needs, concerns, perceptions, potential challenges when using services and resources, as well as to identify the underlying factors that influence help-seeking behaviors among this understudied population. Therefore, interviewing 29 participants provided an effective sample size that was most representative of the target population and captured a wide range of mental health perspectives, symptoms, and challenges experienced by Southeast Asian international students and the barriers to accessing resources and services.

Predictors of Study-Related Outcomes

Given that I sought to examine the help-seeking behaviors of Southeast Asian international students, it was important to identify the dependent and independent variables. The dependent variable in this study was help-seeking behavior, which was considered categorical data. It is worth noting that the type of support for mental health can vary, and seeking actions may be different for Southeast Asian international students. Some may utilize professional counseling; join peer support groups; engage in mindfulness practices like meditation and yoga, folk medicine, and religious healing; or participate in other activities to improve their well-being (Hirai & Clum, 2000). The dependent variable were measured through self-reported surveys using the Barriers to Access Care Evaluation Scale (BACE) scale developed by Clement et al. (2012) and the Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) scale by

Vogel et al. (2013), which ultimately, measured the individual's action of help-seeking behaviors.

Additionally, the impact of various factors on mental health help-seeking behaviors, including demographic characteristics like age group, gender, income, academic majors/programs, geographic location, type of college, living arrangements, and country of origin were also examined. These demographics were assessed primarily through categorical scales, making them categorical independent variables. Other potential predictors that can influence help-seeking behaviors among Southeast Asian international students also included psychological factors. These predictors consisted of Southeast Asian international students' acculturation scores, mental health scores, perceived susceptibility, perceived severity, health motivation/self-efficacy, perceived benefits, and perceived barriers. As evident, these psychological factors represented the constructs of the HBM (Rosenstock, 1966).

The dependent and independent variables are organized in Table 3 (see Appendix G) to categorize their types and the validated measures that were used to examine their relationships and the statistical significance.

The identified dependent and independent variables were used to calculate Pearson's correlation. Pearson's correlation coefficient was the most appropriate statistical measure for this study because the two dependent variables were linear. Pearson's correlation was the best suited approach for this analysis because it provided a statistical analysis that assessed the strength and direction of linear relationships between the likelihood of help-seeking behaviors across continuous variables, including selected demographic characteristics and potential predictors. Specifically, the following monotonic relationships were examined:

- Dependent * Independent 1 (age group)

- Dependent * Independent 2 (country of origin)
- Dependent * Independent 3 (Acculturation Score)
- Dependent * Independent 4 (Mental Health Score)
- Dependent * Independent 3 (Perceived Susceptibility Score)

Overall, these associations helped me examine whether a relationship existed between help-seeking behavior or action (dependent variable) and age group, country of origin, relationship status, and other demographic variables and psychological characteristics.

It is also important to note that the calculation of Pearson correlation coefficient provided a covariance value between -1 and 1. Accordingly, higher variance that is closer to -1 represents a perfect negative relationship, and values that are values closer to 1 reflect stronger and positive correlation. In the present study, closer to 1 reflected a stronger and more consistent correlation, which often means higher scores for action (help-seeking behaviors) across the identified demographic characteristics (age group and country of origin) and psychological factors (constructs of the HBM).

Given that calculating Pearson correlation coefficient only provided a starting point to examine the relationships between continuous variables, I also conducted additional statistical analyses to gain a deeper understanding of the key indicators that influence mental health help-seeking actions among Southeast Asian international students. The differences between the outcome variable help-seeking behavior across significant correlations with demographic characteristics and other potential predictors were assessed using analysis of variance tests (ANOVA), backwards regression, and a hierarchical regression.

To examine the model fit, the Hosmer and Lemeshow chi-square test of goodness-of-fit was used. The goodness of fit test helps “detect lack of fit” with continuous covariates like

demographic characteristics and other potential predictors of help-seeking behaviors (Fagerand & Hosmer, 2017, p. 684). Specifically, an ordinal version of the Hosmer and Lemeshow chi-square test of goodness-of-fit (HL test) was used to examine model fit using Stata for this study. As recommended by Fagerand and Hosmer (2017), obtaining a "$p < 0.10$ with any of the tests should lead to further investigation into the nature of the lack of fit" (p. 684). However, the statistics also noted that the only exception to having to conduct additional tests would be having larger sample sizes of $n > 400$ and using a 5% significance level.

Conclusions

This chapter presented a summary of the methodology, including participant descriptions, data collection procedures, and the instrumentation that was used for both quantitative and qualitative approaches. I also included descriptions of the data management and analysis procedures. The results of the data analyses discussed in this chapter are presented next in Chapter 4.

Chapter 4: Results

This chapter outlines the results of the data analysis, which is divided into two sections: quantitative and qualitative. The findings, which address the research questions, are discussed in detail. First presented are the results from the quantitative data, including descriptive statistics and statistical analyses from the calculated Pearson correlation coefficients, one-way analysis of variance (ANOVA), and the hierarchical multiple regression. Second, the qualitative findings from 29 participant interviews are discussed.

Quantitative Results

The quantitative analysis in this dissertation was based on a survey administered on Qualtrics and completed by enrolled, full-time Southeast Asian international students attending U.S. public or private colleges and universities, including community colleges. The survey administered (N = 178) included 50-items. Data collected were combined and analyzed for the purposes of this dissertation. Quantitative findings are presented in Table 3.

Demographic Characteristics

Descriptive Statistics of Participants

The sample consisted of 178 participants who completed the entire survey. A total of 123 students provided their demographic information regarding their sex, with 63.40% identifying as female (n = 78) as their assigned sex at birth and the remaining 36.60% identifying as male sex (n = 45). Based on the age data reported by 144 participants, the majority of the students who participated in the study were between the ages of 24 and 29 (44.70%, n = 68), followed by the second-largest age group at 18-23 years old (38.20%, n = 58), and the remainder at 30 years and older (17.10%, n = 26). The average age for the sample was 25.04 (SD ± 4.57), with ages ranging from 18 to 40 years old.

Participants (N = 178) originated from a wide range of Southeast Asian countries, with the top three countries being Vietnam (26.97%, n = 48), Indonesia (20.22%, n = 36), and the Philippines (13.48%, n = 24). Other top countries of origin included Singapore (12.92%, n = 23), while Thailand and Malaysia were tied at 8.43% each (n = 15). Some notable characteristics regarding the sample included three students who reported being from two different Southeast Asian countries. One participant identified as hailing from both Singapore and Malaysia (.56%, n = 1), one reported being from Singapore and India (.56%, n = 1), and the third reported coming from Indonesia and Singapore (.56%, n = 1). Less represented groups originated from Cambodia (3.37%, n = 6), Laos (2.25%, n = 4), and Myanmar (1.69%, n = 3). Only one participant identified as being from Brunei (.56%, n = 1).

A total of 155 participants reported their marital status on the survey questionnaire. The majority of students (89.67%, n = 139) indicated they were single or never married, with the remaining 10.33% n = 16) being married or in a domestic relationship. Among the 153 participants who reported their current enrollment status, most students were pursuing master's degrees (50.30%, n = 77), followed by those seeking their bachelor's (42.50%, n = 65), and the remaining 7.20% earning doctoral or professional degrees (n = 11). A total of 157 students reported the types of school they attended. Most were enrolled at private colleges or universities (72.61%, n = 114), followed by public colleges or universities (22.93%, n = 36), and fewer at community colleges (4.46%, n = 7). The majority of participants in the sample (N = 178) attended schools in the Northeast region (68.00%, n = 121), with some students enrolled at institutions in the West (18.50%, n = 33) and the South (10.10%, n = 18), while the Midwest region had the fewest concentration of students (3.40%, n = 6).

Academically, participants pursued a diverse range of majors. The most studied academic major among the participants (N = 155) was Science, Technology, Engineering, and Math (STEM), with 61 students making up 34.30% of the sample. The second most popular major was the Humanities and Social Sciences (29.87%, n = 46), followed by Business and Management (6.70%, n = 12) and Education (6.20%, n = 11). A handful of students were pursuing academic majors and programs in the Health Professions (5.10%, n = 9), the Arts and Design (2.80%, n = 5), and Public Health (2.20%, n = 4). Very few participants were studying Social Work (1.70%, n = 3), International Studies (1.10%, n = 2), and Other majors not previously listed (1.10%, n = 2). Overall, the sample (N = 178) revealed a variety of demographic characteristics including sex, age breakdown, country of origin, marital status, educational status, types of college or university of attendance, geographical location of schools, and academic majors.

Quantitative Findings from Survey Questionnaire

Descriptive Statistics of Participant Sample

A full description of the participant sample is provided in Table 3. The table includes sex, age, country of origin, marital status, current educational program status, type of college/university attending, school attendance region, and academic major.

Table 3

Basic Demographics (BD-10)

	N	%
Sex ***(N = 123)***		
Male	45	36.60
Female	78	63.40
Age ***(N = 144)***		
18-23	58	38.20
24-29	68	44.70
30 and older	26	17.10
[Mean age = 25.04; SD ± 4.57; Min = 18; Max = 40]		
Country of Origin ***(N = 178)***		
Brunei	1	0.56
Cambodia	6	3.37
Indonesia	36	20.22
Indonesia-Singapore	1	.56
Laos	4	2.25
Malaysia	15	8.43
Myanmar	3	1.69
Philippines	24	13.48
Singapore	23	12.92
Singapore-India	1	.56
Singapore-Malaysia	1	.56
Thailand	15	8.43
Vietnam	48	26.97
Marital Status ***(N = 155)***		
Single (never married)	139	89.67
Married or in a domestic partnership	16	10.33
Current Educational Program Status ***(N = 153)***		
1) Bachelor's degree	65	42.50
2) Master's degree	77	50.30
3) Doctoral or professional degree	11	7.20
Type of College (N = 178)		
Public College/University	36	22.93
Private College/ University	114	72.61
School of Attendance Regio ***(N = 178)***		
Midwest	6	3.40
Northeast	121	68.00
South	18	10.10
West	33	18.50

Table 3 (continued)

	N	%
Academic Major *(N = 154)*		
Arts and Design	5	2.80
Business and Management	12	6.70
Education	11	6.20
Health Professions	9	5.10
Humanities and Social Sciences	46	25.80
International Studies	2	1.10
Other	2	1.10
Public Health	4	2.20
Social Work	3	1.70
STEM	61	34.30

Descriptive Statistics of Psychological Characteristics

The average mean score for the Short General Health Questionnaire (GHQ-12) scale was 2.51 (SD ± 0.78), where the scale was from 1 to 4 with 1 = not at all, 4 = much more than usual. On average, participants (n = 178) reported "No more than usual" when it came to recently feeling they could not overcome difficulties, were unhappy and depressed, and were losing confidence in themselves.

Descriptive Statistics of Acculturation Characteristics

Social Isolation: The average mean score for social isolation measured on the Acculturative Stress Scale for International Students (ASSIS) scale was 2.73 (SD ± 0.96), where the scale was from 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree. The majority of participants (n = 178) reported that they disagreed with the statements of (a) feeling that they were being treated differently in social situations, and (b) people ostracized them.

Threats to Cultural Identity: The average mean score for threat to cultural identity measured on the Acculturative Stress Scale for International Students (ASSIS) scale was 2.59 (SD ± 1.09), where the scale was from 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree

nor disagree, 4 = Agree, 5 = Strongly agree. The majority of participants (n = 178) reported that they disagreed with the statements of (a) losing their ethnic identity, (b) feeling lost for not being able to find their roots in society, and (c) being treated differently because of their race.

Homesickness: The average mean score for homesickness measured on the Acculturative Stress Scale for International Students (ASSIS) scale was 3.10 (SD ± 1.07), where the scale was from 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree. The majority of participants (n = 178) reported that they did not agree or disagree with the statements of (a) feeling sad that they were leaving their relatives behind, and (b) feeling sad for living in unfamiliar surroundings.

Communication Problems: The average mean score for communication problems measured on the Acculturative Stress Scale for International Students (ASSIS) scale was 2.39 (SD ± 1.30), where the scale was from 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree. The majority of participants (n = 178) reported that they disagreed with the statements of (a) feeling nervous to communicate in English, and (b) not being able to express fully due to language barriers.

Culture Shock: The average mean score for culture shock measured on the Acculturative Stress Scale for International Students (ASSIS) scale was 2.84 (SD ± 0.98), where the scale was from 1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree. The majority of participants (n = 178) reported that they disagreed with the statements of (a) experiencing multiple pressures being placed on them after migrating, and (b) feeling uncomfortable to adjust to new foods.

Guilt: The average mean score for guilt measured on the Acculturative Stress Scale for International Students (ASSIS) scale was 3.01 (SD ± 1.26), where the scale was from 1 =

Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree. The majority of participants (n = 178) reported that they did not agree or disagree with the statements of (a) feeling guilty when they think they are better off in the United States and there are people at home still suffering, and (b) experiencing guilt from living a different lifestyle.

Results for Research Question 1

What are the perceived threats to mental health among Southeast Asian international students?

Descriptive Statistics of Perceived Susceptibility & Severity

Perceived Susceptibility (Q1) was measured by using two questions from the validated MHBMA scale, created by Greene (2018). When asked about their concerns about their risk of experiencing a mental health problem, 56.70% (n = 101) of participants (N = 177) strongly agreed (42.70%, n = 76) or agreed (14%, n = 25) with the fear of being susceptible, while 22.40% (n = 40) strongly disagreed (6.70%, n = 12) or disagreed (15.70%, n = 28) with the statement. Then, when participants were asked whether they were unable to relax when thinking about mental health problems, 45.50% (n = 81) strongly agreed (7.90%, n = 14) or agreed (37.60%, n = 67) with this statement, and 22.40% strongly disagreed (6.70%, n = 12) or disagreed (15.70%, n = 28) with this statement.

Perceived Severity (Q1) was measured by using four questions from the validated MHBMA scale, created by Greene (2018). When asked whether experiencing a mental health problem would change their feelings about how they viewed themselves, 66.30% (n = 118) of participants (N = 177) strong agreed (17.40%, n = 31) or agreed (48.90%, n = 87), while 17.50% strongly disagreed (6.70%, n = 12) or disagreed (12.40%, n = 34) with this statement. Then,

when asked if having mental health issues would lead to serious consequences, 58.90% (n = 105) of participants strongly agreed (18.50%, n = 33) or agreed (40.40%, n = 72) with having this fear, while 19.10% (n = 34) strongly disagreed (6.70%, n = 12) or disagreed (12.40%, n = 22) with the statement. Participants were also asked if having a mental health problem would make it harder for them to complete daily activities; 84.30% (n = 150) of participants strongly agreed (23.60%, n = 42) or agreed (60.70%, n = 108), while 9.6% (n = 17) strongly disagreed (5.10%, n = 9) or disagreed (4.50%, n = 8) with the statement. Lastly, participants were asked to report if having a mental health problem would hinder their ability to succeed at work or in their education; 47.20% (n = 84) strongly agreed (17.40%, n = 31) or agreed (29.80%, n = 53), and 19.10% (n = 65) strongly disagreed (6.70%, n = 12) or disagreed (12.40%, n = 22) with the statement.

Results for Research Question 2

What is the perceived self-efficacy level to seeking mental health treatment and stigma associated with getting help?

Descriptive Statistics of Perceived Self-Efficacy

Perceived self-efficacy (Q2) level was first assessed using three questions from the validated MHBMA scale, created by Greene (2018). When asked whether participants were willing to open up to a therapist about their mental health struggles, 78.10% (n = 139) of respondents (N = 177) strongly agreed (24.70%, n = 44) or agreed (53.40%, n = 95) with the statement, while 12.90% (n = 23) were unwilling and reported they strongly disagreed (9.00%, n = 16) or disagreed (3.90%, n = 7). Second, when asked about their confidence level in attending therapy appointments regularly, 55.00% (n = 98) of our participants (N = 177) strongly agreed (17.40%, n = 31) or agreed (37.60%, n = 67), while 24.20% (n = 43) reported lacking

confidence with strongly disagreeing (7.90%, n = 14) or disagreeing (16.30%, n = 29). Lastly, when asked if participants felt capable of making necessary changes by going to therapy to improve their feelings, 58.50% (n = 104) of respondents (N = 177) strongly agreed (12.40%, n = 22) or agreed (46.10%, n = 82) in their ability to change behavior, while 15.80% (n = 28) strongly disagreed (6.20%, n = 11) or disagreed (9.60%, n = 17) with the statement. Overall, these results captured participants' reported self-efficacy level in their willingness to open up to a therapist about their mental health struggles, overall confidence in attending regular therapy appointments, and ability or inability to make the necessary changes to improve their feelings by going to therapy.

Perceived self-efficacy (Q2) level was also examined using three questions from the Self-Efficacy in Seeking Mental Health Care (SE-SMHC) scale, created by Moore et al. (2015). When asked if participants were confident in finding a place to get treated for their mental health issues (from 0 no confidence to 10 confidence), the average score among participants (N = 176) was 6.18 (SD ± 2.61). Participants (N =177) also reported that they were confident in following treatment recommendations; an average score of 6.33 (SD ± 2.36) was obtained from the sample size. Participants (N = 177) also indicated they can cope well with the consequences of seeking mental healthcare (treatments, tests, hospitalizations, etc.), with a mean score of 5.95 (SD ± 2.50).

Internal Consistency of Participant Survey

The internal consistency reliability for each of the demographic characteristics and HBM constructs was assessed by calculating Cronbach's alpha. Alpha values ranged from 0.71 to 0.92. Alpha values for Psychological Characteristics were 0.81, Acculturation Characteristics included Social Isolation were 0.78, Threats to Cultural Identity were 0.87,

Homesickness were 0.71, Communication Problems were 0.87, Culture Shock were 0.74, and Guilt were 0.84. Alpha values for the HBM domains were: Perceived Susceptibility were 0.73, Perceived Severity were 0.85, Perceived Benefits with 0.92, Perceived Barriers were 0.78, Perceived Self-Efficacy (1) were 0.82, and Perceived Self-Efficacy (2) were 0.83. Then, for the dependent variables, BACE was 0.78 and SSOSH was 0.79.

See Table 4 for means, SD, Alphas for the mental health help-seeking survey scales.

Table 4

Means, SD, Alphas for Mental Health Help-Seeking Survey Scales, Subscales, and Items (N = 68)

Scale	# Items	Mean	SD	Cronbach's Alpha
Psychological Characteristics	3			0.81
Have you recently felt you couldn't overcome your difficulties		2.48	0.78	
Have you recently been feeling unhappy and depressed?		2.50	0.83	
Have you recently been losing confidence in yourself?		2.56	0.84	
Acculturation Challenges:	13			
Social Isolation	2			0.78
I am treated differently in social situations.		2.93	1.05	
Some people ostracize me.		2.53	1.08	
Threats to Cultural Identity	3			0.87
I am losing my ethnic identity.		2.54	1.23	
I feel lost for being unable to find my roots in this society.		2.60	1.21	
I am treated differently because of my race.		2.64	1.23	
Homesickness	2			0.71
I feel sad leaving my relatives behind.		3.39	1.28	
I feel sad living in these unfamiliar surroundings.		2.81	1.14	
Communication Problems	2			0.87
I feel nervous to communicate in English.		2.23	1.30	
Due to language difficulties, I feel unable to express myself fully.		2.54	1.45	
Culture Shock	2			0.74
Multiple pressures are placed upon me after migration.		3.26	1.22	
I feel uncomfortable adjusting to new foods.		2.41	1.28	

Table 4 (continued)

Scale	# Items	Mean	SD	Cronbach's Alpha
Guilt	2			0.84
I feel guilty when I think that I am better off here but my people still suffer.		3.15	1.35	
I feel guilty that I am living a different lifestyle.		2.86	1.35	
Health Belief Model Constructs:	18			
Perceived Susceptibility	2			0.73
I am concerned about my risk of experiencing a mental health problem.		3.42	1.12	
When I think about mental health problems, I am unable to relax.		3.11	1.16	
Perceived Severity	4			0.85
Having a mental health problem would change my feelings about myself.		3.47	1.15	
Having a mental health problem would result in serious consequences.		3.32	1.10	
Having a mental health problem would make completing daily activities more difficult.		3.77	0.96	
Having a mental health problem would make completing daily activities more difficult.		3.05	0.92	
Perceived Benefits	3			0.92
Therapy would provide me with an environment where I could open up emotionally.		3.73	1.05	
Going to therapy can reduce the symptoms of a mental health problem.		3.73	1.01	
Going to therapy can help me cope with a mental health problem.		3.43	1.10	
Perceived Barriers	6			0.78
I wouldn't want anyone to know if I was going to therapy.		2.97	1.23	
I would prefer to get help from a family member or friend rather than a therapist.		2.59	1.24	

Table 4 (continued)

Scale	# Items	Mean	SD	Cronbach's Alpha
Perceived Barriers (continued)				
Going to therapy means I'm not strong enough to deal with a mental health problem myself.		2.23	1.22	
A mental health problem wouldn't bother me enough to get therapy.		2.63	1.13	
I'm embarrassed to talk about a mental health problem with a therapist.		2.48	1.28	
My family would think less of me if I went to therapy for a mental health problem.		2.92	1.35	
Perceived Self-efficacy (1)	3			0.82
I am willing to open up to a therapist about a mental health problem.		3.81	1.13	
I am confident that I could make it to regular therapy appointments.		3.41	1.18	
With therapy, I am capable of making the changes necessary to improve how I feel.		3.49	1.03	
Perceived self-efficacy (SE-SMHC)	3			0.83
Find a place to get mental health treatment (0 no confidence -10 confidence)		6.18	2.61	
Be able to follow the treatment recommendations made by the staff (0 no confidence -10 confidence)		6.34	2.36	
Cope well with the consequences of seeking care (for example, treatments, tests, hospitalizations) (0 no confidence -10 confidence)		5.95	2.50	
Barriers to Accessing Mental Care (BACE)	6			0.78
Being unsure where to go to get professional care.		3.13	1.23	
Being unhappy with the available services.		3.35	1.12	
Preferring alternative forms of care (e.g. spiritual care, non-Western healing/medicine, complementary therapies).		2.94	1.21	
Not being able to afford the financial costs involved.		3.82	1.23	

Table 4 (continued)

Scale	# Items	Mean	SD	Cronbach's Alpha
BACE (continued)				
Professionals from my own ethnic or cultural group not being available.		3.49	1.24	
Thinking appointments take too much time or inconvenient.		3.31	1.25	
Self-Stigma of Seeking Mental Health Help	3			0.79
My self-esteem would increase if I talked to a therapist.		2.57	1.03	
If I went to a therapist, I would be less satisfied with myself.		2.31	1.01	
I would feel worse about myself if I could not solve my own problems.		3.32	1.27	

Results for Research Question 3

What are the perceived benefits and perceived barriers to seeking out mental health care among Southeast Asian international students?

Descriptive Statistics of Perceived Benefits & Perceived Barriers

Perceived Benefits (Q3) was assessed using three questions from the MHBMA scale, created by Greene (2018). When asked if participants saw therapy as providing an environment to open up emotionally, 71.40% (n = 127) of respondents (N = 178) strongly agreed (19.70%, n = 35) or agreed (51.70%, n = 92) with the statement, while 11.20% (n = 20) strong disagreed (6.70% (n = 12) or disagreed (4.50%, n = 8) with viewing therapy in that beneficial nature. Second, when asked if participants believed that going to therapy can reduce mental health symptoms, 71.40% (n = 127) of respondents (N = 178) strongly agreed (16.90%, n = 30) or agreed (54.50%, n = 97) with the statement, while 10.10% (n = 18) strongly disagreed (6.70%, n = 12) or disagreed (3.4%, n = 6) with seeing this benefit. Lastly, when asked if going to therapy could help participants cope with their mental health problems, 49.10% (n = 87) of respondents

(N = 177) strongly agreed (17.5%, n = 31) or agreed (31.50%, n = 56) with this statement, while 15.20% (n = 27) strongly disagreed (7.90%, n = 14) or disagreed (7.30%, n = 13) with these coping benefits.

Perceived Barriers (Q3) was first assessed using six questions from the validated MHBMA scale, created by Greene (2018). When asked if participants would not want people knowing they were going to therapy, 38.20% (n = 68) of respondents (N = 176) strongly agreed (11.20%, n = 20) or agreed (27.00%, n = 48) with the statement, while 40.40% (n = 72) strongly disagreed (12.90%, n = 23) or disagreed (27.50%, n = 49) and would like others to know. Second, when asked of their preference for seeking help from a family member or friend instead of seeing a therapist, 26.40% (n = 47) strongly agreed (16.70%, n = 12) or agreed (19.70%, n = 35), while 51.10% (n = 91) strongly disagreed (23.60%, n = 42) or disagreed (27.50%, n = 49) and preferred to go see a therapist for mental health help. Participants were also asked if they believed going to therapy was a sign of weakness and pointed to their inability to deal with mental health problems on their own; results showed 20.20% (n = 36) of respondents (N = 176) reported they strongly agreed (5.60%, n = 10) or agreed (14.60%, n = 26), while the majority (69.10%, n = 123) strongly disagreed (33.10%, n = 59) or disagreed (36.00%, n = 64) with the statement. When asked if experiencing a mental health problem would not bother them enough to seek therapy, 26.40% (n = 47) of respondents (N = 177) strongly agreed (3.40%, n = 6) or agreed (23.00%, n = 41), while 50.00% (n = 89) strongly disagreed (18.50%, n = 33) or disagreed (31.50%, n = 56) with the statement. Furthermore, when asked if talking about their mental health problems with a therapist would be embarrassing, 25.30% (n = 45) of respondents (N = 176) strongly agreed (7.90%, n = 14) or agreed (17.40%, n = 31), while 58.50% (n = 104) strongly disagreed (27.00%, n = 48) or disagreed (31.50%, n = 56) with the statement. Lastly,

when asked if going to therapy would make them perceive their families viewed them less, 41.10% (n = 73) of respondents (N = 177) strongly agreed (12.40%, n = 22) or agreed (28.70%, n = 51), while 43.20% (n = 77) strongly disagreed (20.20%, n = 36) or disagreed (23.00%, n = 41) with the statement.

Results for Research Question 4

What are specific stigmas (e.g., cultural or religious) regarding mental health that Southeast Asian international students hold, and how do these beliefs and attitudes influence their help-seeking intentions?

Descriptive Statistics of the Likelihood of Seeking Help for Mental Health Concerns & Self-Stigma (SSOSH)

The **Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) scale (Q4)** (Dependent Variable 1). The average score was 3.02 (SD ± 0.79), indicating a moderate level of "self-stigma associated with seeking therapy" among Southeast Asian international students for our second outcome variable (Vogel et al., 2013, p. 303). Scores ranged from 1 to 5, where 1 was for strongly disagree and 5 was strongly agree.

When asked if their self-esteem would increase if Southeast Asian international students spoke to a therapist, 16% (n = 28) of participants (N = 178) strongly agreed (6.3%, n = 11) or agreed (9.70%, n = 17) with this statement, while the majority, 52.80% (n = 93) of participants (N = 178) strongly disagreed (12.50%, n = 22) or disagreed (40.30%, n = 71). In the second question to measure self-stigma associated with seeking out mental health, participants were asked if they would feel less satisfied about themselves if they saw a therapist, 15.90% (n = 33) of participants (N = 178) strongly agreed (2.80%, n = 5) or agreed (13.10%, n = 28), while 68.80% (n = 121) strongly disagreed (18.80%, n = 33) or disagreed (50.0%, n = 88). Lastly,

when asked if seeing a therapist would make them feel worse about themselves and their inability to solve their own problems, 56.80% (n = 100) of participants (N = 178) strongly agreed (17.0%, n = 30) or agreed (56.80%, n = 70) with the statement, while 31.30% (n = 55) strongly disagreed (10.80%, n = 19) or disagreed (20.50%, n = 36).

Results for Research Question 5

What are specific barriers preventing Southeast Asian international students from getting mental health care?

Descriptive Statistics of Barriers to Accessing Care (BACE)

The **Barriers to Access to Care Evaluation (BACE) scale (Q5)** (Dependent Variable 2). The mean score was 3.34 (SD ± 0.84), indicating a moderate number of barriers "to access to mental health care" among our Southeast Asian international student's population for our first outcome variable (Clement, 2012, p. 2). Scores ranged from 1 to 5, where 1 was for strongly disagree and 5 was strongly agree. When asked if participants were unhappy with the available services, approximately half, 50.80% (n = 100) of the students (N = 178) strongly agreed (14.10%, n = 25) or agreed (n = 36.70%, n = 65), while 24.70% (n = 44) strong disagreed (7.30%, n = 13) or disagreed (17.40%. n = 31) with the statement. When asked if participants preferred alternative forms of care (spiritual care, non-Western healing/medicine, complementary therapies), 34.90% (n = 61) of our students (N = 178) strongly agreed (10.30%, n = 18) or agreed (24.60%, n = 43), while 39.50% (n = 63) of participants strongly disagreed (14.60%, n = 26) or disagreed (24.60%, n = 37). When asked if being unable to afford the financial costs involved, 69.50% (n = 123) strongly agreed (36.20%, n = 64) or agreed (33.30%, n = 59), while 18.60% (n = 33) strongly disagreed (7.90%, n = 14) or disagreed (10.70%, n = 19). When asked if not available professional from their own ethnic or

cultural group having was a barrier, 57.10% (n = 101) of participants (N = 178) strongly agreed (23.20%, n = 41) or agreed (33.90%, n = 60) with the statement, while 24.70% (n = 44) strongly disagreed (19.0%, n = 16) or disagreed (15.60, n = 28). When asked if they thought appointments took too much or were inconvenient, 47.50% (n = 84) of the participants (N = 178) strongly agreed (20.90%, n = 37) or agreed (26.60, n = 47) with the statement, while 29.90% (n = 53) strongly disagreed (9.60%, n = 17) or disagreed (20.30%, n = 36).

Analyses of the Likelihood of Seeking Help for Mental Health Concerns

In this section, the predictors of barriers to accessing mental health care (BACE) and self-stigma associated with seeking help (SSOSH), our two dependent variables, for mental health will be explored. We will determine which of following factors influence these outcomes: (a) demographics, (b) general health, (c) acculturative stress, (d) psychological characteristics, (e) perceived susceptibility, (f) perceived severity, (g) perceived benefits, and (h) self-efficacy.

Correlation Testing: Pearson Correlation Coefficients for BACE

Results for Research Question 6

What is the relationship between the barriers to accessing mental health care (BACE) across demographic characteristics and the Health Belief Model (HBM) construct factors?

To determine the relationship between BACE across demographic characteristics and HBM construct factors (Q6), Pearson Correlation Coefficients were calculated below.

Pearson correlation coefficients were calculated to assess the relationships between barriers to accessing mental health care (BACE), self-stigma of help-seeking behaviors (SSOSH), and predicting variables including demographic factors, perceived threats (susceptibility and severity), the role of self-efficacy, and psychological and acculturation factors. Given the continuous nature of the data, Pearson correlation coefficients were used to

understand the likelihood of mental health behaviors through the Health Belief Model (HBM) constructs. The first section reports the results for Pearson correlation coefficients for significant relationships found between BACE, perceived threats (susceptibility and severity), self-efficacy, and psychological and acculturation factors.

BACE and Perceived Susceptibility and Fears: A Pearson correlation coefficient was calculated to examine the relationship between concerns about the risk of experiencing mental health and perceived barriers to accessing mental health care. There was a moderate positive correlation between having significant concerns surrounding the possibility of having mental health problems and barriers to seeking mental health help, $r(175) = .43$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the inability to relax when thinking about mental health problems and perceived barriers to seeking mental health care. There was a moderate positive association between not being able to relax and barriers to accessing mental health care, $r(175) = .39$, $p < .001$.

BACE and Perceived Severity: A Pearson correlation coefficient was calculated to examine the relationship between the belief that having a mental health problem would change self-perception and feelings and the barriers to seeking mental health support. There was a significant moderate positive relationship between changes in self-perception and barriers to accessing mental health care, $r(175) = .33$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that experiencing a mental health condition would lead to serious consequences and the barriers preventing them from accessing mental health help. There was a significant moderate positive relationship between the serious consequences of mental health conditions and barriers to accessing mental health care, $r(175) = .31$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that experiencing a mental health condition would make completing daily life activities more difficult and the barriers preventing them from seeking mental health care. There was a significant moderate positive relationship between the perceived belief that experiencing mental health would make daily activities more difficult to complete and the barriers to seeking out mental health care, $r(175) = .40$, $p < .001$.

BACE and Perceived Benefits: A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that going to therapy would help foster an opening environment to share their emotions and barriers to accessing mental health care. There was a moderate positive association between the belief in therapy's emotional benefits and opening environment and barriers to accessing mental health care, $r(174) = .31$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the benefits of going to therapy would reduce the symptoms of mental health problems and the barriers to receiving mental health care. There was a moderate positive association between going to therapy to reduce experiencing symptoms of mental health problems and barriers that stand in the way of accessing mental health care, $r (173) = .33$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the benefits of going to therapy to help cope with mental health problems and the barriers to seeking mental health help. There was a moderate positive association between the coping relief gained from going to therapy and barriers to accessing mental health care, $r (175) = .26$, $p < .001$.

BACE and Perceived Barriers: A Pearson correlation coefficient was calculated to examine the relationship between privacy concerns of not wanting others to know of therapy attendance and the barriers to seeking out mental health help. There was a moderate positive

association between the concerns about going to therapy and perceived barriers to accessing mental health care, $r(175) = .34$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the preference of seeking alternative support from family and friends rather than seeing a therapist and perceived barriers to mental health care. There was a moderate positive association between the preference for family and friend support and perceived barriers to seeking mental health help, $r(174) = .29$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that not being strong enough to handle mental health issues independently is a sign of weakness and the barriers to seeking out mental health help. There was a moderate positive association between the self-perception of not being strong enough to overcome mental health problems independently and perceived barriers, $r(175) = .37$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that experiencing mental health issues would not be bothersome enough to seek out therapy and the perceived barriers to getting mental health help. There was a significant moderate positive relationship between being unbothered by mental health issues and perceived barriers, $r(175) = .35$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the embarrassment of talking about mental health problems with a therapist and the perceived barriers to seek out help. There was a significant moderate positive relationship between being embarrassed to talk to a therapist about mental health challenges and perceived barriers to help-seeking behaviors, $r(175) = .34$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that family would view them less favorably for seeking out therapy and perceived barriers to accessing mental health help. There was a significant moderate positive relationship between fearing their family's perception of them would lessen if they knew about them going to therapy and perceived barriers to help-seeking behaviors, $r(175) = .30$, $p < .001$.

BACE and Self-Efficacy: A Pearson correlation coefficient was calculated to examine the relationship between the perceived confidence of being capable of making changes to improve overall feelings and the perceived barriers to getting mental health help. There was a significant moderate positive relationship between self-efficacy level and perceived barriers to engaging in mental health help-seeking behaviors, $r(175) = .26$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the confidence level of finding a place to get mental health treatment and the perceived barriers preventing access to mental health help. There was a significant moderate positive relationship between self-efficacy level of finding care and perceived barriers to engaging in mental health help-seeking behaviors, $r(174) = -.31$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the confidence level of following treatment recommendations by mental health providers and barriers to accessing mental health care. There was a significant weak negative relationship between self-efficacy level in adhering to treatment recommendations and perceived barriers to engaging in mental health help-seeking behaviors, $r(174) = -.19$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the confidence level of coping well with the consequences of seeking mental health care (treatments, tests, hospitalizations) and the perceived barriers to getting help. There was a significant weak

negative relationship between confidently coping well with the reparations of getting help and perceived barriers to engaging in mental health help-seeking behaviors, r (175) = -.24, p < .001.

BACE and Self-Efficacy in Seeking Mental Health Care (SE-SMHC): A Pearson correlation coefficient was calculated to examine the relationship between the confidence level of being able to find a place to get mental health treatment and the perceived barriers to getting help. There was a significant weak negative relationship between identifying location of mental health treatment and perceived barriers to engaging in mental health help-seeking behaviors, r (174) = -.30, p = .00.

A Pearson correlation coefficient was calculated to examine the relationship between the confidence level of adhering to treatment suggestions by staff and perceived barriers to getting help. There was a significant weak negative relationship between being able to follow recommendations by staff and perceived barriers to engaging in mental health help-seeking behaviors, r (175) = -.19, p = .011.

A Pearson correlation coefficient was calculated to examine the relationship between being able to cope well with the repercussions of getting care (treatments, tests, hospitalizations) and the perceived barriers to getting help. There was a significant weak negative relationship between coping well with consequences of getting treated for mental health issues and perceived barriers to engaging in mental health help-seeking behaviors, r (175) = -.24, p = .001.

BACE and Acculturative Stress Challenges:

Social Isolation: A Pearson correlation coefficient was calculated to examine the relationship between being treated differently in social situations and the barriers to seeking out mental health care. There was a significant moderate positive relationship between social

isolation and perceived barriers to engaging in mental health help-seeking behaviors, r (174) = .33, p < .001.

A Pearson correlation coefficient was calculated to examine the relationship between being ostracized and perceived barriers to accessing mental health care. There was a significant moderate positive relationship between ostracization and perceived barriers to wanting to engage in mental health help-seeking behaviors, r (173) = .19, p = .01.

Threat to Cultural Identity: A Pearson correlation coefficient was calculated to examine the relationship between losing one's ethnic identity and the perceived barriers to seeking mental health care. There was a significant moderate positive relationship between ethnic identity loss and perceived barriers to engaging in mental health help-seeking behaviors, r (174) = .24, p = .001.

A Pearson correlation coefficient was calculated to examine the relationship between the threat to loss of cultural roots and the perceived barriers to seeking mental health care. There was a significant moderate positive relationship between the threat of cultural roots being lost in this society and perceived barriers to mental health care, r (174) = .28, p < .001.

A Pearson correlation coefficient was calculated to examine the relationship between experiencing different treatments due to racial identity and perceived barriers to mental health care. There was a significant moderate positive relationship between getting different treatments from others due to coming from a unique racial background and wanting to seek out mental health help, r (175) = .34, p < .001.

Homesickness: A Pearson correlation coefficient was calculated to evaluate the relationship between experiencing homesickness and feeling sad of leaving relatives behind and

perceived barriers to mental health care. There was a significant moderate positive relationship between homesickness and perceived barriers, $r\ (175) = .30$, $p < .001$.

A Pearson correlation coefficient was calculated to evaluate the relationship between experiencing sadness in living in unfamiliar surroundings and perceived barriers to mental health care. There was a significant moderate positive relationship between sadness of living in unfamiliar spaces and perceived barriers, $r\ (175) = .38$, $p < .001$.

Language Barriers: A Pearson correlation coefficient was calculated to evaluate the relationship between the nervousness of communicating in English and perceived barriers to seeking mental health care. There was a significant moderate positive relationship between language barriers and perceived challenges in accessing mental health help, $r\ (175) = .27$, $p < .001$.

A Pearson correlation coefficient was calculated to evaluate the relationship between the challenges of being able to express fully in English and perceived barriers to seeking mental health care. There was a significant moderate positive relationship between the significant language barrier and difficulties in seeking out mental health help, $r\ (175) = .37$, $p < .001$.

Culture Shock: A Pearson correlation coefficient was calculated to evaluate the relationship between culture shock and pressures after migrating and perceived barriers to mental health care. There was a significant strong positive relationship between culture shock and perceived barriers, $r\ (175) = .449$, $p < .001$.

A Pearson correlation coefficient was calculated to evaluate the relationship between the discomfort of adjusting to new foods and perceived barriers to accessing mental health care. There was a moderate positive relationship between adjusting to different foods and perceived barriers to accessing mental health help, $r\ (175) = .27$, $p < .001$.

Guilt: A Pearson correlation coefficient was calculated to evaluate the relationship between the perceived guilt of living a better life while others at home are suffering and perceived barriers to seeking mental health help. There was a significant strong positive relationship between guilt stemming from privilege and perceived barriers, $r\ (175) = .43$, $p < .001$.

A Pearson correlation coefficient was calculated to evaluate the relationship between the guilt of leading a different lifestyle and perceived barriers to mental health care. There was a significant strong positive relationship between guilt from newfound privilege of being an international student in the United States and perceived barriers, $r(175) = .41$, $p < .001$.

This second section of this correlation testing analysis reports the results for Pearson correlation coefficients for the significant relationships found between the self-stigma of help-seeking behaviors (SSOSH), perceived threats (susceptibility and severity), self-efficacy, and psychological and acculturation factors (social isolation, loss of cultural identity, homesickness, language barriers, culture shock, and guilt).

Table 5

Pearson Correlation Coefficients and Significant Variables Related to Likelihood of Seeking Mental Health Help

Associated Variables	Barriers to Access Mental Health Help (BACE) (n = 175)	Self-Stigma of Seeking Mental Health Help (SSOSH) (n = 176)
Psychological Characteristics: feeling not able to overcome difficulties		0.24**
Psychological Characteristics: losing confidence in self		0.16*
Perceived Susceptibility: fear of experiencing mental health risk	0.37**	0.43**

Table 5 (continued)

Associated Variables	Barriers to Access Mental Health Help (BACE) (n = 175)	Self-Stigma of Seeking Mental Health Help (SSOSH) (n = 176)
Perceived Susceptibility: unable to relax when thinking about mental health problem	0.38**	0.39**
Perceived Severity: experiencing mental health challenges would lead to serious consequences	0.30**	
Perceived Severity: change of self-perception for experiencing mental health issues	0.33**	0.45**
Perceived Severity: having mental health problems would make daily activities more difficult to complete	0.40**	0.43**
Perceived Benefits: therapy provides an opening environment to open up emotionally	0.31**	
Perceived Benefits: going to therapy will reduce mental health symptoms	0.33**	
Perceived Benefits: going to therapy will reduce mental health symptoms	0.33**	
Perceived Benefits: going to therapy helps cope with mental health problems	0.26	
Perceived Barriers: not wanting anyone to know about therapy	0.34**	0.52**
Perceived Barriers: preferring to get help from a family member or friend rather than a therapist	.29**	0.25**
Perceived Barriers: going to therapy is a sign of not being strong enough to deal with mental health problems	0.37**	0.41**

Table 5 (continued)

Associated Variables	Barriers to Access Mental Health Help (BACE) (n = 175)	Self-Stigma of Seeking Mental Health Help (SSOSH) (n = 176)
Perceived Barriers: being unbothered by problems enough to go to therapy	0.35**	0.28**
Perceived Barriers: family's perception would change if they knew about going to therapy	0.30**	0.40**
Self-Efficacy: willingness to open up to a therapist about a mental health problem		0.24**
Self-Efficacy: confident in making regular therapy appointments		0.17*
Self-Efficacy: being capable of making changes to improve feelings with therapy	0.26**	0.31**
Self-Efficacy in Seeking Mental Health Care (SE-SMHC): confidence in finding a place to get treated	-0.30**	
Self-Efficacy in Seeking Mental Health Care (SE-SMHC): capable of following treatment plan	-0.19*	
Self-Efficacy in Seeking Mental Health Care (SE-SMHC): coping well with the consequences of care	-0.24**	
Acculturative Stress: Social Isolation: being treated differently by others in social situations	0.33**	0.24*
Acculturative Stress: Social Isolation: being ostracized by others	0.19*	0.27*
Acculturative Stress: Threat to Cultural Identity: losing ethnic identity	0.24**	0.24**

Table 5 (continued)

Associated Variables	Barriers to Access Mental Health Help (BACE) (n = 175)	Self-Stigma of Seeking Mental Health Help (SSOSH) (n = 176)
Acculturative Stress: Threat to Cultural Identity: being lost of not finding roots	0.28**	0.26**
Acculturative Stress: Threat to Cultural Identity: being treated different due to race	0.34**	0.32**
Acculturative Stress: Homesickness: feeling sad from living in new surroundings	0.38**	0.36**
Acculturative Stress: Communication Problems: feeling nervous when speaking in English	0.27**	
Acculturative Stress: Communication Problems: not being able to express fully due to language difficulties	0.37*	0.16**
Acculturative Stress: Culture Shock: experiencing multiple pressures being placed upon them after migrating	0.45**	0.29**
Acculturative Stress: Culture Shock: uncomfortability when adjusting to new food	0.27**	0.30**
Acculturative Stress: Guilt: feeling guilty for being better off than those at home suffering	0.43**	0.32**
Acculturative Stress: Guilt: feeling guilty for leading a different life	0.41**	0.35**

Note. **p < 0.01 (2-tailed), *p < 0.05 (2-tailed)

Analysis of Variance (ANOVA) Findings for BACE

Results for Research Question 7

What are the significant differences in the barriers to accessing mental health care (BACE) scores based on the correlations with demographic characteristics and the HBM construct factors?

To assess the differences in BACE scores of significant correlations with demographic characteristics and HBM construct factors, ANOVA was conducted. (Q7)

BACE and Perceived Susceptibility and Fears: Significant differences in the Barriers to Access Care were found for the following variables: perceived risk of developing a mental health problem ($F(4, 170) = 14.79$, $\eta^2 = 0.26$, $p < .001$) and inability to relax regarding the possibility of having mental health problems ($F(4, 170) = 13.03$, $\eta^2 = 0.24$, $p < .001$).

BACE and Perceived Severity: Significant differences in the Barriers to Access Care were found for the following: change in self-perception ($F(4, 170) = 9.73$, $\eta^2 = 0.19$, $p < .001$), perceived seriousness of consequences of mental health problems ($F(4, 170) = 15.89$, $\eta^2 = 0.27$, $p < .001$), and difficulties completing daily activities ($F(4, 170) = 21.17$, $\eta^2 = 0.33$, $p < .001$).

BACE and Perceived Benefits: Significant differences in the Barriers to Access Care were found for the following: therapy providing an environment to open up emotionally ($F(4, 170) = 17.87$, $\eta^2 = 0.28$, $p < .001$), going to therapy reduces mental health problem(s) ($F(4, 170) = 20.10$, $\eta^2 = 0.32$, $p < .001$), and therapy helps with coping with mental health ($F(4, 170) = 13.07$, $\eta^2 = 0.24$, $p < .001$).

BACE and Perceived Barriers: Significant differences in the Barriers to Access Care were found for the following: concerns about people knowing about them going to therapy ($F(4, 170) = 15.23$, $\eta^2 = 0.26$, $p < .001$), seeking alternative support through family or friends rather than seeing a therapist ($F(4, 169) = 9.27$, $\eta^2 = 0.18$, $p = .02$), self-perceived sense of

weakness for going to therapy ($F(4, 170) = 7.58$, $\eta^2 = 0.15$, $p < .001$), not bothered by experiencing mental health issues ($F(4, 170) = 12.72$, $\eta^2 = 0.23$, $p = .001$), embarrassment talking about mental health problems with a therapist ($F(4, 170) = 6.18$, $\eta^2 = 0.13$, $p < .001$), and feel their family would perceive them negatively or less if they went to therapy ($F(4, 170) = 5.87$, $\eta^2 = 0.12$, $p < .001$).

BACE and Self-Efficacy: Significant differences in the Barriers to Access Care were found for the following: willingness to open up to a therapist regarding their mental health problem ($F(4, 170) = 10.17$, $\eta^2 = 0.19$, $p < .001$), being confident in their abilities to make regular therapy appointments ($F(4, 170) = 6.14$, $\eta^2 = 0.13$, $p < .001$), and having the capability to make the changes to improve feelings ($F(4, 170) = 12.30$, $\eta^2 = 0.22$, $p < .001$).

BACE and Self-Efficacy in Seeking Mental Health Care (SE-SMHC): Significant differences in the Barriers to Access Care were found for the following variables concerning self-efficacy in seeking out mental health care (SE-SMHC): finding a place to get treated for mental health problems ($F(9, 164) = 2.38$, $\eta^2 = 0.12$, $p = 0.01$), being able to adhere to treatment recommendations suggested by staff ($F(9, 165) = 1.90$, $\eta^2 = 0.09$, $p = 0.06$), and coping well with the consequences of getting mental health care ($F(10, 164) = 1.92$, $\eta^2 = 0.11$, $p = 0.05$).

BACE and Acculturative Stress (ASSIS): Significant differences in the Barriers to Access Care were found for the following potential factors leading to acculturative stress due to social isolation, threat to cultural identity, homesickness, communication problems, culture shock, and guilt. Specifically, the following were statistically significant with BACE and acculturative stress: being treated differently in social situations ($F(4, 169) = 8.87$, $\eta^2 = 0.17$, $p < 0.001$), being ostracized by others ($F(4, 168) = 3.28$, $\eta^2 = 0.07$, $p = 0.01$), losing ethnic identity ($F(4, 169) = 5.59$, $\eta^2 = 0.12$, $p < 0.001$), feeling lost due to not being able to find roots in

society ($F(4, 169) = 5.83$, $\eta^2 = 0.12$, $p < 0.001$), getting treated differently due to race ($F(4, 169) = 7.86$, $\eta^2 = 0.16$, $p < 0.001$), leaving behind relatives lead to feeling sad ($F(4, 169) = 7.86$, $\eta^2 = 0.16$, $p < 0.001$), experiencing sadness from living in unfamiliar surroundings ($F(4, 170) = 8.63$, $\eta^2 = 0.17$, $p < 0.001$), feeling nervous from having to communicate in English ($F(4, 170) = 4.26$, $\eta^2 = 0.09$, $p = 0.003$, not being able to express fully due to language barrier ($F(4, 170) = 8.29$, $\eta^2 = 0.16$, $p < 0.001$), having multiple pressures being placed upon them after migration ($F(4, 170) = 12.8$, $\eta^2 = 0.23$, $p < 0.001$), finding it uncomfortable to adjust to new foods ($F(4, 170) = 4.19$, $\eta^2 = 0.09$, $p = 0.003$), feeling guilty when thinking they are better off but people at home are still suffering ($F(4, 170) = 9.62$, $\eta^2 = 0.19$, $p < 0.001$), and having guilt due to leading a different lifestyle ($F(4, 170) = 9.57$, $\eta^2 = 0.18$, $p < 0.001$).

Table 6 presents the analysis of variance for BACE, HBM constructs, self-efficacy, and acculturative stress.

Table 6

Analysis of Variance: Barriers to Access Care (BACE), Health Belief Model Constructs, Self-Efficacy, and Acculturative Stress

	df	*F*	η^2	p
Perceived Susceptibility & Fears:				
Risk of mental health problem	4, 170	14.79	0.26	.001***
Unable to relax	4, 170	13.03	0.24	.001***
Perceived Severity:				
Change in self-perception and feelings	4,170	9.73	0.19	.001***
Serious consequences of mental health problem	4, 170	15.89	0.27	.001***
Difficulties completing daily activities	3, 140	21.17	0.33	.001***
Perceived Benefits:				
Therapy provides emotional support	4, 169	17.87	0.28	.001***
Therapy helps reduce mental health problems	4, 168	20.1	0.32	.001***
Therapy can help cope with mental health	4,170	13.07	0.24	.001***

Table 6 (continued)

	df	*F*	η^2	p
Culture Shock: Feeling pressured after migrating	4,170	12.8	0.23	.001***
Perceived Barriers:				
Not wanting anyone to know about therapy	4, 170	15.23	0.26	.001***
Prefer family friends for support over therapy	4, 169	9.27	0.18	0.02*
Perceived self-weakness for going to therapy	4, 170	7.58	0.15	.001**
Unbothered by mental health problems	4,170	12.72	0.23	.001**
Embarrassment from going to therapy	4,170	6.18	0.13	.001***
Family perception would change and view less/negatively	4,170	5.87	0.12	.001***
Self-Efficacy:				
Willingness to open up to a therapist	4,170	10.17	0.19	.001***
Confidence in making regular therapy appointments	4,170	6.14	0.13	.001***
Therapy helps make the changes necessary to improve feelings	4,170	12.30	0.22	.001***
Self-Efficacy in Seeking Mental Health Care:				
Confidence in finding treatment	9, 164	2.38	0.12	0.02*
Follow treatment recommendations	9, 165	1.90	0.09	0.06
Cope well with consequences of seeking care	10, 164	1.92	0.11	0.05*
Acculturative Stress:				
Social Isolation: Different treatment in social situations	4, 169	8.87	0.17	.001***
Social Isolation: Ostracized by others	4, 168	3.28	0.07	0.01**
Threat to Cultural Identity: Losing ethnic identity	4,169	5.59	0.12	.001***
Threat to Cultural Identity: Feeling lost for not being able to find roots	4,169	5.83	0.12	.001***
Threat to Cultural Identity: Being treated differently due to race	4,169	7.86	0.16	.001***
Homesickness: Feeling sad from leaving behind relatives	4,169	6.69	0.14	.001***
Homesickness: Feeling sad from unfamiliar surroundings	4,170	8.63	0.17	.001***

Table 6 (continued)

	df	*F*	η^2	p
Communication Problems: Nervousness communicating in English	4,170	4.26	0.09	0.003**
Communication Problems: Language barrier from not being able to fully express	4,170	8.29	0.16	.001***
Culture Shock: Feeling pressured after migrating	4,170	12.8	0.23	.001***
Culture Shock: Uncomfortable from adjusting to new foods	4,170	4.19	0.09	0.00**
Guilt: Feeling guilt from being better off and thinking people are suffering at home	4,170	9.62	0.19	.001***
Guilt: Feeling guilty for leading a different lifestyle	4,170	9.57	0.18	.001***

*p < .05, **p < .01, ***p < .001

Hierarchical Linear Regression Findings for BACE

Results for Research Question 8

How do various sets of demographic characteristics and HBM construct factors contribute to the variance in the barriers to accessing mental health care (BACE) model?

To examine how different sets of demographic characteristics and HBM construct factors contribute to the variance in the BACE model, (Q8) hierarchical linear regression analyses were conducted.

The first block included modifying factors consisting of demographics including general health baseline assessment, acculturation stress factors, and psychological characteristics with predicting barriers to accessing mental health care (BACE) as the dependent variable. In block two, the variables comprising the HBM construct of perceived susceptibility and fears were added to examine its unique contributions in explaining the barriers to accessing mental health care. The same steps were repeated for the remaining blocks in the model. In block three, variables of the HBM construct of perceived severity were included as another predictor

variable. For the fourth block, the same variables from the previous three blocks were included, and the variables for the HBM construct of perceived benefits was added as another predictor variable. In the fifth block, all predictors that were previously found in the other four blocks were added, and perceived barriers were included. In the last block, all predictors remained in the model, and the last HBM construct of self-efficacy was added. The sixth block identified the most significant barriers that impacted the access to mental health care (BACE) in the study population.

The significant barriers to accessing mental health care were acculturation stress, particularly the threat to cultural identity, language difficulties, culture shock, guilt, and four of the HBM constructs (perceived benefits, perceived barriers, and self-efficacy). The findings showed that acculturation stress factors were significantly associated with the perceived barriers to accessing mental health care, $F(5,147) = 8.80$, $p < .001$, $R^2 = .23$. Here, I identified that the threat to cultural identity, language problems, culture shock, and guilt was significant barriers in accessing mental care. To build on the initial model, the second one added the perceived susceptibility and fears, an HBM construct, ($F(6,168) = 18.00$, $p < .001$, $R^2 = 0.39$), which saw significant improvement from the first model $\Delta F(1,168) = 9.20$, $p < .001$, $\Delta R^2 = .16$.

The third model extended the previous two models with all the factors previously included and added the HBM construct of perceived severity of mental health issues making daily activities more difficult to complete, $F(7,136) = 14.34$, $p < .001$, $R^2 = .43$. Similar to the first two models, perceived severity was added to predict the barriers to accessing mental health care, $\Delta F(1,136) = -3.66$, $p < .001$, $\Delta R^2 = .04$.

The fourth block sought to understand the role of perceived benefits in predicting the barriers to accessing mental health care. The fourth model was significant, ($F(8,165) = 14.97$,

$p < .001$, $R^2 = .42$) and saw a variance of 42.1%, with an adjusted R^2 of 0.39. The fifth block ($F(10,163) = 17.47$, $p < .001$, $R^2 = 0.52$) sought to understand the role of perceived barriers in predicting the barriers to accessing mental health care. It showed continued improvement from the previous model, $\Delta F(2,163) = 2.50$, $p < .001$, $\Delta R^2 = 0.10$.

Lastly, in the sixth block ($F(13,160) = 14.17$, $p < .001$, $R^2 = .54$), I sought to understand the role of self-efficacy as a potential barrier to accessing mental health care (BACE). This last and final model indicated that the barriers to BACE were being treated differently because of race, language difficulties with communicating and expressing, experiencing multiple pressures after migration, feeling guilt for leading a different lifestyle, going to therapy does not provide an environment to open up emotionally, seeking therapy indicates weakness, therapy is not necessary, and going to therapy does not improve well-being.

Table 7 presents each of the six blocks that examined the significant predictors of barriers to accessing mental health care (BACE) and self-stigma of seeking out help (SSOSH).

Table 7

Hierarchical Linear Regression Results for BACE

Model/Variables	B	SE of B	P
Model 1			
Acculturative Stress (Threat to Cultural Identity): being treated differently because of race	0.12	0.05	0.01*
Acculturative Stress (Communication Problems): language difficulties and not being able to express fully	0.12	0.04	0.001**
Acculturative Stress (Culture Shock): experiencing multiple pressures after migration	0.10	0.05	0.04*
Acculturative Stress (Guilt): Feeling guilty for leading different lifestyle	0.10	0.04	0.02*
Model 2			
Psychological Characteristics: Recent loss in self confidence	-0.17	0.07	0.01*

Acculturative Stress (Threat to Cultural Identity): being treated differently because of race	0.13	0.05	0.001**
Acculturative Stress (Communication Problems): language difficulties and not being able to express fully	0.12	0.04	0.001**
Acculturative Stress (Culture Shock): experiencing multiple pressures after migration	0.10	0.05	0.04*
Acculturative Stress: Feeling guilty for leading different lifestyle	0.10	0.04	0.02*
Health Belief Model Construct: (Perceived Susceptibility and Fears) concerned about risk of experiencing a mental health problem	0.14	0.05	0.01*
Model 3			
Psychological Characteristics: Recent loss in self confidence	-0.17	0.07	0.02*
Acculturative Stress (Threat to Cultural Identity): being treated differently because of race	0.13	0.05	0.02*
Acculturative Stress (Communication Problems): language difficulties and not being able to express fully	0.12	0.04	0.003**
Health Belief Model Construct (Perceived Susceptibility and Fears): concerned about risk of experiencing a mental health problem	0.15	0.06	0.02*
Health Belief Model Construct (Perceived Severity): Experiencing mental health problems would make completing daily activities more difficult	0.19	0.07	0.01*
Model 4			
Psychological Characteristics: Recent loss in self confidence	-0.15	0.07	0.03*
Acculturative Stress (Threat to Cultural Identity): being treated differently because of race	0.12	0.05	0.01*
Acculturative Stress (Communication Problems): language difficulties and not being able to express fully	0.16	0.04	0.00**
Acculturative Stress (Culture Shock): experiencing multiple pressures after migration	0.13	0.05	0.01*
Health Belief Model Construct (Perceived Severity): Experiencing mental health problems would make completing daily activities more difficult	0.13	0.07	0.05*

Table 7 (continued)

Model/Variables	B	SE of B	P
Model 5			
Acculturative Stress (Threat to Cultural Identity): being treated differently because of race	0.10	0.04	0.04*
Acculturative Stress (Communication Problems): language difficulties and not being able to express fully	0.11	0.03	0.00**
Acculturative Stress (Culture Shock): experiencing multiple pressures after migration	0.11	0.05	0.02*
Acculturative Stress (Guilt): Feeling guilty for leading different lifestyle	0.08	0.04	0.05*
Health Belief Model Construct (Perceived Benefits): going to therapy provides an environment to open up emotionally	0.17	0.05	0.00**
Health Belief Model Construct (Perceived Barriers): going to therapy is a sign of weakness for not being able to deal with mental health problems	0.13	0.04	0.00**
Health Belief Model Construct (Perceived Barriers): unbothered by mental health problems enough to seek out therapy	0.17	0.05	0.00**
Model 6			
Acculturative Stress (Threat to Cultural Identity): being treated differently because of race	0.01	0.04	0.02*
Acculturative Stress (Communication Problems): language difficulties and not being able to express fully	0.1	0.03	0.00**
Acculturative Stress (Culture Shock): experiencing multiple pressures after migration	0.1	0.05	0.02*
Acculturative Stress (Guilt): Feeling guilty for leading different lifestyle	0.08	0.04	0.05*
Health Belief Model Construct (Perceived Benefits): going to therapy provides an environment to open up emotionally	0.17	0.07	0.02*
Health Belief Model Construct (Perceived Barriers): going to therapy is a sign of weakness for not being able to deal with mental health problems	0.12	0.04	0.00**

Table 7 (continued)

Model/Variables	B	SE of B	P
Health Belief Model Construct (Perceived Barriers): unbothered by mental health problems enough to seek out therapy	0.17	0.04	0.00**
Health Belief Model Construct (Self-Efficacy): going to therapy and being capable of making changes necessary to improve feelings	0.14	0.07	0.03*

Note. **p < 0.01 (2-tailed), *p < 0.05 (2-tailed)

Correlation Testing: Pearson Correlation Coefficients for SSOSH

Results for Research Question 9

What is the relationship between the self-stigma associated with seeking mental health help (SSOSH) across demographic characteristics and the HBM construct factors?

To determine the relationship between SSOSH across demographic characteristics and HBM construct factors, (Q9) Pearson Correlation Coefficient were calculated.

SSOSH and General Health

A Pearson correlation coefficient was calculated to examine the relationship between concerns about not being able to overcome difficulties recently and the self-stigma of help-seeking behaviors (SSOSH). There was a moderate positive correlation between feeling that they are unable to overcome recent challenges and the self-stigma of help-seeking behaviors (SSOSH), $r(176) = .24$, $p = .00$.

A Pearson correlation coefficient was calculated to examine the relationship between losing confidence in yourself (SSOSH). There was a moderate positive correlation between feeling that they are unable to overcome recent challenges and the self-stigma of help-seeking behaviors (SSOSH), $r(176) = .16$, $p = .00$.

Research Question 10: *What is the relationship between the self-stigma associated with seeking mental health help (SSOSH) across demographic characteristics and the Health Belief Model (HBM) construct factors?*

To determine the relationship between SSOSH across demographic characteristics and the HBM construct factors, Pearson Correlation Coefficients were calculated below.

SSOSH and Perceived Susceptibility and Fears: A Pearson correlation coefficient was calculated to examine the relationship between concerns about the risk of experiencing mental health and the self-stigma of help-seeking behaviors (SSOSH). There was a moderate positive correlation between having greater concerns regarding the potential susceptibility of having mental health problems and the self-stigma that can prevent engaging in mental health help behaviors, $r(175) = .43$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the inability to relax when thinking about mental health problems and the self-stigma of help-seeking behaviors (SSOSH). There was a moderate positive association between being unable to relax and self-stigma in seeking mental health help, $r(175) = .39$, $p < .001$.

SSOSH and Perceived Severity: A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that having a mental health problem would change the way individuals felt about and viewed themselves, and the self-stigma associated with seeking mental health help. There was a significant moderate positive relationship between changes in feelings and self-perception and higher self-stigma surrounding seeking out mental health care, $r(176) = .40$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that experiencing a mental health condition would have severe consequences

and the self-stigma associated with getting mental health support. There was a significant moderate positive relationship between the perceived belief that having mental health problems would result in serious consequences and self-stigma associated with seeking help, $r(176) = .32$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that having mental health problems would make completing daily life activities more difficult and the self-stigma associated with seeking mental health help. There was a significant moderate positive relationship between changes in self-perception and the self-stigma surrounding using mental health care, $r(176) = .43$, $p < .001$.

SSOSH and Perceived Benefits: A Pearson correlation coefficient was calculated to examine the relationship between the perceived benefits of therapy providing an opening environment to emotionally share their emotions and the self-stigma associated with seeking mental health help. There was a moderate positive association between being able to open up emotionally in therapy and having self-stigma surrounding getting mental health support, $r (175) = .37$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the perceived benefits of going to therapy would reduce the symptoms of mental health problems and self-stigma associated with seeking mental health help. There was a moderate positive association between going to therapy to reduce experiencing symptoms of mental health problems and the self-stigma associated with seeking mental health care, $r (174) = .38$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the benefits of going to therapy for coping well with mental health problems and the self-stigma associated with getting mental health help. There was a moderate positive association between

belief in therapy's benefits and coping relief and the self-stigma of reaching out for mental health help, $r(176) = .32$, $p < .001$.

SSOSH and Perceived Barriers: A Pearson correlation coefficient was calculated to examine the relationship between having privacy concerns of not wanting people to know about them going to therapy and the self-stigma of getting mental health help. There was a moderate positive association between the concerns about going to therapy and the self-stigma of getting mental health help, $r(175) = .46$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between wanting to get support from family and friends rather than seeing a therapist and the self-stigma associated with getting mental health care. There was a moderate positive association between the preference for seeking alternative support through family and friends and the self-stigma associated with wanting to get mental health help, $r(175) = .25$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that going to therapy was a sign of weakness for not being able to juggle mental health problems on their own and the self-stigma associated with seeking out help. There was a moderate positive association between the self-perception of not being strong enough to overcome mental health problems independently and the self-stigma associated with mental health seeking behaviors, $r(175) = .41$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that dealing with mental health problems would not be bothersome enough to seek out therapy and the self-stigma associated with getting mental health help. There was a significant moderate positive relationship between being unbothered by mental health issues and the self-stigma associated with help-seeking behaviors, $r(176) = .28$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between being embarrassed to talk about mental health problems with a therapist and the self-stigma associated with getting mental health. There was a significant moderate positive relationship between being embarrassed talking to a therapist about mental health issues and the self-stigma associated with help-seeking behaviors, $r\ (175) = .41$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the perceived belief that their family's perception of them would change if they knew about them going to therapy and the self-stigma associated with reaching out for mental health support. There was a significant moderate positive relationship between the belief that their family would perceive them less if they knew of them going to therapy for mental health issues and the self-stigma associated with help-seeking behaviors, $r\ (176) = .40$, $p < .001$.

SSOSH and Self-Efficacy: A Pearson correlation coefficient was calculated to examine the relationship between the willingness to open up to a therapist about mental health challenges and the self-stigma associated with seeking out help. There was a significant moderate positive relationship between being willing to open up to a therapist and the self-stigma associated with engaging in mental health help-seeking behaviors, $r\ (176) = .24$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the confidence of being able to attend regular therapy appointments and the self-stigma associated with seeking out mental health help. There was a significant moderate positive relationship between being willing to open up to a therapist and the self-stigma associated with engaging in mental health help-seeking behaviors, $r\ (176) = .17$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the confidence level that therapy would help make them make changes to improve how they feel and

the perceived self-stigma associated with seeking out mental health help. There was a significant moderate positive relationship between being confident in their abilities to make necessary changes to improve overall feelings with the help of therapy and the self-stigma associated with mental health help-seeking behaviors, $r\ (176) = .31$, $p < .001$.

SSOSH and Acculturative Stress Challenges:

Social Isolation: A Pearson correlation coefficient was calculated to examine the relationship between being treated differently in social situations and the self-stigma related to seeking mental health care. There was a significant moderate positive relationship between social isolation and the perceived stigma to engaging in mental health help-seeking behaviors, $r\ (175) = .24$, $p = .001$.

A Pearson correlation coefficient was calculated to examine the relationship between being ostracized by others and the self-stigma related to seeking mental health help. There was a significant moderate positive relationship between ostracization and the self-stigma related to engaging in mental health help-seeking behaviors, $r\ (174) = .27$, $p < .001$.

Threat to Cultural Identity: A Pearson correlation coefficient was calculated to examine the relationship between the loss of ethnic identity and the self-stigma associated with seeking mental health help. There was a significant moderate positive relationship between ethnic identity loss and the self-stigma associated with seeking out mental health help, $r\ (175) = .24$, $p = .001$.

A Pearson correlation coefficient was calculated to examine the relationship between the feeling lost due to not finding cultural roots in a new environment and the self-stigma associated with accessing mental health care. There was a significant moderate positive relationship

between the threat of cultural roots being lost in this society and perceived barriers to mental health care, $r(175) = .26$, $p < .001$.

A Pearson correlation coefficient was calculated to examine the relationship between being treated differently due to holding a certain racial identity and the perceived self-stigma associated with getting mental health help. There was a significant moderate positive relationship between getting different treatments due to having a unique racial identity and wanting to seek out mental health help, $r(175) = .32$, $p < .001$.

A Pearson correlation coefficient was calculated to evaluate the relationship between feeling homesick and sad from leaving relatives behind and the self-stigma associated with seeking mental health help. There was a significant moderate positive relationship between homesickness and the self-stigma associated with seeking out mental health support, $r(176) = .40$, $p < .001$.

Homesickness: A Pearson correlation coefficient was calculated to evaluate the relationship between the sad feeling of living in unfamiliar environments and the perceived stigma associated with seeking out mental health help. There was a significant moderate positive relationship between sadness of living in new spaces and the self-stigma associated with needing mental health help, $r(176) = .36$, $p < .001$.

A Pearson correlation coefficient was calculated to evaluate the relationship between the nervousness of speaking in English and the self-stigma associated with seeking mental health support. There was a significant moderate positive relationship between language barrier and self-stigma associated with wanting to get mental health help, $r(175) = .15$, $p = 0.05$.

A Pearson correlation coefficient was calculated to evaluate the relationship between the inability to express fully due to the language barrier and the perceived self-stigma associated

with needing mental health support. There was a significant moderate positive relationship between the lack of expression due to the significant language barrier and the self-stigma surrounding seeking out mental health help, $r(176) = .16$, $p = 0.04$.

A Pearson correlation coefficient was calculated to evaluate the relationship between culture shock and pressures after migrating and the self-stigma associated with getting mental health help. There was a significant strong positive relationship between culture shock and the perceived stigma surrounding seeking out mental health support, $r(176) = .29$, $p < .001$.

A Pearson correlation coefficient was calculated to evaluate the relationship between the discomfort of having to adjust to new foods and the self-stigma associated with accessing mental health resources and services. There was a moderate positive relationship between adjusting to different foods and the self-stigma associated with seeking out mental health help, $r(175) = .30$, $p < .001$.

A Pearson correlation coefficient was calculated to evaluate the relationship between feeling guilty of living a different lifestyle. There was a significant moderate positive relationship between guilt stemming from living a different lifestyle and the perceived self-stigma associated with getting mental health help, $r(176) = .35$, $p < .001$.

See Table 5 for Pearson correlation coefficients and significant variables related to seeking mental health help (SSOSH).

ANOVA Findings for SSOSH

Results for Research Question 10

What are the significant differences in the self-stigma associated with seeking mental health help (SSOSH) scores based on the correlations with demographic characteristics and the HBM construct factors?

To assess the differences in SSOSH scores of significant correlations with demographic

characteristics and the HBM construct factors, (Q10) ANOVA was conducted.

SSOSH and Perceived Susceptibility and Fears: Significant differences in the Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) were found for the following variables: experiencing risk of mental health issues ($F(4, 170) = 24.14$, $\eta^2 = 0.36$, $p < .001$) and being unable to relax regarding mental health problems ($F(4, 170) = 12.26$, $\eta^2 = 0.23$, $p < .001$).

SSOSH and Perceived Severity: Significant differences in the Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) were found for the following variables: having different feelings about oneself ($F(4, 171) = 15.18$, $\eta^2 = 0.25$, $p < .001$), serious consequences pertaining to mental health problems ($F(4, 171) = 17.57$, $\eta^2 = 0.29$, $p < .001$), and struggling to complete daily activities ($F(4, 171) = 24.09$, $\eta^2 = 0.36$, $p < .001$).

SSOSH and Perceived Benefits: Significant differences in the Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) were found for the following: therapy provides emotional support ($F(4, 170) = 14.82$, $\eta^2 = 0.26$, $p < .001$), going to therapy to reduce mental health issues ($F(4, 169) = 12.81$, $\eta^2 = 0.23$, $p < .001$), and therapy helps with coping with mental health challenges ($F(4, 171) = 12.91$, $\eta^2 = 0.23$, $p < .001$).

SSOSH and Perceived Barriers: Significant differences in the Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) were found for the following: nobody knowing about them going to therapy ($F(4, 170) = 17.33$, $\eta^2 = 0.29$, $p < .001$), prefer seeking support from family and friends over seeing a therapist ($F(4, 170) = 3.95$, $\eta^2 = 0.09$, $p = 0.004$), perceived self-weakness for going to therapy ($F(4, 170) = 9.8$, $\eta^2 = 0.19$, $p < .001$), not bothered enough about mental health issues ($F(4, 171) = 4.34$, $\eta^2 = 0.09$, $p = 0.002$), family's perceptions of them would view them negatively ($F(4, 171) = 9.44$, $\eta^2 = 0.18$, $p < .001$), and feeling embarrassed when talking about mental health issues with a therapist ($F(4, 171) = 9.06$, $\eta^2 = 0.18$, $p < .001$).

SSOSH and Self-Efficacy: Significant differences in the Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) were found for the following variables: willingness to open up to a therapist for a mental health problem ($F(4, 171) = 8.51$, $\eta^2 = 0.17$, $p < .001$), being confident in making therapy appointments regularly ($F(4, 171) = 8.51$, $\eta^2 = 0.17$, $p < .001$), and having the capability to make the changes to improve feelings ($F(4, 171) = 13.43$, $\eta^2 = 0.24$, $p < .001$).

SSOSH and Acculturative Stress (ASSIS): Significant differences in the Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) were found for the following potential factors leading to acculturative stress due to social isolation, threat to cultural identity, homesickness, communication problems, culture shock, and guilt. Specifically, the following were statistically significant with BACE and acculturative stress: being treated differently in social situations ($F(4, 170) = 9.22$, $\eta^2 = 0.18$, $p < 0.001$), being ostracized by others ($F(4, 169) = 4.66$, $\eta^2 = 0.10$, $p < 0.01$), losing ethnic identity ($F(4, 170) = 5.42$, $\eta^2 = 0.11$, $p < 0.001$), feeling lost due to not being able to find roots in society ($F(4, 170) = 5.71$, $\eta^2 = 0.12$, $p < 0.001$), getting treated differently due to race ($F(4, 171) = 6.54$, $\eta^2 = 0.13$, $p < 0.001$), leaving behind relatives lead to feeling sad ($F(4, 171) = 13.54$, $\eta^2 = 0.24$, $p < 0.001$), experiencing sadness from living in unfamiliar surroundings ($F(4, 171) = 9.68$, $\eta^2 = 0.18$, $p < 0.001$), feeling nervous from having to communicate in English ($F(4, 170) = 2.15$, $\eta^2 = 0.05$, $p = 0.08$, not being able to express fully due to language barrier ($F(4, 171) = 3.61$, $\eta^2 = 0.08$, $p = 0.01$), having multiple pressures being placed upon them after migration ($F(4, 171) = 17.22$, $\eta^2 = 0.23$, $p < 0.001$), finding it uncomfortable to adjust to new foods ($F(4, 171) = 4.47$, $\eta^2 = 0.10$, $p = 0.002$), feeling guilty when thinking they are better off but people at home are still suffering ($F(4, 171) = 7.35$,

$\eta^2 = 0.15$, $p < 0.001$), and having guilt due to leading a different lifestyle ($F(4, 171) = 6.62$, $\eta^2 = 0.13$, $p < 0.001$).

Table 8 presents the one-way analysis of variance for self-stigma, HBM constructs, self-efficacy, and acculturative stress.

Table 8

One-Way Analysis of Variance: Self-Stigma in Help-seeking Behaviors (SSOSH), Health Belief Model Constructs, Self-Efficacy, and Acculturative Stress

	df	*F*	η^2	p
Perceived Susceptibility and Fears:				
Risk of mental health problem	4, 170	24.14	0.36	.001***
Unable to relax	4, 170	12.26	0.23	.001***
Perceived Severity:				
Change in self-perception and feelings	4,170	15.18	0.25	.001***
Serious consequences of mental health problem	4, 171	17.57	0.29	.001***
Difficulties completing daily activities	4, 171	24.09	0.36	.001***
Perceived Benefits:				
Therapy provides emotional support	4, 170	14.82	0.26	.001***
Therapy helps reduce mental health problems	4, 169	12.81	0.23	.001***
Therapy can help cope with mental health	4,171	12.91	0.23	.001***
Perceived Barriers:				
Not wanting anyone to know about therapy	4, 170	17.33	0.29	.001***
Prefer family friends for support over therapy	4, 170	3.95	0.09	0.004**
Perceived self-weakness for going to therapy	4, 170	9.80	0.19	.001**
Unbothered by mental health problems	4,171	4.34	0.09	0.002
Embarrassment from going to therapy	4,170	9.06	0.18	.001***
Family perception would change and view less/negatively	4,171	9.44	0.18	.001***
Self-Efficacy:				
Willingness to open up to a therapist	4,171	8.51	0.17	.001***
Confidence in making regular therapy appointments	4,171	8.78	0.17	.001***
Therapy helps make the changes necessary to improve feelings	4, 171	12.30	0.22	.001***
Self-Efficacy in Seeking Mental Health Care				
Confidence in finding treatment	9, 165	1.38	0.07	0.20
Follow treatment recommendations	9, 166	0.71	0.04	0.70
Cope well with consequences of seeking care	10, 164	1.92	0.11	0.05*

Table 8 (continued)

	df	*F*	η^2	p
Acculturative Stress				
Social Isolation: Different treatment in social situations	4, 170	9.22	0.18	.001***
Social Isolation: Ostracized by others	4, 169	4.66	0.10	0.01**
Threat to Cultural Identity: Losing ethnic identity	4,170	5.42	0.11	.001***
Threat to Cultural Identity: Feeling lost for not being able to find roots	4,170	5.71	0.12	.001***
Threat to Cultural Identity: Being treated differently due to race	4,171	6.54	0.13	.001***
Homesickness: Feeling sad from leaving behind relatives	4,171	13.54	0.24	.001***
Homesickness: Feeling sad from unfamiliar surroundings	4,170	9.68	0.18	.001***
Communication Problems: Nervousness communicating in English	4,170	2.15	0.05	0.08
Communication Problems: Language barrier from not being able to fully express	4,171	3.61	0.08	0.01*
Culture Shock: Feeling pressured after migrating	4,171	7.22	0.14	0.001***
Culture Shock: Uncomfortable from adjusting to new foods	4,171	4.47	0.10	0.002**
Guilt: Feeling guilt from being better off and thinking people are suffering at home	4,171	7.35	0.15	
Guilt: Feeling guilty for leading a different lifestyle	4,171	6.62	0.13	.001***

*p < .05, **p < .01, ***p < .001

Hierarchical Linear Regression Findings for SSOSH

Results for Research Question 11

How do various sets of demographic characteristics and the HBM construct factors contribute to the variance in the self-stigma associated with seeking mental health help (SSOSH) model?

To examine how different sets of demographic characteristics and HBM construct factors contribute to the variance in the SSOSH model (Q11), hierarchical linear regression analyses were conducted.

A hierarchical linear regression was conducted in a backwards process to determine the models of best fit, with six blocks of variables (variables that comprise the HBM constructs) for

each of the dependent variables, barriers to accessing care (BACE). This process helped determine the variables that had the most predictive power on the Barriers to Accessing Care (BACE) and the Self-Stigma Associated with Seeking Mental Health (SSOSH). This statistical analysis allowed me to control for relevant factors including demographics, acculturative stress, stigma surrounding health beliefs, and other relevant predictors that impacted the barriers to accessing mental health care and the self-stigma associated with getting help in this study. The following sections present the variables included in each block, followed by the findings from the six blocks to understand the significant predictors of barriers to accessing mental health care (BACE) that hinder help-seeking behaviors.

The first block included modifying factors which consisted of demographics including the region of the school attended, general health baseline assessment, acculturation stress factors, and psychological characteristics with self-stigma associated with seeking mental health help as the dependent variable. In block two, the first HBM construct of perceived susceptibility and fears was introduced to examine its impacts on shaping self-stigma in seeking mental health care. Similar to how I set up the six models in BACE, I repeated the same steps for the remaining block. For block three, variables of the HBM construct of perceived severity were added as another predictor variable. In the fourth block, all the variables in block three remained, and I added variables for the HBM construct of perceived benefits to examine the effects of this predictor variable. In the fifth block, all predictors from the previous four blocks remained, and the variables from the HBM construct of perceived barriers were added. In the final sixth block, all potential predictors from the previous blocks remained in the model, and I added the remaining variables for the HBM construct of self-efficacy. The sixth block found the most

significant predictors that shaped the self-stigma of Southeast Asian international students in seeking mental health help (SSOSH).

The key predictors contributing to the self-stigma associated with seeking mental health care were the geographic region of school attendance, recent feelings of not being able to overcome mental health challenges, and three of the HBM constructs: perceived severity, perceived benefits, and perceived barriers.

In the first block, the significant predictors that shaped self-stigma in seeking mental health help were the recent feelings of not being able to overcome difficulties and acculturation stress. The recent struggles of not overcoming mental health problems were found to be a significant predictor contributing to the self-stigma associated with seeking mental health (B = 0.21, 95% CI [0.07, 0.36], p = 0.001). Additionally, the findings showed that acculturation stress factors were significantly associated with the self-stigma of seeking mental health care, $F(4,170) = 11.18$, $p = 0.001$, $R^2 = 0.21$. Here, I found that feeling uncomfortable with adjusting to new foods stemming from culture shock (B = 0.21, 95% CI [0.06, 0.24], p = 0.001) and the guilt over leading a different lifestyle were the acculturative stressors that shaped self-stigma (B = 0.16, 95% CI [0.08, 0.25], p = 0.00). In the second block, the variables from the first HBM construct of perceived susceptibility and fears was included, ($F(5,168) = 11.66$, $p < .001$, $R^2 = 0.26$), which saw significant improvement from the first model, $\Delta F(1,168) = 11.35$, $p < 0.001$, $\Delta R^2 = 0.05$.

For the third block, the modifying factors from the previous two blocks were included, and I added the HBM construct of perceived severity to predict self-stigma associated with shaping mental health help-seeking behaviors, $F(6,136) = 12.20$, $p < .001$, $R^2 = 0.35$. Specifically, I extended the first two blocks to include perceived severity, particularly to examine

whether experiencing mental health issues would make daily activities more difficult to complete and how it could be a significant predictor of self-stigma associated with seeking mental health help in the third block (B = 0.26, 95% CI [0.11, 0.40], $p < .001$). The addition of perceived severity also predicted the self-stigma associated with seeking mental health help. For the first time in these models, geography of school attendance was a significant predictor in contributing to the internalized self-stigma of seeking out mental health help (B = 0.11, 95% CI [0.02, 0.20], $p = 0.02$). Overall, the third block saw continued improvement from the previous two blocks, $\Delta F(1,136) = 18.83$, $p < 0.001$, $\Delta R^2 = 0.09$.

In the fourth block, I examined the role of perceived benefits in predicting the self-stigma associated seeking mental health help. Results showed that the fourth block was significant, ($F(7,134) = 12.07$, $p < .001$, $R^2 = .39$). Marginal significance was observed in the psychological characteristics of the general health baseline of having recent feelings of not overcoming difficulties as a significant predictor of shaping self-stigma associated with seeking mental health help (B = 0.14, 95% CI [-0.004, 0.29], $p = 0.056$). Similarly, marginal significance was also found in the HBM construct of perceived susceptibility and fears, where concerns about the risk of experiencing a mental health problem were found to be a significant predictor in shaping the internalized self-stigma of seeking mental health help (B = 0.20, 95% CI [-0.003, 0.25], $p = 0.055$). The geography of school attendance remained a significant predictor in contributing to the internalized self-stigma of seeking out mental health help (B = 0.12, 95% CI [0.03, 0.21], $p = 0.01$). Overall, the fourth block, with the addition of the HBM construct of perceived benefits as a potential significant predictor of self-stigma associated with seeking mental health help, saw continued improvement from the previous three blocks, $\Delta F(1,134) = 8.79$, $p < 0.001$, $\Delta R^2 = 0.04$. The fifth block ($F(9,132) = 16.93$, $p < .001$, $R^2 = 0.54$) sought to understand the role of perceived

barriers in predicting the self-stigma associated with seeking out mental health help. I found that they not wanting people to know about their going to therapy was a significant predictor in shaping internalized self-stigma surrounding seeking out mental health help, (B = 0.21, 95% CI [0.12, 0.30], p = 0.00). Additionally, fearing that their family would perceive them less if they found out that they were going to therapy for mental health problems was found to be another strong predictor in shaping the self-stigma of seeking out help, (B = 0.13, 95% CI [0.04, 0.22], p = 0.00). Our fifth block with the addition of perceived barriers showed continued improvement from the previous fourth block, $\Delta F(2,132) = 4.86$, $p < .001$, $\Delta R^2 = 0.15$.

In the final sixth block, ($F(10,131) = 15.12$, $p<.001$, $R^2= .54$), I wanted to examine the role of self-efficacy as a predictor of contributing to self-stigma in seeking out mental health, which was found to not be significant in predicting the dependent variable. Self-efficacy was not significant in this block. This last block, however, indicated that other significant predictors shaped the participants' self-stigma associated with mental health help-seeking. Those variables included the region of school attendance, recent feelings of not being able to overcome difficulties, and the variables of the HBM constructs of perceived severity, perceived benefits, and perceived barriers. Specifically, the region where Southeast Asian international students in this study attended school played a significant role in influencing their self-stigma surrounding mental health uptake (B = 0.10, 95% CI [0.02, 0.18], p = 0.02). Additionally, the psychological characteristic of having recent feelings of not being able to overcome struggles was another predictor of self-stigma associated with seeking mental health help (B = 0.19, 95% CI [0.05, 0.32], p = 0.01). The HBM construct of perceived severity, particularly acknowledging that having a mental health problem would hinder daily activities and make them more difficult to complete was another predictor in influencing the self-stigma associated with seeking mental

health care (B = 0.17, 95% CI [0.05, 0.30], p = 0.01). On the other hand, believing in the benefits of going to therapy to reduce the symptoms of a mental health problem was a significant predictor in contributing to the self-stigma of seeking mental help support (B = 0.17, 95% CI [0.05, 0.30], p = 0.01). Lastly, the perceived barrier of privacy concerns of not wanting people to know about going to therapy (B = 0.21, 95% CI [0.12, 0.30], p = 0.00), and fearing that family perception of them would change if they knew they were going to therapy (B = 0.13, 95% CI [0.04, 0.22], p = 0.00) were found to be significant predictors in impacting the self-stigma of Southeast Asian international students when it came to mental health help-seeking behaviors. See Table 9 below for the hierarchical linear regression results for SSOSH:

Table 9.
Hierarchical Linear Regression Results for SSOSH

SSOSH

Model/Variables	B	SE of B	P
Model 1			
Psychological Characteristics: recent feelings of not being able to overcome difficulties	0.21	0.07	0.00**
Acculturative Stress (Culture Shock): experiencing multiple pressures after migration	0.15	0.05	0.00**
Acculturative Stress (Guilt): feeling guilty for leading different lifestyle	0.16	0.04	0.00**
Model 2			
Acculturative Stress (Culture Shock): experiencing multiple pressures after migration	0.13	0.05	0.01*
Acculturative Stress (Guilt): feeling guilty for leading different lifestyle	0.10	0.05	0.02*
Model 3			
Geographic of School Attendance: South, Midwest, West, Northeast			
Acculturative Stress (Culture Shock): experiencing multiple pressures after migration	0.10	0.05	0.02*
Acculturative Stress (Guilt): Feeling guilty for leading different lifestyle	0.11	0.05	0.01*
Health Belief Model Construct (Perceived Susceptibility and Fears) concerned about risk of experiencing a mental health problem	0.14	0.06	0.03*

Table 9 (continued)

Model/Variables	B	SE of B	P
Health Belief Model Construct (Perceived Severity): Experiencing mental health problems would make completing daily activities more difficult	0.26	0.07	.001***
Model 4			
Geographic of School Attendance: South, Midwest, West, Northeast	0.12	0.05	0.01*
Psychological Characteristics: Recent feelings of not being able to overcome difficulties	0.14	0.08	0.056
Acculturative Stress (Culture Shock): experiencing multiple pressures after migration	0.11	0.05	0.02*
Health Belief Model Construct (Perceived Susceptibility and Fears): concerned about risk of experiencing a mental health problem	0.12	0.06	0.055
Health Belief Model Construct (Perceived Severity): Experiencing mental health problems would make completing daily activities more difficult	0.20	0.07	0.01*
Health Belief Model Construct (Perceived Benefits): going to therapy would help reduce mental health symptoms	0.19	0.06	0.00**
Model 5	0.19	0.07	0.01*
Psychological Characteristics: Recent feelings of not being able to overcome difficulties			
Health Belief Model Construct (Perceived Severity): Experiencing mental health problems would make completing daily activities more difficult	0.17	0.06	0.01*
Health Belief Model Construct (Perceived Benefits): going to therapy provides an environment to open up emotionally	0.18	0.06	0.00**
Health Belief Model Construct (Perceived Barriers): going to therapy is a sign of weakness for not being able to deal with mental health problems	0.21	0.05	0.00**
Health Belief Model Construct (Perceived Barriers): unbothered by mental health problems enough to seek out therapy	0.13	0.05	0.00**
Model 6			
Geographic of School Attendance: South, Midwest, West, Northeast	0.10	0.04	0.02*
Psychological Characteristics: Recent feelings of not being able to overcome difficulties	0.19	0.07	0.01*
Health Belief Model Construct (Perceived Severity): Experiencing mental health problems would make completing daily activities more difficult	0.17	0.06	0.01*
Health Belief Model Construct (Perceived Benefits): going to therapy can reduce mental health symptoms	0.17	0.06	0.01*
Health Belief Model Construct (Perceived Barriers): I wouldn't want anyone to know if I was going to therapy	0.21	0.05	0.00**

Health Belief Model Construct (Perceived Barriers): My family would think less if I go to therapy for mental health issues	0.13	0.05	0.00**

*p < .05, **p < .01, ***p < .001

Qualitative Findings from Interviews with Participants

In addition to the quantitative results, qualitative findings are captured in this section of this chapter. One-on-one in-depth interviews were conducted with full-time Southeast Asian international students (N = 29) attending community colleges and 4-year universities (public or private) in the United States. Interviews were recorded on Zoom and lasted approximately 60 minutes long. Qualitative results are presented in this section of the chapter to capture the demographics of the participants and their unique mental health experiences and perceptions. Recurring themes were categorized and presented in a preliminary model in Figure 1. The five overarching themes among the interviewees included: (a) Mental health perceptions and stigma levels; (b) Acculturation and adjustment challenges including culture shock (collectivism v. individualism), homesickness, and loneliness/isolation; (c) Language barriers; (d) Overburdened and complexities of American health care system; and (e) Preference for alternative forms of care through informal support networks and religion. These prominent themes are further supported by the direct quotes from participants to capture their lived experiences and unique perspectives to answer the five research questions.

Sample Demographics

A total of 29 students completed the qualitative portion of the study after they consented to participate in the interviews. Given the nature of the study, all 29 participants were Southeast Asians. The demographics of the 29 interviewees were as follows: for their sex, 58.62% (n = 17) identified as female, while the remaining 41.38% (n = 12) were male. Most participants were between the ages of 24 and 29 (41.38%, n = 12), followed by students between 19 and 23

(31.03%, n = 9), and those who were 30 years and older (27.59%, n = 8). The average age among the participants was 26.41 (SD ± 5.94), with a broad age range from 19 to 40 years.

The majority of participants were graduate students (65.52%, n = 19), with the remaining third being undergraduate students (34.48%, n = 10). The majority of interviewees attended colleges and universities in the Northeast (89.66%, n = 26), but a few were from the West Coast (6.90%, n = 2), and the Midwest (3.45%, n = 1). All participants were attending 4-year colleges that were either private or public.

Overall, the interviewees represented a variety of Southeast Asian countries, with Vietnam and Indonesia equally represented at 34.48% each (n = 10). The second-leading countries of origin included the Philippines and Singapore, with each country comprising 6.90% (n = 2) of the sample (N= 29). One interviewee hailed from Malaysia, which made up 3.45% (n = 1) of the sample. A few participants indicated they were from two Southeast Asian countries, including Singapore-India (3.45%, n = 1), Singapore-Malaysia (3.45%, n = 1), and Indonesia-Singapore (3.45%, n = 1). A summary of the demographic characteristics described above is presented in Table 10.

Identified Perceived Barriers and Potential Risks of Mental Health Resources and Sources

Interview participants responded to a series of six open-ended questions that were informed by the Health Belief Model (HBM). Results were coded and grouped based on recurring themes found in the thematic analysis and integrating process. Table 13 presents the recurring themes that emerged in the participant interviews, which were coded based on identified barriers, potential risks, and current help-seeking behaviors or alternative coping mechanisms for mental health (see Table 11 for coding).

Table 10

Basic Demographics

	N	%
Sex (N = 29)		
Female	17	58.62
Male	12	41.38
Age (N = 29)		
19-23	9	31.03
24-29	12	41.38
30 and older	8	27.59
[Mean age = 26.41; SD ± 5.94; Min = 19; Max = 40]		
Education Level (N = 29)		
Undergraduate	10	34.48
Graduate	19	65.52
Region of School Attendance (N = 29)		
Northeast	26	89.66
Midwest	1	3.45
West	2	6.90
Type of College/University (N = 29)		
Public	2	6.90
Private	27	93.10
Country of Origin (N = 29)		
Vietnam	10	34.48
Indonesia	10	34.48
Malaysia	1	3.45
Singapore	2	6.90
Philippines	2	6.90
Singapore-India	1	3.45
Singapore-Malaysia	1	3.45
Indonesia-Singapore	1	3.45

Table 11

Qualitative Data Coding Scheme

Category	Theme	Coding
Modifying Factors	Cultural & Religious Beliefs	MF_CRB
	Stigma & Mental Health Perceptions	MF_STG
	Stereotypes & Misconceptions	MF_STT
	Family Influence & Expectations	MF_FAM
	Language Barriers	MF_LANG
	Systemic Barriers to Using Health Care	MF_SBHC
Perceived Threats	Financial Constraints	PT_FIN
	Fear of Stigma & Confidentiality Concerns	PT_CONF
	Limited Awareness & Understanding of Mental Health Services	PT_AWARE
Evaluation of Behaviors	Perceived Benefits of Seeking Help	EB_BENEFIT
	Barriers to Accessing Mental Health Services	EB_BARRIER
	Lack of Culturally Competent Mental Health Providers	EB_CULTCOMP
	Alternative Coping Strategies	EB_ALTCOPING

Prominent themes found in this study regarding overall mental health perceptions and help-seeking behaviors among Southeast Asian international students were categorized into three overarching factors: (a) Modifying Factors, (b) Perceived Threats, and (c) Evaluation of Behaviors.

Modifying factors can also be considered predisposing factors, which in this study were identified as demographic variables and psychological characteristics. Participants highlighted cultural or religious beliefs, stigmatization, stereotypes, family expectations and perceptions, and

other systemic barriers like financial constraints, language barriers, and navigating the American health care system as key determinants in shaping their understanding and potential barriers in their mental health help-seeking journeys. These modifying factors informed mental health understanding and reinforced behaviors actions that either facilitated or discouraged uptake.

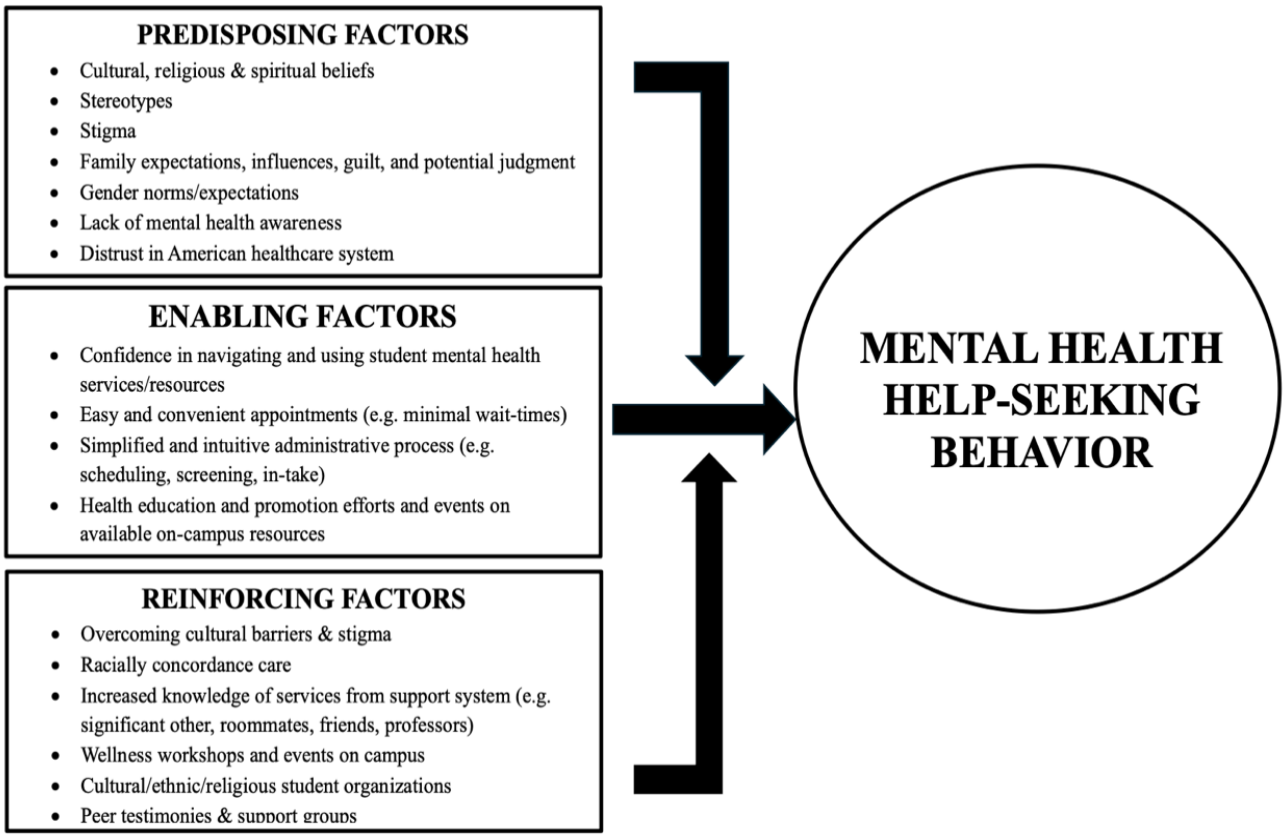
Specifically, **perceived mental health threats** were emphasized by interviewees who reported varying levels of susceptibility and severity to experiencing mental health issues. These perceived threats were largely defined by the participants' fears and uncertainties associated with seeking mental health help, particularly the stigma surrounding mental health in their families and overall cultures. Other commonly perceived threats identified in the thematic analysis included systemic and cultural barriers like reservations regarding the confidentiality of seeking mental health help, questions surrounding the effectiveness of these costly services and resources, and their mistrust in the American health care system due to poor past experiences that prevented them from getting support.

Lastly, **evaluation of behaviors** was the last category of the themes coded among interviewees based on the common benefits and barriers that shaped participants' help-seeking behaviors (or lack thereof). Some participants identified potential benefits to getting mental health help, including improving overall well-being and establishing balance in their daily routines and lives, while others emphasized more barriers like unfamiliarity with the American healthcare system, long intake procedures and wait times for appointments, limited understanding of services and resources available, and lack of culturally competent providers.

Overall, the key themes that emerged from the 29 interviews are also arranged in a preliminary model depicted in Figure 2. Identified themes and categories are supported by the quotes of selected participants in the following tables.

Figure 2

Preliminary Model of Factors Impacting Mental Health Uptake Among Interview Participants



Research Question 1

What are the perceived barriers and potential risks to seeking out mental health services or resources among Southeast Asian international students?

Modifying factors and perceived threats. The first research question centered the unique viewpoints of the participants on the underlying factors and potential risks of using mental health resources and services as full-time Southeast Asian international students studying in the United States. Pertinent themes identified by the interviewees included how **cultural and religious beliefs, stigma, stereotypes and misconceptions, family, the challenges of**

navigating the costly, overburdened, and complex American health care system, the lack of culturally sensitive and competent services, and language barriers were the common factors that shaped their mental health understanding and hindered help-seeking behaviors. Some participants also emphasized their reluctance to use and trust American health services as potential risk factors to seeking mental health help.

The majority of participants pinpointed ***cultural and religious beliefs*** as significant barriers in their mental health journeys that prevented them from engaging in help-seeking behaviors. Specifically, the majority of interviewees cited cultural and religious beliefs playing significant roles in shaping not only their initial understanding of their mental health, but also how these factors prevented them from seeking mental health help. Notably, Indonesian students made statements regarding the role of their culture and religion playing key roles in their mental health journeys. For example, one participant stated:

> I'm a Javanese…. In our culture, men should be strong and should be enough for everyone. They can't show their emotions too much in public or to other people. You have to keep your secret on your own. You have to keep your issue to yourself. You cannot talk about your mental health to other people. It's better for you to keep it a secret and find the solution for yourself…. I think it's quite related, because back to my religion, if you did something wrong… it's better for you to keep it secret rather than to talk to anyone because it's taboo it, because it's your sins, so it's better for you, and God only knows about that, and he will give you the mercy. But, both of them are quite related to shaping the mindset of Indonesian people to mental health.

Religious beliefs were also significant determinants in informing mental health understanding and uptake for support. An Indonesian student shared that religious beliefs painted having mental health issues as failing in their spirituality, which contributed to having a poor relationship with God. They explained:

> If you're having mental health problems, then you're not normal. Perhaps you're not like a term that I don't really like…. Some people say that, oh, perhaps you're not close to your God. Or maybe you're not praying in a good way so that you are having a mental health issue.

The student then explained how mental health is often perceived through the lenses of religious teachings in Indonesia. In this particular case, the student offered their critiques of how Islamic beliefs can often lead to misconceptions of mental health that invalidate and disregard individuals' experiences and struggles and only encourage them to continue praying to increase their spirituality rather than seeking out professional services and resources for psychological support. They highlighted the following observations:

> The naive understanding about the relationship with God and mental health in Islam is that if you pray well, if you are close to God, then God will solve all of your problems. But I think that is a naive understanding because you know, it's fine to have mental health problems, even like our Prophet, our role model, have problems which are bigger than us, like they're having an unfair King, they are being tortured. And things like that. So I believe that being angry, being depressed, being stressful it's like a normal thing and it's very human…and I think that people in Indonesia who are using that for normalizing mental health issues are creating a misconception about Islam.

Similarly, another Indonesian student further elaborated on the ***cultural differences in mental health understanding and uptake*** in their home country and the United States. According to their observations and experiences, they reported that Indonesians often only seek out mental health services and resources when they experience severe issues that have implications on their physical health. They said:

> In Indonesia the majority of people do not consider seeking professional help for mental health as important. Sometimes they think that they don't really care about mental health like it's not as important as when you are physically unhealthy and you go to the doctor, but in Indonesia it's not common for the majority of people to see that if you feel sad, or if you don't feel good about your mental health. You need to find a therapist or psychologist. It's not common in Indonesia. People only seek them if they experience severe mental health issues.

Another Indonesian student elaborated that the cultural beliefs surrounding mental health uptake negatively shaped their perceptions and prevented them from wanting to seek out help. They shared:

> But I think like how the majority of people here perceive someone with mental health problems and using services as sick. It indirectly shaped my perspective…. So, I don't feel like going and the embarrassment of having to go to a professional…. But maybe the cultural view shaped my perception, so I don't want to go there and seek help.

Consequently, a Vietnamese student shared how their mother's deeply ingrained ***cultural beliefs*** shaped their perception, understanding, and help-seeking behaviors. In this case, they explained how their Vietnamese mother perceived the idea of them going to therapy as a form of failure rather than an avenue for support. They recounted:

> When I talk to my mom, she always says to me that meeting a therapist is a failure and only, like bad things. It's taboo and I shouldn't share any of my personal stories or family stories to strangers. That's what my parents, my mom, and my relatives believe.

Similarly, other participants also alluded to the role of ***stigma*** and how mental health is perceived as a taboo topic in their culture. As a result, participants reported that the stigma of mental health influenced their overall understanding of their own mental health and their decision-making processes when it comes to seeking or not seeking help. Specifically, one Indonesian participant shared that the stigmatization of mental health back in their home country has shaped their overall mindset and made them less inclined to seek out mental health help because of feelings of embarrassment, guilt, and potential bullying. They stated:

> In Indonesia, the stigma of mental health is still high. It's still something there compared to this country, which seems that people here are aware about mental health, so I don't feel embarrassed, or hesitated to seek out mental health help…. The Indonesian community I'm not close to, but they don't know that I go seek professional mental health help… I don't talk about it with Indonesians because I think it's about the mindset about mental health that people back in my country think that mental health relates to something crazy. You are an insane person, you are insane people and you have to go to the hospital because of it. And it's better for you to have cancer rather than any mental health issue. But I think because they are not well informed or well-educated about mental health, they think that all mental health is bad and dangerous. It's kind of taboo to talk about your mental health and they will bully or mock you about it, and they will underestimate you that you are not a strong person. You are not reliable people. You have to be strong for yourself. You cannot get help for mental health. And that's yeah. That's quite embarrassing for me to talk about mental health with my colleagues so it's more comfortable for me to see some professional help here.

Other Indonesian participants also echoed similar sentiments regarding the ***stigmatization*** of mental health and how it influenced their perceptions and action-seeking behaviors (or lack thereof). For example, another Indonesian student emphasized the weirdness surrounding mental health and how seeking help is viewed as a sign of weakness. They explained:

> In Indonesia it's like, it's still a bit of a weird topic, as in like when people go to mental health like, we think of them as weak like when we have a mental health course in school or something, we laugh about stuff like that. So, we definitely do not accept this. Like from our view, it's like a weak American thing. It's weird, that's like as bluntly as I'm gonna put it. We don't really accept it fully, I think because we've been brought up very traditionally. It is not in our culture to like to use these services or admit we have mental health-related issues.

Another Indonesian student shared how the ***stereotypes*** surrounding mental health uptake back in their home country contributed to the ***misconceptions*** they hold. While they acknowledged that mental health resources and services are provided by professionals trained to best support them, they reported discomfort and mistrust in using mental health services. Their reasons included struggles to confide in professionals who do not have rapport with them that is best suited in helping them overcome personal and difficult issues. They voiced concerns about their discomfort and inability to open up to people who do not know them, but have the training and resources necessary to help them cope with their struggles. They explained:

> They are professional and can help me to cope, but there is a stereotypical belief that makes me not want to go there. Sometimes I am also not comfortable telling my story to strangers…. There are some private stories that I do not tell to everybody…only to my very closest person in my life. It's hard for me to disclose that information to new people like if I go to the psychologist or psychiatrist…. I cannot be open or something.

Given the sensitivity surrounding mental health and the confidentiality of seeking support, some participants expressed concerns about the ***stereotype*** of mental health uptake and their fears of people finding out if they sought out help. A Vietnamese student shared:

> I feel like that's kind of like that kind of stereotype type, so I don't want to go. I don't want anyone to know about it because I know they're gonna be pretty concerned and then I have to explain and have to like, persuade them that no, it's not a problem. It's just normal and kind of like that.

Vietnamese students echoed similar sentiments on how the ***stigmatization*** surrounding mental health was a significant obstacle for them when deciding whether to seek out services and resources. They shared that the limited knowledge and awareness of mental health among the Vietnamese community, coupled with their ***family's concerns***, were key deciding factors in their decision to reconsider seeking out help. More specifically, the student further explained that their own understanding and their parents' were shaped by learning only about severe mental disorders like depression. As a result, seeking mental health help would be perceived as negative, extreme, and unnecessary, which made them more reluctant to get help if they were experiencing any mental health issues. They noted:

> Not enough information about it which makes it stigmatized in the sense that because there's not enough information about it. So all that, like people heard about, even my parents heard about are like severe cases of depression or like psychedelics, or like, any kind of crazy, or more chronic type of disorders which they heard from the news which make it sound like very severe and quite alarming.

Similarly, an Indonesian-Singaporean student voiced their fears of ***people's perceptions and potential judgment*** if they found out about their mental health issues and help-seeking behaviors. As a result of not wanting people to know, they are less inclined to seek out mental health support. They said:

> I feel like it's not embarrassing, but I'd rather people not know that I was seeking therapy because you know how Indonesia is like super chill…. But I'm scared people would bring up questions: Is she crazy? Is she mentally ill, like what's going on, you know? Because if anything happens like people will know and people are quick to judge, especially like my Singaporean friends are also really quick to judge, so I feel like, especially in Singapore I feel like I'd be more attacked if people in Singapore knew that aspect about me.

Similarly, an Indonesian student echoed similar sentiments and also explained their concerns surrounding the confidentiality of seeking mental health services in the United States, given breaches in their home country. They reported:

> Mental health issues in Indonesia are not a big thing…. I think that the confidentiality in my country is not that good because they will share eventually to your friend, or to people who know them, and I don't believe them.

In addition to the lack of trust and fear of people finding out, another Vietnamese student added that they stopped seeking help in fear of their ***parents' concerns and not wanting to worry them***:

> I don't want to bring it up as if it's like a big deal. Because if I tell them like, oh, I went to a mental health counselor, they will take it like a very big deal…. As if, like, I'm you know, being in depression or something like that. So that's why I didn't go anymore.

Similar to the stigma surrounding mental health identified by most participants, the role of ***family*** has also been emphasized as a potential barrier in influencing their mental health knowledge and uptake. In this case, family played a key role in shaping the following participant's relationship with their dad when discussing their mental health and going to therapy:

> I'm telling him that like I go to therapy, or I want to keep going to therapy, and he's worried that therapy will quote on quote like take me away from the family like he told me his concern that one of his friend's daughter went to therapy, and then the therapist told her to cut the family off, and he was worried that that would happen in this case as well….

In fact, one participant elaborated on how ***familial expectations*** have shaped their mental health mindset and prevented them from engaging in help-seeking actions to get additional support during their academic studies in the United States. When they shared more about their mental health concerns with their parents, they found it extremely difficult to navigate the

cultural differences in mental health understanding and how Indonesian culture perceives seeking help as a step towards Americanization. They stated:

> Southeast Asian parents like mine have different morals and values…. They will say, like my habits, have turned so American …. I don't know what's like Western and like non-western…. You're living in the U.S. now, and you have adopted the traits of an American…. I feel like it's because of the whole thing of bringing your child to study abroad and expecting only the greatest from you. They'll think that, okay, if I'm going somewhere 20 hours away from them, I should be focused on making them happy. And the moment that I fail to show them, like how I'm doing amazing or that I love school, like I'm performing so well, that's like the only things that they want to hear.

Another key barrier to seeking mental health help that participants identified was the lack of ***family acceptance*** among Southeast Asian parents to continue seeking out mental health help through services and resources. This pertinent theme emerged in an Indonesian participant's experience when telling their mom about going to therapy, which served as a potential barrier and perceived risk that made them hesitant to continue seeking this professional support. They shared:

> There are just some things which are just not easy for me to talk to, you know, like an older generation, especially my mom is gonna be 70 soon and it's not easy for a generation to accept things like therapy, because it's like the minute you talk to them about therapy, they think, oh, my God, my son's going crazy, you know…. Is there something serious that he's going through? Is it curable, you know, like they look at mental health as a very damning thing.

Participants who are commuters and reside at home with their families reported even ***greater embarrassment and fear of not being accepted by their families*** if they found out they were getting mental health help. One Vietnamese student shared the following:

> I am still living with my parents, so every single time when I'm out, they will ask, Where are you going? So, I just like that I don't see my therapist much. I just see them in person twice and I prefer we have a phone call, but then we stopped doing that because maybe they think that I don't want to meet them in-person….

While most participants reported their families posed as potential barriers and emphasized their loved ones' concerns regarding the perceived risks associated with getting

mental health help, others noted their ***financial concerns with seeking these services and resources***. A Vietnamese student perceived therapy to be costly:

> I always have this kind of thought that the therapy is pretty expensive, so I never actually thought of going to it unless I actually have a problem. And the problem is big enough, you know…. If later in life, I have money and like I can afford this then I'm gonna do that more frequently.

Similarly, a Filipino student emphasized not only the financial barriers when it comes to affording mental health services, but also the ***limitations of coverage with having American health insurance*** as an international student who goes home over the summer. They noted:

> I had a good experience…but I sort of ended it because if you go home over the summer or out of the U.S. you can't do anything really like you can't use their available services, even though you're still paying for summer insurance. So yeah, I knew that was a lot.

Beyond cost and limited coverage, others expressed frustrations and concerns over the ***overburdened mental health care services offered at their campuses.*** An Indonesian-Singaporean student described how the limited availability and the long waits between counseling appointments created barriers for them to continue therapy on campus:

> So I have been to two sessions, I think, around my freshman year and sophomore year. I feel like it was really helpful, but I feel lazy because of the long line. It was hard to follow up, especially because of the long line, like, I feel lazy to go back… .And then she would want to follow up in the next two weeks. When I'm like, can we do it earlier? And they're like, no, we have way too many students.

A Cambodian participant (female sex, 20-years-old, studying computational biology at a private school in the Northeast) also shared that the ***long waitlists to get counseling appointments on their campus*** was a significant barrier that made them not interested in seeking mental health help. They identified this as a potential barrier that prevented them from engaging in mental health help-seeking behaviors because they were made aware of the extensive waiting

periods to schedule appointments from peers who have used these on-campus services. They noted:

> I've probably heard that there's a long wait list. So I don't always feel like I'm gonna call them, and I get it instantly. It wasn't that easy, you know. So I was like, oh, it's such a long as a high barrier to cross and I know that there's a long wait list and cause I have friends that told me there's a long wait list.

Another student shared similar experiences and how studying abroad made it easier for them to get a counseling appointment. They stated:

> I know that counseling is quite hard to make. I was thinking of doing it. But then the counseling appointment was not really available. So when I went to London to study abroad… of course, the schedule was much more free so I was able to book one….

In addition to the long waiting times for appointments, an Indonesian student reported that the ***time commitment*** to get psychological support is not worthwhile and beneficial for them. They said:

> I think that going to mental health services will be a waste of time.

Another Indonesian student echoed the same concerns surrounding ***time commitments and the extensive administrative steps*** involved in getting mental health help that they can easily seek out through informal social support systems. They stated:

> To be honest, I'm interested in attending a mental health session but I think I have no more time to do that, because to get a counseling session, I need to finish several types of screenings and schedule the meeting, but I don't think I can manage it. Sometimes it takes a lot of effort and time to go there instead of just, you know, going outside or visiting my friends.

A Singaporean-Malaysian student reported their experiences ***navigating American health care services*** as an international student and generalized how this process could create barriers for their other vulnerable peers, particularly understanding their insurance coverage and the additional costs of co-payments after receiving mental health services. They said:

> I was friends with an American who helped me to navigate it even better. I don't think so, especially if I was an international student where English is not my first language. I imagine it's kind of hellish to understand the insurance that comes with it, or if you don't have insurance, like having to pay for all of that.

The only Cambodian student (20-years-old, female sex, studying computational biology at a private university in the Northeast) interviewed went on to share their lack of interest in engaging in mental health help-seek behaviors and offered the following critique:

> I still don't really like to navigate the American healthcare system in general…. I just want to understand why the healthcare system is so messy.

Another Singaporean student (40-years-old, male sex, studying writing for television and film at a private university in the Northeast), also the oldest in the qualitative sample, recalled their ***difficulties with learning how to navigate using mental health resources*** when they first arrived on campus for new student orientation. They claimed that this negative experience with the department's absence contributed to their lack of awareness that prevented them from understanding how to access and use mental health services and resources on their campus. They shared the following observations:

> So I attended every single department from security…. Everyone had a representative to talk about the department, but the one department that did not and had a no show was the mental health services…it's just someone else like having to quickly just go through the saying, Okay, if you need more information just call this number da da da…. And I did try to seek help. I went on the health website and looked at the numbers sometimes, but I'm not too sure if I'm calling up the right numbers.

Another Indonesian student elaborated on their ***struggles navigating their college's website to learn more about mental health resources and services***. Given their challenges in finding the relevant information, they were frustrated and confused over how to access such options. They cited that the lack of guidance and the way in which information was presented left them feeling discouraged and hesitant about engaging in help-seeking behaviors. Here, their experience revealed how institutional barriers like the presentation and structure of school health

websites could also impede other Southeast Asian international students' mental health understanding and help-seeking behaviors. The participant shared:

> To be honest, I'm not sure how to do that. Because if I read the [name of school hidden for privacy reasons] Health website.… It's confusing for me…. If I feel like I have a mental problem, what should I do? Where should I go? I don't think that it is clear on the health website. So, it discourages me to seek mental health services…is not straightforward. It's just not convenient. If you want to do something you have to like to report or make an appointment.

While some participants identified cultural, religious, and structural barriers that discourage them from seeking out mental health help, those who engaged in help-seeking behaviors emphasized that the biggest obstacle for them to continue getting support was the ***lack of culturally sensitive and competent resources and services***. For example, one Vietnamese student shared their experiences discussing their eating habits with their counselor:

> The counselor doesn't really understand, like the Asian culture aspect of like parents…how strict they could be, how the eating culture is and the restrictions on it. It's like, also kind of ingrained in the pressure that parents may place on us. So, yeah, I definitely wish to have some kind of counselor who would understand the situation that Asian students are going through.

Similarly, a Filipino student struggled with finding a mental health professional that they could trust and comfortably talk to in the United States who would be ***culturally aware of their unique needs and challenges*** as an international student. In this case, the idea of receiving care virtually from their therapist in the Philippines was more appealing than utilizing the free services and resources covered by their student insurance in the United States. They noted, however, that the additional costs of this preference served as financial barriers that hindered their help-seeking behaviors. They stated:

> I still think about it like, do I just wanna book a session with a psychologist back home, just because it's easier…. Someone from back home like, even if I know the services here are free. Sometimes I still think about things like, what if I just pay for services back home, just because it's easier to talk to somebody who will understand my own language and all the cultural nuances that I don't have to explain anymore…. My

> psychologist would just talk to me as I am. What's stopping me is that I have to pay for that, whereas I have it free here. But if I'm desperate, I feel like I should just do that instead.

Given the diverse backgrounds of Southeast Asian international students, a Vietnamese cited the ***lack of representation and cultural understanding of available mental health providers in the United States*** made it difficult for them to seek help. They said:

> There were not that many Asians….

Another Vietnamese student further explained their hesitation about seeking mental health services and resources because of the following reasons:

> The thing is, like all these mental health services, they employ people mostly from social work, and people who don't necessarily help or have a formal understanding of psychology and culture, you know. Sometimes they are there as a legal protection for the company, more so than trying to help you.

Lastly, the most significant obstacle that the majority of participants alluded to was the ***language barrier*** and how it discouraged them from seeking out mental health support. Given that Southeast Asian international students come from diverse backgrounds and speak different languages as their native tongues, some noted that they struggled with expressing themselves and are unable to articulate in English about their strong emotions and most difficult experiences. As a result of this language barrier, participants reported feelings of frustration at not being able to communicate and capture the cultural differences in their acculturation process and how these factors interacted to inform their mental health understanding and uptake. An Indonesian student admitted the following:

> In the U.S., it will be more challenging because the cultural difference will make it challenging to share my story in the context of my culture, and also a challenge with language. Because sometimes, if I want to share something really deep, sometimes I don't have enough capacity to share it with English. It's also become a problem here and sometimes it also hinders my intention to seek professional help.

Research Question 2

How do Southeast Asian international students perceive the current offerings of campus mental health services and resources, and how well are they doing in meeting their mental health needs and concerns?

Evaluation of Behavior. The second question captured the unique beliefs and experiences of Southeast Asian international students and how they evaluated their mental health help-seeking behaviors as related to the current offerings of services and resources on campus. Here, of particular interest was their assessment of existing services and resources (or the lack thereof) on their college campuses and if they encountered any barriers in their help-seeking journeys. Students' reflections of how they perceived the current offerings of mental health services and resources at their colleges and universities are captured through the experiences they shared. Some participants discussed their perceptions and negative experiences using the resources and services offered at their colleges and universities, while others found those available options beneficial. The majority of participants agreed that they would like to see improvements made to on-campus offerings for mental health support that increases accessibility and availability and is culturally aware of their unique needs and backgrounds.

Those who sought out psychological support on campus **expressed their frustrations and confusion with administrative hurdles in accessing services**. They shared that lengthy intake processes, multiple administrative steps, and continuously repeating their health issues were not only time-consuming but also left them with concerns about potential patient confidentiality violations regarding on-campus services and resources. In this anecdote, an Indonesian student emphasized how frustrated they were when they sought out medical help for an illness they were experiencing at their university health center on campus earlier this fall.

They described how **complicated the administrative process** was and burdened patients to openly disclose personal information to multiple individuals who were not doctors; this made them to want reconsider seeking out medical and mental health help. They emphasized how the patient administrative burden in the U.S. healthcare system was a dramatic experience and feared facing similar encounters if they sought psychological support on-campus. They explained:

> There are a lot of layers that I need to face to get the service I need…. There are a lot of doors like in the first door, I need to tell my problem and then I am referred to another door, and like in those doors, I repeat again my problem, and like I don't think that it is significant for me to tell the details especially in the first door. I don't think it's necessary…. There are a lot of steps, and each step I need to tell my story again and again. I keep repeating like for even something that's very administrative. I need to tell the problem and sometimes it's not really convenient for me to do that and at the end I don't feel that I receive a significant service. It's not mental health, but it's medical. Due to that experience, it gave me a dramatic event and I don't want to use that service again for any health…mental health or physical health, like, I wish I never have to deal with that again.

Additionally, the same student also noted their discomfort and concerns about patient confidentiality at their university health clinic because the door was open in all encounters with medical staff, including the doctor:

> And sometimes even like in the first room ask me about the details of what I'm experiencing and like the door was open. So I'm not sure even someone outside can hear me speaking.

Enabling Factors for Promoting Mental Health Help-Seeking Behaviors. This student's experience highlighted the **administrative burden rooted in the U.S. healthcare system** that discouraged them from seeking additional support for physical and mental health needs. Their concerns surrounding the extensive administrative process and the potential breach of confidentiality suggested there were systemic barriers in navigating the American healthcare system that other Southeast Asian international students may face. When asked what improvements could be made to better meet the mental health needs of Southeast Asian international students, this student wanted to see simpler intake processes with fewer people

involved, less demand on time, and greater protection measures for handling sensitive patient information:

> I think it is better if you can bypass several administration processes. I need to meet a lot of people to talk about the same problem. And why don't just the first person ask the details in the beginning, because, like at the end, I will tell the details to the doctors…. I think I don't need to tell my problems to a lot of people again and again…. Sometimes I feel tired because I need to repeat my explanation again. I feel uncomfortable because, like I don't want to share it with everyone. If you don't have any business with my health problem then just let the doctor hear that. But because of the process, a lot of people knew and they keep asking me the same question every time I move onto another step…. And I'm questioning the confidentiality of my information, because you are asking me the same question, and the question is quite personal.

Here, making mental health services and resources **more user-friendly and streamlined** for busy students will decrease frustration and build greater trust in these available resources and, as a result, will encourage help-seeking behaviors on college campuses.

Research Question 3

How can mental health services and resources on campus be tailored to align with the perceived cultural beliefs and attitudes of Southeast Asian international students to meet their specific needs and concerns?

Evaluation of Behavior. Similarly, the third research question further explored how on-campus mental health resources and services can be improved to better meet the unique needs of Southeast Asian international students. The two most common themes identified by participants was the need for colleges and universities to **(a) increase the knowledge of available mental health options on-campus, and (b) make appointments and intake processes more convenient and user-friendly.** The majority of participants reported that they were not informed about on-campus mental health options available to them. They attributed their lack of awareness to limited communications and outreach from their schools. A Singaporean student (30-years-old, female sex, graduate student studying law at a private university in the Northeast) confessed

that they did not engage in mental health help-seeking behaviors because they were **not aware of the campus offerings**. They said:

> I don't recall seeing any…. It could be like a small paragraph in one of the many emails. But then I probably missed that.

Those who eventually become aware of the campus mental health services and resources reported only learning about those options through **word-of-mouth from their peers or professors who encouraged them to seek out help**. However, by the time participants would receive information and guidance on how to utilize mental health resources and services, many reported not needing help because their mental health issues had been resolved. As a result of this delay in their understanding, several participants emphasized how important it was for them to become aware of available resources and services and guided information on how to utilize these offerings. When asked how campus mental health offerings can be improved, one student suggested that having **more structured communications at the beginning of each semester**, particularly during orientation, would inform them of available resources and services and increase their mental health uptake if the process of seeking help was to follow. They explained:

> If you pay attention during orientation, they will tell you where to go for mental health services…. They show you where to go, and if you go to that spot you can sign up with a nurse to get a referral. So in that way, it was pretty easy. I think it's maybe hard to navigate, but once you understand it becomes easier to get done.

As evident from this student's suggestion, colleges and universities can work **on improving communications and implementing outreach efforts** that increase mental health awareness and clear guidance on how to access and utilize campus resources and services for their students, particularly their international students with diverse needs. By promoting these options *early* on in the academic year, Southeast Asian international students and the broader campus community would be informed on how to take better care of their mental health and know the necessary

steps to follow when needing to seek out help. Here, tailoring health messages and promotion efforts to target students at orientation or in the beginning of each semester will also help students become more familiar and comfortable with these resources and services. With increased knowledge, students can make plans early on in the school year to reach out for help. For example, they can take advantage of scheduling appointments in advance once they get their course syllabi to ensure the best availability and earliest time slots.

Much like participants who were unaware of campus mental health offerings, even those who were informed and sought help offered key insights into improvements that colleges and universities can make to better meet their needs. As previously noted by many students, **high demand for mental health services and limited staffing** on college campuses hindered participants' mental health uptake or contributed to negative care experiences. In this student's case, they shared their unique mental health care experiences and how they never received the phone call for their screening appointment that was scheduled at their school. They shared:

> I hope that my university provides better mental health support…. So I had an appointment at this time, but on the day I made my appointment, I didn't get any emails or any text message about it, but I really waited for it. I was waiting for it like all day long… It made me hesitate to seek their help again…. Maybe I don't know why, maybe because they are overloaded or something else. I don't know. It's quite depressing for me, like I don't want to access them again. And because of it I just feel like I don't want to get the same experience since I have the same expectation and I feel some dead end about it…. they don't even call me to reschedule. Nothing. I really want to know the reason, or something else.

This student's experience illustrated the limitations of an **overburdened mental health care delivery system on college campuses, where resources and services are currently stretched thin**. Their recollection highlighted unaddressed systemic issues in accessing mental health services on college campuses, particularly **poor communications and lack of accountability in confirming appointments.** As evident by these shortcomings identified by this participant,

colleges and universities have significant adjustments to make to campus mental health services and resources, particularly around **improving appointment scheduling and management** to ensure communications are being tracked effectively. These improvements will enable students to use campus resources more effectively to address their mental health needs and also reinforce positive help-seeking experiences that they can recommend to peers.

Research Question 4

What are the specific factors that influence mental health uptake among Southeast Asian international students? What roles can families, friends, classmates, and professors play in encouraging help-seeking behaviors such as the recurring use of campus mental health services?

While family was previously depicted as one of the key determinants in preventing participants from seeking out mental health help due to cultural stigma, religious beliefs, and other misconceptions, other participants reported that parents, spouses/partners, roommates, friends, classmates, and professors served as strong support systems and pushed them to explore campus resources. A Malaysian-Singaporean student (22-years-old, female sex, graduate student studying film at a private university in the Northeast) shared that they **learned of available campus offerings through their roommates** who were also aware of other culturally competent services for Southeast Asian international students. They reported:

> I asked my roommate, who knew, like so many like resources for Asian and Asian American, like mental health resources….

Similarly, another Singaporean student (40-years-old, male sex, studying film at a private university in the Northeast) shared that their **spouse encouraged them** to explore both the physical and mental health services available to students on campus. They said:

> We have Zoom sessions where they actually had to remind me to get a health check from a doctor…. Because I'm not young anymore. They'd say can you please go and sign

> up for this doctor by this day, you know.… Get an appointment for physical and mental health…. Get yourself checked out….

Another Malaysian student shared that their **professor** who taught them in a course and also served as their supervisor for a research assistant role would emphasize the importance of taking care of their well-being and striking a balance between work and life. They shared:

> I think the professors appear quite supportive. So like, I'm actually doing a research assistant role with a professor…and they're pretty encouraging, and they'll always say, like, you know, your health and school are important, so you know the RA [research assistant] work comes second. So, I think they are really supportive when they say, like, you know, you have
> to live life. It's not just about your schoolwork and stuff. Yeah. So they would like, encourage us to do something fun over the weekend, and we can tell them during class that kind of stuff…

As evidenced by these participants' testimonies, **friends, roommates, spouses, and professors** were identified as important informal sources of emotional support and soundboards to provide valuable knowledge, share lived experiences, and guidance. These key players played significant roles not only in holding important mental health discussions but also in encouraging help-seeking behaviors and reinforcing the continuous use of campus mental health resources and services. Here, the participants credited friends, roommates, and professors for shaping their mental health knowledge and guiding them through the necessary steps to use the available options.

Research Question 5

What are the identified alternative coping mechanisms that help Southeast Asians maintain their well-being?

Reinforcing Factors. In addition to having strong support systems, the majority of our participants identified engaging in **religious practices** as a way to overcome barriers and utilize alternative coping mechanisms instead. Specifically, they noted that going to religious

sites, worshipping, and praying can help increase their spirituality and improve their overall well-being. Going to temples and praying to their ancestors and the spirits were reported by an Indonesian participant:

> I practice Hinduism…it's very spiritual. And we really sort of think about worshiping our ancestors, praying to the spirits. I feel like that's been very helpful in terms of feeling like connecting with my ancestors and respecting them essentially and I easily do when I go back. I don't know. I feel very relaxed and satisfied when I go to the temples, and socialize with my family, and pray to improve my well-being.

A Vietnamese undergraduate student, 20-years-old, studying biology at a public university in the West shared that they turned to **religion and informal support groups** to help reduce their stress. As a Catholic, they reported being reluctant to seek mental health help on their campus because attending a youth ministry program every Sunday was the best alternative coping strategy that provided strong social, emotional, and spiritual support and helped improve their well-being. They shared:

> Youth group is the one that helped me the most. I view that, like the youth group, like people, I got to talk more about it because they understand mental health. They also understand the relationship between religion and mental health and how they also correlate with each other. Because of the Bible, they talk about a lot of things like the characters and personalities. And I think that mental health is something that, for my case, I could not explain. Sometimes I feel bad. I feel sad sometimes I get a mood change because I'm like just hitting my twenties, but sometimes I get a mood change. Sometimes being young, I don't know what to do when I make a mistake. So I always seek out religion because I know that some people, a lot of people have got their own faith in things that are invisible. But you feel that as long as you believe in yourself, as long as you have faith you always overcome the things that you struggle with. So I believe that religions is really a really big part, important part of a person's life because it helps them not only with their faith, mental health, but also like make friends, and they can confess something that they've been hiding so long to someone that know them well, and help them through with their faith journey. Through retreats like confirmation with the high schoolers and Bible study in youth groups, I learned that people have different problems in their lives, too. We were able to share our stories together so that I know that I'm not alone in this fight and everybody prays for each other, and I know it's really good, because I know people are willing to help.

Another Vietnamese student (24-year-old, female sex, studying business at a public university in West) shared they were a practicing Buddhist and echoed similar sentiments about how they turned to **religion** in the long term because they ran out of therapy sessions covered by their insurance:

> I believe in religion more than therapy because in the long run, you believe in God, or read in the Bible or something…and you listen to the Buddhist Bible. They have a lot of good lessons on how you overcome the struggles in your life, how you open up with people, how you live a meaningful life….

This Vietnamese student's help-seeking journey illustrates Schultz's findings, where we know that for Vietnamese people, "depending on [their] socio-economic characteristics, may reject one system of treatment, or rely on both," where "one system may be utilized for diagnosis, another for curing.. or, when practitioners of one system are unavailable, the patient turns to the practitioners of another system," which we see in this case through practicing religion and spirituality (p. 6). As evident, this student pulled from Western medicine to get diagnosed first with depression and anxiety, but they turned to an alternative system because they could not afford more therapy sessions on their insurance.

Another Filipino student (24-years-old, female sex, studying psychology at a private university in the Northeast) reflected on the cultural and religious beliefs that informed their mental health understanding and various strategies to take care of their well-being. They emphasized that the predominantly Catholic society in the Philippines encourages engaging in religious practices like praying rather than seeking out professional help because mental health struggles can be overcome through having stronger faith and resilience. Given their observations, they noted that religious practices are often perceived as alternative coping mechanisms for Filipinos including the participant. They shared:

> It's a very religious society there, like very Catholic, so they're told that whatever you're struggling with, you just have to pray it out. Since it's a poor country, your elders would say, oh, there's so many people in the country who struggled worse than you. And yeah, I get that the conditions are really poor and we have so many problems like politics, whatever, but I also have mental health issues of my own.

As evident from these students' reflections, religious practices were more familiar and accessible to Southeast Asian international students who came from diverse backgrounds with different understandings of mental health and uptake. For many, religion provided structured ways to seek emotional and spiritual support without any perceived barriers to help-seeking. Participants shared that they turned to religion instead of formal mental health resources and services on- and off-campus as alternative coping mechanisms. Practices like praying, reading sacred texts, connecting with their ancestors, visiting their ancestors at temples, and attending youth groups were strategies that helped them take care of themselves and their spiritual well-being. From Hinduism to Catholicism, participants across different religious backgrounds emphasized how engaging in these religious rituals and practices were not only aligned with their cultural backgrounds, but also provided them with a sense of safety, belonging, and comfort in times of struggle. Participants also emphasized how religious communities provided necessary social, emotional, and spiritual support far from home. They were free of judgment, embarrassment, and stigma, which were often perceived as the identified barriers to seeking out professional mental health services and resources. Religious spaces like temples and youth ministry groups at churches created unique opportunities for vulnerability, deep reflections, and building community in times of struggle. Students shared that confiding in their religious communities helped them become more resilient in overcoming challenges because they were not alone on their academic and mental health journeys.

In this section, the selected quotes from the 29 interviewees suggested that practicing religious rituals were not only commonly used alternative coping mechanisms among Southeast Asian international students, but they also could explain their low perceived susceptibility, lack of self-efficacy, and minimal mental health uptake. The intersections between religion and mental health uptake are discussed in Chapter 5 to synthesize the findings and show how these rituals and practices are often preferred coping mechanisms reinforced by cultural beliefs and values rather than barriers surrounding the use of psychological resources and services.

Table 12 depicts the themes identified and selected quotes of participants to represent the category. While many quotes were captured during the interviews, only the representative best are presented here as evidence.

In conclusion, this chapter presented qualitative and quantitative results, including Pearson correlation coefficients, ANOVA, hierarchical linear regression, and a thematic analysis of qualitative data. Significant results were captured in tables and presented in conjunction with the research questions. Chapter 5 next discusses the study limitations, overall implications of the findings, and specific recommendations for colleges and universities to better meet the mental health needs of this vulnerable population.

Table 12

Qualitative Pertinent Themes

Category	Theme	Participant Quote
Modifying Factors	Cultural Beliefs	"I'm a Javanese…. In our culture, men should be strong, and should be enough for everyone. They can't show their emotions too much in public or to other people. You have to keep your issue to yourself. You cannot talk about your mental health to other people. It's better for you to keep it a secret and find the solution for yourself."
Modifying Factors	Religious Beliefs	"If you're having mental health problems, then you're not normal. Perhaps you're not close to your God. Or maybe you're not praying in a good way so that you are having a mental health issue."
Modifying Factors	Stigma & Mental Health Perceptions	"In Indonesia, the stigma of mental health is still high. It's still something there compared to this country, which seems that people here are aware about mental health, so I don't feel embarrassed or hesitant to seek out mental health help….."
Modifying Factors	Stereotypes & Mental Health Perceptions	"They are professional and can help me to cope, but there is a stereotypical belief that makes me not want to go there. Sometimes I am also not comfortable telling my story to strangers… There are some private stories that I do not tell to everybody…only to my very closest person in my life. It's hard for me to disclose that information to new people like if I go to the psychologist or psychiatrist…. I cannot be open or something."
Modifying Factors	Family Influence & Expectations	"When I talk to my mom, she always says to me that meeting a therapist is a failure and only for bad things. It's taboo and I shouldn't share any of my personal stories or family stories with strangers. That's what my mom and my relatives believe."
Modifying Factors	Language Barriers	"In the U.S., it will be more challenging because the cultural difference will make it challenging to share my story in the context of my culture, and also a challenge with language. Because sometimes, if I want to share something really deep, sometimes I don't have enough capacity to share it with English. It's also become a problem here and sometimes it also hinders my intention to seek professional help."

Table 12 (continued)

Category	Theme	Participant Quote
Perceived Threats	Financial Constraints	"I always have this kind of thought that therapy is pretty expensive, so I never actually thought of going to it unless I actually have a problem. And the problem is big enough. If later in life, I have money and like I can afford this, then I'm gonna do that more frequently."
Perceived Threats	Fear of Stigma & Confidentiality Concerns	"I feel like that's kind of like a stereotype, so I don't want to go. I don't want anyone to know about it because I know they're gonna be pretty concerned and then I have to explain and persuade them that no, it's not a problem. It's just normal and things like that."
Evaluation of Behaviors	Perceived Benefits of Seeking Help	"I have the luck and privilege of having a therapist in undergrad who was a woman of color. We talked a lot about her family's immigrant experiences, and it revealed to me how much I felt safe and comforted talking to someone with similar experiences to me. That's why I was looking for a therapist who was also an Asian immigrant."
Evaluation of Behaviors	Barriers to Accessing Mental Health Services	"I think that going to mental health services will be a waste of time."
Evaluation of Behaviors	Lack of Culturally Competent Mental Health Providers & Improvement Suggestions	"The counselor doesn't really understand the Asian cultural aspect of parents… how strict they could be, how the eating culture is and the restrictions on it. It's also kind of ingrained in the pressure that parents may place on us. I definitely wish to have some kind of counselor who would understand the situation that Asian students are going through."
Evaluation of Behaviors	Alternative Coping Strategies	"I practice Hinduism… it's very spiritual. We think about worshiping our ancestors, praying to the spirits. I feel like that's been very helpful in terms of feeling connected with my ancestors and respecting them. I don't know, I feel very relaxed and satisfied when I go to the temples, socialize with my family, and pray to improve my well-being."

Table 13

Study Findings Across Countries of Origin

Category	Theme	Vietnam	Indonesia	Philippines	Singapore	Malaysia
Modifying Factors	Cultural Beliefs	✓	✓	✓	✓	✓
	Religious Beliefs	✓	✓	✓		
	Stigma & Mental Health Perceptions	✓	✓	✓	✓	✓
	Stereotypes & Mental Health Perceptions		✓	✓	✓	✓
	Family Influence & Expectations	✓	✓	✓	✓	✓
	Language Barriers	✓	✓	✓		
Perceived Threats	Financial Constraints	✓	✓	✓		✓
Perceived Threats	Fear of Stigma & Confidentiality Concerns	✓	✓	✓		
Evaluation of Behaviors	Perceived Benefits of Seeking Help			✓	✓	
Evaluation of Behaviors	Barriers to Accessing Mental Health Services	✓	✓	✓	✓	✓
Evaluation of Behaviors	Lack of Culturally Competent Mental Health Providers & Improvement Suggestions	✓	✓	✓	✓	
Evaluation of Behaviors	Alternative Coping Strategies	✓	✓	✓		
Alternative Coping Strategies	Religious & Spiritual Practices	✓	✓	✓	✓	✓

Chapter 5: Discussion, Limitations, Implications, Cues to Action, and Conclusion

This final chapter synthesizes the key findings from surveys and in-depth interviews with Southeast Asian international students, an understudied population. First discussed are the relationships found between barriers to accessing mental health care (BACE), the self-stigma of help-seeking behaviors (SSOSH), and the significant predictors that can influence behavior uptake using the quantitative and qualitative data. Specifically examined are the key demographic factors, perceived threats (susceptibility and severity), psychological characteristics, and acculturation challenges that were statistically associated with the two dependent variables that shaped the participants' mental health perceptions, knowledge, and overall mental health uptake. The unique anecdotes and testimonials from the 29 interviewees further support claims of crucial barriers and common acculturation challenges that prevent Southeast Asian international students from seeking out mental health help.

Additionally, the chapter delves into how emergent findings and themes from this present study on Southeast Asian international students' perceptions, experiences, and help-seeking behaviors compare and contrast with the current literature. The discussion extends the conversation to look more closely at the mental health needs and concerns of Southeast Asian international students who are overshadowed by the experiences of East and South Asian international students. This comparative discussion includes common perceptions and identifies key barriers, the roles of stigma and cultural norms, and alternative coping strategies (religion and informal support systems through family and friends) and how they align with existing research on the broader Asian international student population. Specifically referenced are the works of Fritz et al. (2008), Han et al. (2013), Kim et al. (2023), Lian et al. (2020), Wei et al. (2007), Ma et al. (2020), and Cong et al. (2024), and Zhang et al. (2022) to ground the findings

and analyze how barriers such as self-stigma, acculturation challenges, psychological factors, and certain demographic characteristics have shaped Southeast Asian international students' mental health help-seeking behaviors. Lastly, a discussion of the study's limitations, implications for health education and higher education policies and initiatives, and recommendations for future research and practices are included to support the conclusions.

Discussion of Findings and Demographic Characteristics

This section integrated both the quantitative and qualitative data to highlight the diverse characteristics of the target population and better understand how certain demographics may play a role in shaping their mental health perceptions, barriers, and mental health uptake. In this study, the sample size consisted of N = 178 survey respondents for the quantitative data, while the qualitative portion featured N = 29 interviewees. In both quantitative and qualitative sample sizes, the majority of participants were female, with a mean age of approximately 25 and 26 years, who were also graduate students attending private schools in the northeastern region of the United States, and the majority of students hailed from Vietnam or Indonesia. All Southeast Asian countries were represented in the quantitative data sample except for Timor Leste. Among the 29 interviewees, all countries were represented except for Thailand, Timor Leste, Brunei, Burma (Myanmar), and Laos.

Key Demographic Characteristics (Age)

In the current literature, Cong et al. (2024), noted that "younger Asian international students had higher stress levels than their older counterparts" throughout the acculturation process (p. 29). The present study, however, found that older Southeast Asian international students reported higher levels of acculturative stress from fear of losing their cultural identity, communication challenges from language barriers, culture shock from different foods and

expectations placed on them, and guilt over living differently than those at home. Here, higher acculturative stress prevented them from seeking mental health help but also led to increased self-stigma associated with getting support for their struggles. In the quantitative sample (N = 178), the average age was 25.04, SD ± 4.57, and a range of Southeast Asian international students from 18 to 40 participated in the survey questionnaire. A total of 57.50% of survey participants (N = 178) were graduate students
(n = 88), with the majority pursuing their master's degrees (50.30%, n = 77) and some pursuing doctoral degrees (7.20%, n = 11). In the qualitative sample (N = 29), the majority of participants were graduate students (65.52%, n = 19) and the remaining were undergraduates (34.48%, n = 10). Given the higher proportion of graduate students represented in both the quantitative and qualitative samples, the findings showcased the unique acculturation challenges faced by Southeast Asian international graduate students and how those stressors became significant predictors in the barriers to accessing mental health care. Unlike younger undergraduate students, graduate students have to juggle more responsibilities in addition to their academic studies such as jobs, living in different housing arrangements (on- or off-campus), or even doing household tasks (grocery shopping, cooking, cleaning) that may exacerbate feelings of losing their cultural identities, having communication problems, or experiencing culture shock and guilt.

Discussion of Key Quantitative Findings

This section analyzes key findings from the correlation analysis, one-way ANOVA, and hierarchical linear regression to capture the relationships found between the likelihood of the seeking out mental health help (health behavior operationalized through two variable outcomes: barriers to accessing care and self-stigma of seeking help), the significant predictors (e.g.,

barriers, stigma, self-efficacy, perceived threat, perceived benefits), and demographic variables (e.g., age, gender, current enrollment status).

Interpretation of Correlation Testing Results

By calculating for Pearson correlation coefficients, significant relationships were observed with perceived barriers using the BACE scale to examine the interplay between mental health help, perceived susceptibility, perceived severity, and self-efficacy. These key Health Belief Model (HBM) constructs were found to play vital roles in mental health uptake and are individually discussed below.

BACE, Perceived Susceptibility, and the Health Belief Model

According to Pearson correlation coefficients, participants who were highly concerned about the possibility of being at risk of experiencing mental health issues also reported having greater barriers to accessing mental health care when measured on the BACE scale, $r(175) = .37$, $p < .001$. Additionally, a moderate positive relationship was found between not being able to relax when thinking about mental health issues and barriers to accessing mental health care, $r(175) = .39$, $p < .001$. These findings suggested that although many participants acknowledged they were susceptible to experiencing mental health issues and were unable to relax. There were also perceived barriers from the BACE scale that influenced their help-seeking behaviors. The barriers measured on the BACE scale that were identified as potential predictors of their help-seeking actions included uncertainty with knowing where to get professional care for mental health, being unhappy with existing mental health services, preferring to seek alternative forms of care (spirituality, non-Western healing/medicine, complementary therapies), concerns around affordability of financial costs involved for care, not having culturally competent mental health

care professionals, and thinking appointments were too time-consuming or inconvenient; these all influenced their low mental health uptake.

Although Southeast Asian international students reported greater susceptibility and heightened concerns over their inability to relax when experiencing mental health problems, these results suggested that their moderate levels of awareness and tenseness did not translate to them engaging in help-seeking behaviors. This was aligned with the HBM framework, where being in a "moderate position" indicated that individuals "may admit to the statistical possibility of its occurrence but to whom this possibility has little reality and who does not really believe it will happen…" (Rosenstock, 2005, p. 6). In this context, the moderate positive correlation found between being concerned about the possibility of experiencing mental health and barriers to engaging in mental health behaviors suggested that participants recognized their mental health risks, but their help-seeking behaviors were informed by the interaction of other HBM constructs, modifying factors, and demographic characteristics. Overall, the findings operationalized the HBM to illustrate that perceived susceptibility is a key component in informing help-seeking behaviors, but it must be followed by high levels of perceived severity, low perceived barriers, strong perceived benefits, and increased self-efficacy to engage in mental health uptake (Rosenstock, 1966).

BACE, Perceived Susceptibility, and the Mental Health Belief Model Assessment (MHBMA) Scale

Because the findings aligned with Greene's (2018) work, the present study used the Mental Health Belief Model Assessment (MHBMA) to understand Southeast Asian international students' perceived susceptibility to mental health. According to Greene (2018), perceived susceptibility is when an "individual's acceptance of a mental health diagnosis" and "how susceptible the individual feels to the condition (on a low to high continuum)" (pp. 2-9). Given

that Southeast Asian international students in this study fell in the middle of this continuum, perceived susceptibility was moderately correlated with the barriers used in the BACE scale. These results can be interpreted as these Southeast Asian international students were aware of their risks and vulnerability to developing mental health issues and the tenseness of not being able to relax, but the level of threat was not strong enough to drive mental health uptake. Perceived barriers from the BACE scale pointed to the participants' uncertainties with where to get help, dissatisfaction with existing services, preference for alternative forms of care, fears of getting into financial constraints, concerns surrounding the lack of culturally competent staff, and frustration at how time-consuming and inconvenient appointments were.

BACE, Perceived Susceptibility, and Comparison to Existing Literature

In addition to this study aligning with Rosenstock's (1966) HBM framework and Greene's (2018) work, results were similar to Fritz et al.'s (2008) results. According to Fritz and colleagues (2008), Asian international students had higher levels of anxiety compared to European international students and domestic peers. This was also consistent with the present students who reported not being able to relax when thinking about mental health struggles. Here, the inability to relax could serve as a predictor of developing anxiety if it goes untreated. They also found that Asian international students had the lowest mental health uptake, compared to their European and domestic counterparts in their sample of 71 Asian international students from "an ethnically diverse" community college located in Southern California. Unlike the present sample, their Asian subgroup sample consisted of only three Indonesians, three Singaporeans, one Malaysian, one Filipino, and one Thai. This lack of representation for Southeast Asian international students (n = 9) in their Asian subgroup sample revealed that the present study helped fill a critical gap in knowledge about this understudied population.

The interaction between perceived susceptibility and barriers to accessing care was further supported by the qualitative data. An Indonesian international student (19 years old, male sex, attending a private college in the northeastern region of the United States, and studying STEM) shared the following perspective on their low level of perceived susceptibility:

> I never considered seeking mental health support. When I struggle, I usually blame myself for not preparing earlier or not taking the right steps, rather than viewing it as a mental health issue. I assume I'm fine and that the problem is simply a lack of effort or focus—maybe I was too distracted during summer or winter break to plan ahead. In a way, that might be part of the problem—not recognizing when I could have benefited from reaching out for support.

This student's account of their mental health struggles clarifies the interaction between perceived susceptibility and barriers (self-blame) to seeking out care through the lenses of qualitative data. In this case, the student acknowledged that their academic struggles stemmed from shortcomings including lack of preparation, focus, and minimal efforts, which further illustrated their hesitancy to seek out mental health care because of their lack of mental health awareness.

SSOSH, Perceived Susceptibility, and Health Belief Model

Similarly, there was a moderate positive correlation between perceived susceptibility and self-stigma of seeking help (SSOSH). Participants in the present study were significantly concerned about their risk of experiencing mental health issues and also likely suffering from self-stigmatization with low self-esteem, poor self-satisfaction, and feeling worse about oneself for not being able to solve mental health problems. Additionally, a moderate positive association was also observed between being unable to relax and self-stigma in seeking out mental health care, $r(175) = .39$, $p < .001$. This finding suggested that Southeast Asian international students in the present study could not relax when thinking about their mental health risks, and this

tenseness internalized with self-stigma, particularly low self-esteem, less self-satisfaction, and feeling worse about themselves, can block their mental health uptake.

From these findings, it was clear that Southeast Asian international students had moderate perceptions of their risk of developing mental health illnesses; however, their internalized self-stigma around going to therapy impacted their overall mental health uptake. Here, the interplay between perceived susceptibility and self-stigma associated with accessing care suggested that Southeast Asian international students had negative perceptions of seeking help. Specifically, the majority of participants believed that seeing a therapist would decrease their overall self-esteem, self-satisfaction, and problem-solving abilities, which were identified as significant barriers in preventing them from engaging in mental health help-seeking behaviors.

To further illustrate this complex interplay between this independent variable (perceived susceptibility) and the dependent variable (self-stigma of seeking help), the qualitative data support the overarching claims made about the study population. Given that mental health was described by the majority of interviewees as being highly stigmatized and taboo in Southeast Asian cultures, another Indonesian student's recollection of this issue paints a better picture of the cultural beliefs and nuances surrounding mental health and help-seeking behaviors. A 19-year-old Indonesian male, studying engineering at a private 4-year university in the northeast United States shared the following:

> I don't know of my friends actually using these services. Maybe it's because a lot of my friends are international, and we were brought up not to really use them. We were raised traditionally, so we don't think very highly of these kinds of services. We see them as a sign of weakness. There's definitely a stereotype that struggling through things on your own is just part of the process.

Here, the student's unique perspective captured how their attitudes were shaped by Indonesian cultural beliefs of suppressing mental health issues that have led to stereotypes and self-stigma

around uptake. As evidenced in this recollection, mental health help-seeking behaviors are often discouraged in Indonesian culture as well as Southeast Asian countries because getting help is perceived as a sign of weakness. This student's suppression of mental health issues and their negative perception and dissatisfaction with mental health resources and services showed how deeply rooted cultural beliefs shaped their upbringing, mental health understanding, and uptake. Their experiences aligned with broader findings from the qualitative data presented in Chapter 4, where it was shown that cultural beliefs and expectations contributed to stereotypes, gender norms, and stigma surrounding mental health that Southeast Asian international students internalized. The differences in mental health understanding, perceptions, and uptake in Southeast Asian cultures illustrated how "diverse demographic, sociopsychological, and structural variables may affect the individual's perceptions and thus indirectly influence health-related behavior" (Rosenstock et al., 1994, p. 10).

SSOSH, Perceived Susceptibility, and the Existing Literature

These findings on the interactions between perceived susceptibility and self-stigma to seeking mental health care aligned with previous research, particularly works by Xiong and Yang (2021), Fritz et al. (2008), and Wei et al. (2007). To date, Asian international students have the lowest mental health utilization rate, compared to other international students and domestic peers in the United States, due to their stigma and minimal understanding of the services and resources for mental health help (Xiong & Yang, 2021). Specifically, "culture-related variables such as loss of face and stigma concerns" were also evident from the quantitative and qualitative findings (p. 172). Additionally, these "traditional Asian values" that Southeast Asians in the present study hold have contributed to feelings of embarrassment, perceived self-weakness, low self-esteem, fear of judgment, and feeling rejected (p. 172). All of these stigmatized sentiments

shaped the present Southeast Asian international students' mental health understanding and low uptake—a finding that extends the broad literature of Asian international students, where "the relationship between perceived stigma and personal stigma was stronger for Asian international students" compared to Asian American students (Maeshima & Parent, 2022, p. 1).

Implications of BACE, SSOSH, and Perceived Susceptibility

Overall, the moderate relationships observed from the correlation testing between perceived susceptibility, BACE, and SSOSH have important implications for understanding Southeast Asian international students' mental health perceptions and overall uptake. Although the participants recognized they were susceptible to experiencing mental health challenges, this awareness was influenced by barriers and self-stigma that minimized mental health uptake among this population.

To intervene, colleges and universities must recognize these unique barriers and self-stigma that Southeast Asian international students face. Increasing mental health understanding and utilization among these vulnerable students will require health education messaging and programs that incorporate culturally relevant strategies. First, it is important to have targeted messages and programs that normalize mental health and well-being to foster healthier college campuses. To close knowledge gaps, it could be helpful to consider working with the international student offices to distribute announcements, guides on how to access available resources and services, and workshops and events that address stigma. Based on the present study, this vulnerable population reported limited knowledge in knowing where to get help, dissatisfaction with existing services, and preference to seek out alternative forms of care due to financial concerns about the costs of getting care, not having culturally competent professionals, and time-consuming and inconvenient appointments. Given the identified barriers and the high

self-stigma associated with seeking help among Southeast Asian international students, it is important to factor such barriers in health education interventions that will mitigate them. Thus, colleges and universities can create step-by-step guides to outline the mental health help-seeking process in a clear and organized way for students to follow. Here, creating a clear roadmap for students will provide guidance and manage expectations when it comes to seeking mental health support on campus, particularly essential phone numbers to call for normal operation hours and expected wait times, timelines for screenings and intakes, scheduling appointments, and number of sessions allotted for each term. A small phonebook could be printed and provided to students as they pick up their photo identifications for campus access during orientation events. Most importantly, the tutorial guides on how to access mental health resources and services can be translated into Southeast Asian languages and distributed to various departments, including the international student offices, health services, dean's office, Asian or ethnic studies programs, and student organizations to spread the message throughout the campus. As noted by our oldest participant and Singaporean student (male, 40 years old, attending a private university in the Northeast), it is important to disseminate the information early on, particularly at orientation or the first few weeks of each term, to help students learn about existing campus resources and services, ask questions, and plan accordingly.

Additionally, as illustrated by the interviewees, their participation in cultural and ethnic student organizations like the Vietnamese Student Association (VSA) played vital roles in shaping their student life on campuses. Most importantly, they reported finding supportive communities through engaging in Southeast Asian clubs that increases their sense of belonging and connection with their cultural roots to mitigate feelings of isolation. As evidenced by the descriptive statistics, when asked to understand the impacts of acculturative stress on mental

health uptake, 29.80% (n = 53) of the participants (N = 178) strongly agreed (5.60%, n = 10) or agreed (24.20%, n = 43) to feeling a threat to their cultural identity due to being lost and unable to find their cultural roots. Similarly, 28.10% (n = 50) of students who participated (N = 178) strongly agreed (5.60%, n = 10) or agreed (22.50%, n = 40) that they feared they were losing their ethnic identity.

BACE, Perceived Severity, and the Health Belief Model

According to Pearson correlation coefficients, a moderate relationship existed between participants who feared that having a mental health problem would change feelings about themselves and barriers to accessing mental health care when measured on the BACE scale, $r(175) = .33$, $p < .001$. Similarly, another moderate positive correlation was observed between the severity of consequences of having mental health issues with barriers to accessing mental health care, $r(175) = .31$, $p < .001$. Another significant moderate positive relationship occurred between believing that experiencing mental health issues would make daily activities more difficult to complete and barriers to accessing mental health care, $r(175) = .40$, $p < .001$.

These findings suggested that the Southeast Asian international students in this study who perceived having mental health issues would change their feelings about themselves, have severe consequences, and make completing daily activities more difficult, were also more likely to experience barriers to accessing care. Those barriers to accessing care measured through the BACE scale included being uncertain about where to receive care, being unhappy with existing available resources and services, preferring alternative forms of support, facing financial concerns involved in getting treated, having a lack of culturally competent care, and finding appointments too time-consuming or inconvenient. Here, the HBM construct of perceived severity worked hand in hand with the previous perceived susceptibility to make up perceived

threats. This moderately positive relationship between the perceived belief that having mental health issues would hinder their abilities to complete daily activities and barriers to accessing mental health care revealed that study participants believed there were serious repercussions to developing a mental health illness; moreover, "leaving it untreated" could impact their education, family, friends, and daily lives (Rosenstock et al., 1994, p. 8).

BACE, Perceived Severity, and the Mental Health Belief Model Assessment (MHBMA) Scale

According to Greene (2018), the MHBMA Scale operationalized the HBM construct of perceived severity in reference to how individuals "perceived to have serious consequences (morbidity and mortality)" of experiencing mental health illness (p. 9). This validated scale was used to examine the correlation between perceived severity and barriers to accessing mental health care. The Southeast Asian international students in this study believed experiencing mental health issues would lead to severe consequences and were likely to experience greater barriers when accessing mental health care.

BACE, Perceived Severity, and Existing Literature

In the current literature, Asian American students in the United States were found to "delay seeking help until problems become quite severe" and "tend to have greater severity of symptoms, including reduced functioning, at the outset of mental health treatment relative to White Americans" (Kim & Zane, 2016, p. 314). These behavior patterns indicated that there were significant barriers to seeking out mental health help for Asian American students. They also showed that the two HBM constructs of perceived susceptibility and perceived severity interacted with each other, whereby individuals may only recognize their risks to mental health issues when there are severe consequences or symptoms that impact their daily lives.

Similarly, in the context of Asian international students, Xiong (2018) also found that this population exhibited similar help-seeking behaviors. Asian American students and Asian international students have similar mental health help-seeking behaviors; both populations were found to wait for their mental health conditions to manifest into more severe symptoms before getting support (Kim & Zane, 2016; Xiong & Yang, 2018). Specifically, Xiong (2018) found that Asian international students "tend to express psychological problems in physical symptoms (e.g. headaches and stomach pain) because of the stigmas towards mental health issues in Asian culture" (p. 172).

Quantitative findings on the moderate correlation between perceived severity and barriers to accessing mental health care aligned perfectly with the broader literature on Asian international students, where Southeast Asian international students in the present study showed similar levels of perceived severity and reluctance to seeking out mental health support until there were serious symptoms because of existing barriers such as not knowing where to access help, being dissatisfied with existing services and resources, preferring alternative forms of care, having financial concerns surrounding costs involved, finding current mental health care professionals not culturally competent, and feeling appointments were time-consuming and inconvenient.

On the qualitative side, the results provided further evidence to support how perceived severity was moderately correlated with barriers to accessing mental health care, particularly illustrating the delay in seeking help until symptoms became more severe. In the present study, a Malaysian international student shared that they "hide" their mental health challenges and would only consider seeking care "if things ever get bad enough" or they "cannot take care of it" on their own. While "mental health is important" and "people die because of poor mental health…

and it also manifests to your physical health over time," this student feared that seeking help would make completing their daily activities more difficult because they "work part-time on campus….don't have a lot of room left to go to mental health help and might stress out even more…about fitting in appointments…lose study time or like working time." Here, their sentiment mirrored the help-seeking patterns of Asian American and Asian international students, where experiencing mental health problems may not be severe enough to seek out help due to structural barriers such as not having the time to fit into therapy appointments while juggling school and working. Overall, the moderate correlation between perceived severity and barriers to accessing mental health found in this study suggested that Southeast Asian international students feared having mental health problems would change their feelings about themselves, lead to serious consequences, and make it harder to complete their daily activities if their conditions become severe and impact their physical health.

SSOSH, Perceived Severity, and the Health Belief Model

According to Pearson correlation coefficients, perceived severity was also found to be moderately significant with the self-stigma associated with seeking mental health help. A moderate positive relationship occurred between the perceived belief that there would be a change in how Southeast Asians viewed themselves if they experienced mental health issues and the self-stigma associated with seeking out mental health care, $r(176) = .40$, $p < .001$. Additionally, another moderate positive correlation was observed in believing that having mental health problems would lead to serious consequences and the internalized self-stigma surrounding seeking help, $r(176) = .32$, $p < .001$. Lastly, a significant moderate positive relationship was found between the perceived belief that having mental health issues would hinder daily life and make completing activities more difficult and the self-stigma surrounding seeking mental health

care, $r(176) = .43$, $p < .001$. Here, the moderate interplays between perceived susceptibility and the self-stigma associated with seeking help suggested that Southeast Asian international students in the present study moderately recognized their vulnerability to experiencing mental health issues with consequences.

ANOVA: SSOSH and Geographic Region of School

The geographic region of the school that students attended was a significant predictor of shaping the self-stigma associated with seeking out mental health care (SSOSH). Higher SSOSH scores suggested that seeking out mental health was highly stigmatized among the Southeast Asian international students in the present study. Their high levels of self-stigmatization surrounding mental health uptake was significantly associated with the geographic region (West, Midwest, Northeast, and South) where they attended school. The findings revealed that Southeast Asian international students studying in the Western parts of the country reported the highest levels of stigma, followed by the Midwest, Northeast, and the South. While there were significant differences between self-stigma associated with seeking out help and geographic region in the one-way variance analyses, it is important to note that cultural and geographical differences were not the primary focus of this preliminary work; more research is needed to draw stronger conclusions for this study population.

According to the most recent *Open Doors Report on International Educational Exchange* (2023), California, a Western state, hosts the most international students with over 140,000 of the 1.12 million international students in the country. It is worth noting that California not only has the highest concentration of international students, but is also home to the largest number of Asians in the United States. (Pew Research Center, 2021). According to Pew Research Center (2021), almost half (45% or 9.8 million) of the Asian population in the United States reside in

the West, and close to a third (30%) of those Asians live in California. To put it into greater perspective, Asians in California make up 17% of the state's overall population, while for Washington State, they accounted for 11% of the state's overall population (Pew Research Center, 2021). When it comes to Southeast Asian-Americans, as cited in the course provided by NetCe on *Providing Culturally Responsive Care to Asian Immigrants*, Vietnamese people make up the fourth largest Asian group in the U.S., coming in at 2.3 million people based on data obtained from the U.S. Census Bureau in 2022, and expected to climb to 4 million by 2030, which will make this growing population the second largest Asian American subgroup. More than a third of Vietnamese immigrants, approximately 39%, call California home, while another 13% are in Texas (NetCe, 2024).

Given the large clusters of international students and Asian Americans, Southeast Asian international students studying in California and other neighboring Western states such as Alaska, Arizona, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming may navigate different cultural norms due to the varying beliefs, attitudes, and behaviors surrounding each region. Accordingly, the *Open Doors Report on International Educational Exchange* (2023) also noted that the following West Coast schools host the most international students in the United States. Specifically, the enrollment breakdown for international students is as followed: Arizona State—Campus Immersion (with around 18,400 students); University of Southern California (approximately 17,400 students); University of California—Berkeley (around 12,400); University of Washington (roughly 10,700 students); University of California—San Diego (about 10,400 students); and the University of California—Los Angeles (around 10,400 students).

According to a study conducted by the Copernicus Marketing Consulting Research (2024), Americans (18 years and older) living on both western and eastern coasts have different "attitudinal and behavioral differences shaping these regional perceptions"; this is discussed in this section to draw potential conclusions on how the West Coast and East Coast might play a role in contributing to the high stigma participants exhibited while studying on the West Coast versus those with the lowest levels on the East Coast. As described by the firm,-generalizations of West Coast people are as "more peaceful…more free-flowing, casual, and hippy-style," while East Coasters are "uptight, unfriendly, and stressed out…. more prim, proper, and conservative in their dress… and social attitudes" (n.p.). Although these generalizations are broad, the firm's findings can offer working knowledge of how geographical differences might shape self-stigma among Southeast Asian international students.

For Southeast Asian international students studying on the West Coast (n = 33), the more laid-back culture and "go-with-the-flow" attitudes of this region can interact with other modifying factors, particularly the larger concentration of Asian international students and other Asian communities. Here, being surrounded by other Asian communities on the West Coast, who may have maintained traditional cultural values and collectivist mindsets, can play a role in increasing students' self-stigma around mental health uptake. Given that the literature has found that other Asian international students "often have negative attitudes toward professional counseling," being in closer proximity to these peers and the broader Asian communities holding similar beliefs can lead to further stigmatizing the search for mental health among our study population (Zhang et al., 2022, p. 59). As a result, their self-esteem would decrease if they saw a therapist, and they would be less satisfied with and feel worse about themselves for not being able to solve their issues.

In the Midwest, the present study's ANOVA findings showed the second highest self-stigma (SSOSH) scores among Southeast Asian international students. While only six participants studying in the Midwest participated in this study (N = 176) and only one was interviewed, this significant difference in the geographical area where students attended school, in conjunction with their self-stigma associated with seeking out mental health, suggested that region of school enrollment can shape overall perceptions of mental health and increase self-stigma around help-seeking behaviors.

This finding is worth noting because several Midwestern states were among the top 10 in hosting the most international students. These leading hosts included Illinois with approximately 62,300 students, followed by Michigan with around 38,100 students, Ohio with roughly 36,900, and Missouri with about 32,600 (Open Doors, 2023). In academic year 2023-2024, Midwestern institutions that saw the most international students were the University of Illinois—Urbana-Champaign in Illinois with approximately 15,400 students; Purdue—West Lafayette in Indiana with 12,200 students; and the University of Michigan—Ann Arbor with around 11.800 students. Despite the large proportions of international students enrolled in colleges and universities in the Midwest, this region has been described as "closed-minded and unenlightened," given its traditional and more conventional norms, according to Emeritus Professor Lenkowsky of public affairs and philanthropic studies at Indiana University when asked in *Persuasion* magazine (Appelbaum, 2023).

In the context of Southeast Asian international students studying at Midwestern institutions, the "social conservatism" rooted in the founding of schools in this region can shape not only the campus environment, but also the mental health climate that potentially increases self-stigma of help-seeking behaviors among Southeast Asian international students (Hoeveler,

1974, p. 395). For example, the conservative and reserved cultural environments found at Midwestern colleges and universities can play a role in influencing the self-stigma associated with seeking out mental health. Without strong quantitative and qualitative data from this present study, however, it is not possible to make definite claims about the campus environments in the Midwest and how regional differences in cultures and attitudes can contribute to the self-stigma of seeking out mental health resources and services or whether higher stigma levels might already have existed within the study population.

The Northeast (n = 120) was most represented in the sample (N = 176), with approximately 68% hailing from this region. The greater proportion of Southeast Asian international students in the present study coming from the Northeast was likely due to enrollment trends reported by the *Open Doors Report on International Educational Exchange* (2023), in which New York University is the leading host for international students in the United States, with approximately 27,300 students, followed by Northeastern University (second) with around 21,000 students, Columbia University (third) with about 20,300 students, and Boston University (seventh) with 12,800 students. Given that four of the 10 leading host institutions are located in the Northeast, it is plausible that these colleges and universities may have more experience and familiarity working with international students from diverse backgrounds, particularly in cities like New York and Boston. This knowledge and training could create more inclusive, open, and resourced campus environments that are responsive to the mental health challenges of ~~their~~ international students, particularly those from Southeast Asia. As a result, it is likely that students attending schools in the Northeast region are more comfortable in openly discussing their mental health with their peers; the interviewees admitted as much in their

interviews. Specifically, one 19-year-old Vietnamese female student studying economics at a private college in the Northeast shared the following:

> I feel like for my peers, they talk a lot about going to therapy– about, like, meeting with their therapist….

As evident from this student's recollection, the mental health environment at their Northeast institution felt more receptive to mental health conversations and help-seeking behaviors, which could explain the lower levels of self-stigma surrounding uptake among all the study participants.

For the Southern region (n = 17), Southeast Asian international students in the present study (N = 176) reported the lowest level of self-stigma associated with seeking out mental health help. According to the *Open Doors Report on International Educational Exchange* (2023), the leading Southern host institutions that were included in the top 15 list were the University of North Texas with around 12,000 international students and the University of Texas—Dallas with approximately 10,500 international students. The one-way analysis of variance showed that the lowest level of self-stigma associated with seeking out mental health was found among Southeast Asian international students attending institutions in the South, compared to higher rates seen in those in the West, Midwest, or Northeast regions. One potential explanation for this finding could be that the smaller representation of international students across colleges and universities in the South could reduce the self-stigma of seeking out mental health care for Southeast Asian international students. With fewer international students present at Southern institutions, Southeast Asian international students could experience more loneliness, loss of cultural identity, and lack a sense of belonging without their community. As a result of these acculturation challenges and feelings of isolation, Southeast Asian international students studying in the South could have lower self-stigma levels, compared to peers in other regions of

the United States who are likely to be surrounded by their own ethnic or cultural communities. Thus, these international students will likely experience greater pressure to hold onto their cultural values, which has been found to stigmatize mental health uptake (Zhang et al., 2022).

Despite these significant differences between the geographical region where Southeast Asian international students attended school and their self-stigma associated with seeking out mental health, this preliminary work was limited in drawing any further conclusions, given the unequal representation of Southeast Asian international students studying in different geographical regions. As a result, this discussion provides a working understanding of how this demographic characteristic of where students attended school may play a role in shaping their attitudes and help-seeking behaviors. Therefore, this study intended to lay a solid foundation for future research to recruit a more diverse group and balanced sample consisting of Southeast Asian international students studying in different regions of the United States. Thus, more insights will be offered into these regional differences in attitudes and cultures and how they shape self-stigma levels among this population.

Summary of Hierarchical Linear Regression Findings and Analysis for BACE

The sixth and final block of the backwards hierarchical regression model revealed significant variables contributing to the barriers to seeking mental health among Southeast Asian international students in the present study, ($F(13,160) = 14.17$, $p < .001$, $R^2 = .54$), with a 54% variance. Those predictors included acculturative stressors (threat to cultural identity, communication problems, culture shock, and guilt) and the HBM constructs of perceived benefits, perceived barriers, and self-efficacy. Overall, these hierarchical regression findings suggested that acculturative stressors and the HBM constructs of perceived barriers, perceived benefits, and self-efficacy predicted higher BACE scores. Higher BACE scores from the findings

suggested that greater perceived barriers prevented Southeast Asian international students from seeking mental health care, particularly among the graduate student population. As noted in the literature, "prolonged exposure to acculturation stress may result in a decline in mental health" (Ma et al., 2020, p. 34), which can be exacerbated by barriers to accessing help and the self-stigma associated with care.

Acculturative Stress and BACE

The noteworthy findings from the sixth model for BACE showed that higher levels of acculturation stress (loss of cultural identity, communication challenges, culture shock, and guilt) were associated with increased barriers to seeking out mental health care among the Southeast Asian international students in this study. Each of these stressors played significant roles in contributing to higher acculturative stress and perceived barriers in accessing mental health care. These key interactions between the acculturative stressor and BACE are discussed and synthesized in the following section.

Threat to Cultural Identity

The Southeast Asian international students in this study who reported being treated differently because of their race were found to associate their fears of losing their cultural identity as significant barriers preventing them from accessing mental health care. As cited in Çimşir and Kaynakçıs's (2024) work, Zeng et al. (2022) found that perceived discrimination and financial concerns were identified as significant predictors of the risk of experiencing depression among international undergraduate students (n = 712) in the United States. The hierarchical regression findings in the present study extended this broader understanding to show that undergraduate and graduate Southeast Asian international students' perceptions of being treated

differently because of their race not only increased their fears of losing their cultural identities, but were also barriers to their help-seeking intentions for mental health care (BACE).

To support these claims further, descriptive statistics revealed that 60.80% (n = 100) of the participants (N = 178) strongly agreed (14.10%, n = 25) or agreed (36.70%, n = 65) to being unsatisfied with existing mental health services. Moreover, 56.70% (n = 101) of the participants (N = 178) strongly agreed (23%, n = 41) or agreed (33.70%, n = 60) that the lack of culturally competent mental health professionals from their own ethnic or cultural background was a significant barrier to seeking care.

Discussion of Qualitative Findings

On the qualitative side, these experiences of being treated differently because of their race were some of these students' first encounters in the United States. In an interview, a 20-year-old female Indonesian Singaporean student studying art history in the Northeast region recalled feeling discriminated and disrespected during the first day of orientation in an icebreaker activity. After an American peer immediately heard they were from Indonesia, the peer proceeded to ask the participant, "How do you get to school in Indonesia?" Here, the participant explained that this classmate assumed the infrastructure of their home country was "third world" and lacked the necessary "forms of transportation." The student further clarified to their peer:

> No, I did not take a boat to school. I did not ride an elephant to school. I did not kayak to school, so I thought it was very disrespectful to ask me that type of question as well, and they only knew Bali, which is an island, but they were trying to understand my home country…and while it may be a third world country, but they assumed that I didn't know a lot of things that they did….

This participant went on to share that they tried to obtain mental health help through their school resources but ran into another barrier: not having a culturally competent provider who understood their acculturation struggles. Instead of receiving the needed help, the student shared

that their therapist reminded them to focus on "living in the moment because you are not home anymore." The student felt this was insensitive to their unique acculturative experiences and dismissive of their challenges. As a result of the lack of culturally competent and sensitive therapists, this student remained highly unsatisfied and uncomfortable and experienced high levels of perceived barriers to continue therapy after the two sessions proved non-beneficial. This Indonesian Singaporean student's experience of microaggressions highlighted how being treated differently because of one's race can serve as a significant barrier to seeking mental health help or compelling them to try therapy. In this case, the student felt that the available mental health professionals were not sensitive to their fears of losing their cultural identity and, thus, was not satisfied with the existing services.

Similarly, a 30-year-old female graduate student studying psychology at a private university in the Northeast shared similar sentiments of being treated differently by people who learned they were from the Philippines. They described the following:

> Sometimes when people learn that we come from third world countries or developing countries, they just imagine it's all poverty—everyone is struggling. I hear comments like, "Oh yeah, it's so hard there, I can't imagine." It sounds condescending sometimes. There's this lack of connection or effort to truly understand what our culture is really about.

These unique narratives illustrated how racial discrimination, microaggressions, and perceived cultural assumptions of being a "foreigner" increased acculturative stress and created significant barriers that decreased their mental health help-seeking behaviors (Sandhu & Asrabadi, 1994., p. 435). The qualitative data aligned with the existing literature, in which Cong et al. (2024) cited Wei et al.'s study (2012) which found how "language misunderstanding might play a role in students' perceptions of experiencing discrimination and actually experiencing it" (p. 58). These negative experiences further alienated these two students and decreased their self-

esteem and willingness to connect to others, particularly to mental health providers who were not able to understand their cultural backgrounds, values, and fears of losing their identities as international students studying in the United States. Overall, the quantitative and qualitative findings captured the complex interplay between acculturative stress stemming from the potential threat to cultural identity by being treated differently because of race and how these racialized experiences were potential barriers in mental health help-seeking among Southeast Asian international students.

Interventions

Overall, these findings revealed how the acculturation process, particularly the stress from being treated differently because of race, can serve as a significant barrier in seeking out mental health care. To help decrease acculturation challenges among Southeast Asian international students, relevant departments and programs across colleges and universities should prioritize proactive and early outreach to international students, particularly those coming from Southeast Asia. As suggested by Dr. Hwang (2014) in a fact sheet report written for the Asian American Psychological Association (AAPA) Leadership Fellows Program, a "resource package for Asian international students" is necessary, particularly creating a subfolder for Southeast Asian international students (p. 3). This would involve cross-collaboration at colleges and universities. For example, relevant departments and programs including international student offices, admissions, advising, mental health services, dean's offices, student life, residential life, and student affairs can collaborate to conduct a formative evaluation of the unique needs and concerns of their international student population before their arrival on campus. Specifically, open-ended online surveys can be distributed along with other enrollment forms to be completed as part of the required matriculation process. These in-take forms could be

sent along with roommate selection, where colleges and universities can include questions targeting potential mental health concerns and asking for suggestions about services, resources, and programming events for international students. Office hours (phone, virtual, or in-person meetings) should also be offered during this period to answer any questions that students may have as they complete these in-take forms. Once data have been collected, the above-mentioned departments must work together to aggregate students' feedback and generate a report with strong objectives and specific approaches to addressing diverse mental health needs for all students, particularly vulnerable international students from Southeast Asia.

Acculturative Stress (Communication Problems) and BACE Hierarchical Regression

Given that Asian international students struggle the most with the language barrier, compared to European counterparts and domestic students in the United States, these findings from six hierarchical regression models extended this broad understanding to show how communication difficulties prevented Southeast Asian international students from seeking out mental health help (Fritz et al., 2008).

From these six blocks, acculturative stress was a major predictor in preventing access to mental health care (BACE), particularly because of communication problems in not being able to express themselves fully. As noted by Cong et al. (2024), the lack of English proficiency can be "one of the strongest predictors of acculturative stress for Asians" (p. 29). For the Southeast Asian international students in this present study, language difficulties was a major contributing source of acculturative stress that not only remained unaddressed but also decreased their mental health uptake. Here, not being able to communicate their feelings effectively to others increased their acculturative stress level, which likely prevented them from wanting to get help.

Qualitative Findings

The emergent theme of language challenges from the qualitative findings further supported the complex interplay between experiencing higher acculturative stress due to communication problems and could be a significant predictor in preventing mental health uptake among Southeast Asian international students. A 30-year-old, Filipino female student who is studying psychology at a private university in the Northeast recounted how their language challenges manifested in the classroom:

> There were times in class where I would hesitate to recite or share an opinion, mainly because I didn't know if people would understand me. I can speak English, but I still find myself stumbling sometimes because I want to switch to my home language. Sometimes it's just harder to explain, so I have to translate in my mind before sharing an opinion. And I hesitate because I wonder—will they notice that I'm code-switching or stumbling over my words?

This student's recollection of acculturation challenges, particularly with the language barrier, was aligned with what is known about communication challenges among international students in the existing literature, where they "need to translate their thoughts in their home language to prepare answers in English"—or code-switching in this context for this Filipino student (Zhang et al., 2022, p. 58).

Similarly, a 31-year-old Indonesian female graduate student studying education at a private university in the Northeast experienced the same nervousness and anxiety when asked to contribute to their classroom discussion for the first time. They said:

> The first time, I rarely spoke because I was afraid they wouldn't understand what I was saying. I was also afraid of making mistakes when I spoke.

Both of these reflections illustrated how language barriers can impact students' communication abilities and academic performances, which have been extensively studied in the literature (Cong et al., 2024; Zhang et al., 2022). Unlike those studies, this present research has

extended this understanding to examine how acculturative stress from the language barrier can impact mental health uptake among this understudied population.

Given that English is often not the first language for the participants who then struggle to express themselves fully inside and outside the classroom, they can experience acculturative stress and anxiety—at a level which is the highest among Asian international students compared to European and domestic students (Fritz et al., 2008). Language struggles throughout the acculturation process can make it difficult for students to communicate their immediate needs and concerns effectively, particularly finding the right words to articulate their raw emotions, stress, anxiety, and other unique experiences. As a result of these communication problems, acculturative stress was found to be a significant barrier in these students' help-seeking journeys and prevented them from getting the support they needed. In addition to the language barrier, these participants' limited knowledge of where to get professional help, dissatisfaction with existing services that lack culturally competent or even bilingual professionals, financial constraints, preference for alternative forms of care, and concerns surrounding time commitment and inconvenience of therapy appointments were other key variables measured with the BACE scale that identified additional predictors in shaping participants' hesitancy and overall low mental health uptake.

Acculturative Stress (Culture Shock) and BACE Hierarchical Regression

In the sixth hierarchical regression model for BACE, culture shock from the acculturative process played a significant role in predicting barriers to seeking out mental health care (BACE) among Southeast Asian international students. The culture shock of feeling many pressures placed on them after arriving to the United States was not only a stressor experienced by these participants but also a significant barrier in predicting their mental health help-seeking behaviors.

The observed interplay between higher acculturative stress from the culture shock of having pressures placed upon them after arriving to the United States prevented Southeast Asian internationals in the present study from seeking mental health help. Currently, the three main contributing factors of culture shock experienced by the broader population of Asian international students in the United States include adjusting to differences in academic engagement, learning styles, pedagogical approaches, and alternative mental health (Zhang et al., 2022). The following sections discuss the multiple pressures (academic and family) that participants alluded in the interviews that may have served as potential barriers in their mental health help-seeking journeys.

Acculturative Stress (Culture Shock) Qualitative Findings

A 24-year-old Filipino female graduate student studying psychology at a private university in the Northeast described the culture shock of navigating an individualistic culture in U.S. academia, which shaped how they approached lectures and discussions and networking with classmates and professors. This participant went on to describe how their acculturation challenges increased their stress and anxiety levels, which also manifested into experiencing imposter syndrome. They shared the following:

> I think one of the biggest struggles for me is how to present myself in academic spaces because I noticed there's such a big cultural difference in the U.S. and in the Philippines…the individualist culture…I just struggled, especially in classes, when my fellow students had no hesitation to talk to professors after class or present their ideas, I always feel so small, and I always doubt whatever I'd have to say in class or contribute…. It fed a lot to my anxiety….

The acculturation challenges of adjusting to an individualist society (often found in North America and Western Europe) from a collectivist perspective was extremely difficult for this participant who, like others, experienced multiple pressures, particularly in academic spaces where they are "in a double bind, caught between the old values of their cherished native culture

and the new values of the host culture, which they are pressured to adopt" (Sandhu & Asrabadi, 1994., p. 445). Given the drastic contrast between the collectivist culture found in most Southeast Asian countries and the individualism seen in America, this student's struggles with classroom participation and outreach to their professors further illustrated the difference in values and expectations of self-promotion and assertiveness in higher education. According to Ma et al. (2020), the dichotomy between collectivist and individualistic cultures can also lead to increased acculturative stress. In this context, the findings suggested that acculturation challenges from the multiple pressures Southeast Asian international students faced inside and outside the classroom also contributed to feelings of imposter syndrome from holding onto the "colony mindset," where to them if they saw "a white person, or if you see someone from America," then they "immediately look up to them" because the Philippines and other Southeast Asian nations have been colonized by imperial powers such as the Spanish, Americans, French, Dutch, Portuguese, and British.

In a similar vein, a graduate student shared how international students often "have to hold back" when it comes to navigating the rising tensions on campuses such as protests because of their "vested interests" and that they "have more to lose" as student visa holders in the U.S. They go on share the push and pull dilemma of student activism as they walk around campus and how it can influence their mental health and overall well-being below:

> Of course, it's like a catch-22, right? You want to participate... but you're scared. You're here on scholarship. You have so much invested. You have your visa. They're really holding you by your throat.

This statement underscores not only the mental health stressors of navigating the rising tension on campus environments with student protests such as encampments, walk-outs, and sit-ins, but also recognizing their vulnerability as an international student from Southeast Asia who is

receiving financial scholarships. This student's observation highlights the multiple pressures they faced throughout the acculturation process of having to navigate on-going student protests and campus tensions, while also recognizing that they need to remain apolitical and disengaged to protect their legal immigration status under a Trump administration.

Given the current and complex political climate, international students face significant emotional tolls and mental health burdens due to the increased scrutiny and safety concerns surrounding their visas and legal statuses as we continue to see a rise in anti-immigration sentiments and shifting policies that are intentionally targeting this population. According to Ashley Mowreader, a Student Success reporter for *Insider Higher Ed* (2025), more than 1,550 F-1 or J-1 student visas of international students and recent graduates from over 240 U.S. colleges and universities across the nation have been revoked as of April 18, 2025. Notably, this "explosion of visa terminations" were a result of "the Trump administration's crackdown on immigration and alleged antisemitism," and have left concerning questions and increased fears for higher education institutions, immigration lawyers, and international students (n.p.). At this time, "students and colleges [are grappling] with the changing legal landscape" with looming lawsuits and uncertainties surrounding the protection, sense of safety, and overall mental health well-being of this vulnerable population in the U.S. (Insider Higher Ed, 2025, n.p.). As a result of these new policy changes and heightened surveillance on international students' participation in protests and social media presence, these factors are significantly contributing to unique acculturative stressors of having to experience multiple pressures, navigating tensed campus environments, and safeguarding their student visas from being revoked, cancelled, or jeopardized with the looming risk of being detained or deported—often at the cost of their moral values and mental health.

Outside their classrooms and campuses, culture shock was also evident in their new living environments. A 30-year-old Singaporean graduate student studying law at a private university in the Northeast shared it was their first time seeing homelessness and dirty streets. They offered a comparison of Singapore and New York below:

> So like in Singapore it's really safe… there aren't homeless people. Everything's very clean and pristine. So coming here was—I mean, I'm not foreign to it because I travel a lot—but to be permanently here, at least for like a year, kind of changes the view a little bit.

Here, the differences in cleanliness and awareness of the unhoused population shifted their sense of safety on and off-campus, where they go to express heightened concerns and fears "especially at night" when venturing out to "Midtown or even like a few streets down from campus" since they believed that the areas were "pretty rough." This student's observations of the built environment such as the homelessness and perceived lack of cleanliness increased their concerns for their personal safety as they navigate and adjust to these new surroundings while taking the precautions necessary when living alone for the first time in the U.S.

Overall, the quantitative and qualitative findings suggested that experiencing significant culture shock from the unfamiliar surroundings of their new environments and the many pressures placed upon them after arriving in the United States not only increased Southeast Asian international students' acculturative stress levels, but also acted as barriers in preventing them from accessing mental health care (BACE). Based on the other six models conducted in the hierarchical regression and the 29 one-on-one interviews, the findings on acculturative stress among Southeast Asian international students reflected what is currently known in the literature and cited by the work by Sandhu and Asrabadi (n.d.), who referenced Sandhu, Fortes, and McPhee (1996) where the literature shows that international students tend to experience "threats to cultural identity, powerlessness, feelings of marginality, a sense of inferiority, loneliness,

hostility, and perceived alienation and discrimination" act as stressors and significant barriers in the mental health-seeking journeys of this study population (Sandhu et al., 1996, p. 16).

Guilt and Hierarchical Regression Findings Summary

As shown in the sixth model from our hierarchical regression, the guilt of living a different lifestyle in the United States was also found to be associated with predicting higher BACE scores, contributing to the barriers that impacted Southeast Asian international students' access to mental health care (BACE). Here, the guilt experienced by the participants played a significant role in predicting their low mental health uptake. As noted in the chapter written by Sandhu and Asrabadi (n.d.), this guilt experienced by Southeast Asian international students during the acculturation process can feel as if they have betrayed their native cultures, particularly from insecurities surrounding their new lifestyles in the United States that have important implications on their mental health.

For example, a 20-year-old Cambodian student (the only participant from that country) who was studying computational biology at a college in the Northeast described their feelings of guilt. This offers a powerful example of seeing the interplay between acculturative stress (guilt) and barriers to accessing mental health care (BACE) in the qualitative findings. They described how the guilt they felt was a barrier that prevented them from seeking out therapy. This student reported that getting help felt like a "privilege" and a "betrayal" to their family because they would be "take up all the space" and "ask for the help" they needed if they wanted to get support, but it would invalidate their family's trauma, sufferings, and hard work. They reflected:

> My family didn't have any of that…they survived the Cambodian genocide…they didn't come to America.

As a result of this intergenerational guilt, this participant perceived getting mental health help would make them feel more "foreign" and "Western" for not "living the same way or talking the

same way" as others do at home because "Cambodia is still pretty conservative." Here, their guilt stemmed from the privilege of having access to mental health resources, the fear of losing their cultural identity if they went to therapy, and concerns of not being understood in a Westernized care setting.

Most notably, this feeling of guilt for living a different lifestyle in the United States made them feel more disconnected from their family, and going to therapy to talk about this distance they felt was scary. They said:

> I feel distant from them, and that makes going to therapy and talking about them feel... like guilt. I feel guilty. I'm scared of the fact that I go to talk to someone explaining what I'm feeling, and then have them be like, 'Well, you shouldn't feel like that,' or, 'Wait no, you shouldn't feel guilty, like you're here.' You should take care of yourself. But they don't understand the nuance of the story. It's not simply that I am guilty of seeking therapy... but it makes it harder for me to seek therapy.

This student's powerful story illustrated how guilt can manifest itself as a perceived barrier in the help-seeking process of other Southeast Asian international students, which explained the low mental health uptake in this study population. The quantitative and qualitative findings on how feelings of guilt predicted greater barriers to access to mental health care aligned with the understanding derived from the literature on how Asian international students hold negative perceptions of getting professional help for their mental health due to "traditional Asian values of humility and emotional self-control" (Zhang et al., 2022, p. 59). As cited in the work by Zhang et al. (2022), the authors noted that studies from Young (2017), Ladd and Ruby (1999), Wan et al. (1992), and Zhai (2004) found that coming from more collectivist cultures, such as those practiced in Southeast Asia with Confucius norms, promotes more self-sufficiency "to manage their hardship and maintain emotional strength without complaining." Moreover, "control their behavior, despite their feelings….keeping quiet" were more encouraged because they were more "natural reaction[s]" rather than getting professional help (Zhang et al., 2022,

p. 59). Similarly, the findings from the present study mirrored what is known from the literature, where feelings of guilt from leading different lifestyles in the United States manifested into significant barriers that prevented Southeast Asian international students from wanting to get help, thus explaining the low mental health uptake in this study population.

Summary of Hierarchical Regression Findings and Analysis for SSOSH

The sixth and final block of the backwards hierarchical regression model saw significant predictors of self-stigma associated with seeking out mental health among the study population, ($F(10,131) = 15.12$, $p < .001$, $R^2 = .54$), with a 54% variance. Those strong predictors included the region of school attendance; psychological characteristics of recent feelings of not being able to overcome difficulties; and the HBM constructs of perceived severity, perceived benefits, and perceived barriers. Overall, these hierarchical regression findings suggested that the region where students attended school; psychological characteristics and perceived severity; perceived benefits; and perceived barriers (HBM constructs) played crucial roles in predicting higher SSOSH scores. Higher levels of self-stigma suggested that this study population found mental health to be stigmatized, and seeking out help would lower self-esteem, decrease self-satisfaction, and lead to worse feelings of self because they were unable to solve their own problems. These findings were consistent with those from the literature, where Ma and colleagues (2020) noted that "Asian cultures place greater emphasis on emotional self-control and greater stigmatization of psychological distress than Western cultures" (p. 35).

Geographic Region of School Attendance and SSOSH

As previously discussed from the one-way analysis of variance (ANOVA) finding on geographic region, where students attend school can shape their self-stigma surrounding mental health and overall help-seeking behaviors. Despite the significant findings in the ANOVA,

hierarchical regression analysis, and qualitative interviews, more research is needed to fully explore the attitudes and behavioral differences of Southeast Asian international students attending colleges and universities in various regions of the United States to draw further comparisons and conclusions on how geographic areas can shape self-stigma and mental health uptake. As noted by Ma et al. (2020), the cultural differences found in each region of the United States may or may not influence stigma because it is clear that "acculturation is not confined to one group or geographic location" (p. 36). Therefore, it is important to consider individual (source of funding for school) and other environmental factors (size of school) when exploring the potential interplay between geographic region of school attendance and how it can shape students' self-stigma and overall mental health uptake.

Implications and Recommendations

As previously noted, this preliminary study is the first of its kind to examine the perceptions, challenges, and help-seeking behaviors of Southeast Asian international students studying in the United States through operationalizing the Health Belief Model and the validated survey tools as noted in Appendix G.

This unique work contribute to the existing literature and the fields of health education and international education by shining a spotlight on the lack of representation of Southeast Asian international students' mental health and acculturation experiences in U.S. higher education. Further research is urgently needed to cast a greater focus on the mental health concerns and needs of this understudied population as the United States continues to host all-time records of international students. It is important that the academic and mental health struggles of Southeast Asian international students be documented on their own because the existing literature overshadows their unique experiences with their East and South Asian

counterparts, who are most represented at U.S. colleges and universities at this time because India is overtaking China as the top sending country. As of the recent *Open Doors Report on International Educational Exchange* (2023), China, South Korea, Canada, Taiwan, and then Vietnam trails India in rounding out the top Asian-producing countries.

This present study revealed that the acculturation challenges facing Southeast Asian international students—particularly communication problems, academic and family pressures, racial discrimination, and feelings of guilt—exacerbated their mental health. Overall, moderate levels of perceived susceptibility, perceived severity, perceived benefits, and self-efficacy were also seen among the study participants. The Southeast Asian international students in the present study had significant perceived barriers that shaped their self-stigma and prevented them from seeking out mental health.

Given that the present findings saw high levels of stigma stemming from cultural and religious beliefs at home, it is worth recommending the implementation of culturally competent mental health resources and services that are uniquely tailored for Southeast Asian international students (Jin & Acharya, 2022). Other interventions can include devoting programming, workshops, and trainings to align with Mental Health Awareness Month in May of each year to host daily or weekly events that target Southeast Asian internationals. Partnerships with student cultural, ethnic, and racial groups will be crucial to spread campus awareness of mental health and dismantle high levels of stigma among Southeast Asian international students. World Mental Health Day also occurs on October 10th of every year; this could be perfect timing at the beginning of each academic year to foster a more open, inclusive, and healthy campus that discusses this important health topic via multilingual pamphlets and brochures which inform all

students about existing campus offerings for mental health support and the formation of peer support groups.

Limitations

The present study had several limitations when examining this health topic among the study participants. The limitations included the use of convenience sampling, participant burden, short data collection period and timing, recruitment challenges, and weaknesses in the survey measurements that perceived mental health help through Western lenses. As reported by Lindsey Phillips, senior editor for *Counseling Today* at the American Counseling Association (2021), they shared that: Dr. Sue, the co-founder of the Asian American Psychological Association, explained that counseling has its limitations, particularly due to theories that focuses on "only one aspect of the human condition: the behavioral self, the feeling self, the cognitive self," however, "humans are cultural, political and spiritual beings," particularly Southeast Asian international students who are unique and come from diverse backgrounds and countries that "traditional counseling can often overlook" when seeking to educate and help mitigate their mental health challenges (n.p.).

The use of convenience sampling for the quantitative portion of this dissertation presented several limitations. While the sample size (N = 176) fell short of meeting the needed estimate sample size required for a moderate effective size of 0.50 with a power of 0.80 (α = 0.05), the sample was not representative of the overall Southeast Asian international student population. The quantitative sample only included one student from Brunei and none from Timor Leste. The sample were predominantly Vietnamese (n = 46), Indonesian (n = 35), Filipinos (n = 24), and Singaporean (n = 20). As for the qualitative sample size (N= 29), students from Thailand, Brunei, Timor Leste, and Myanmar were not represented. With this in mind, the lack

of representation from other Southeast Asian countries in both sample sizes must be considered when evaluating the findings and interpretations.

The study also suffered from the limitations of snowball sampling, where the first Indonesian interviewee shared the study in their WhatsApp group that consisted mostly of government employees currently pursuing their master's or doctoral degrees sponsored by the Indonesian government through the Indonesia Endowment Fund for Education Agency (LPDP). For further context, the LPDP program was started in 2011 and is managed by the Minister of Finance. According to their stipulations outlined on their website and echoed by the seven participants who were LPDP recipients, the program does not allow them to work in the United States because they are government employees on leave and will be required to return to Indonesia upon completion of graduate studies (master's or doctoral) to innovate through research and "actualize a prosperous, democratic, and advanced Indonesia" (Lembaga Pengelola Dana Pendidikan, n.d., n.p.). As a result of these restrictions, acculturation challenges, academic pressures, and living arrangements (some come with families) of these Indonesians may differ from others studied in this dissertation.

Additionally, the participant burden of the 50-item survey (which took approximately 25-30 minutes to complete) and the 1-hour interview may have presented challenges for students who were juggling academic studies, employment, and extracurricular activities.

The recruitment period of the study occurred around midterm exams in October and November. Given the potential increase in stress and anxiety surrounding exams and papers during this timeframe, participants may have overreported their mental health challenges. Additionally, the timing of this recruitment period could have prevented students from participating in this present study due to time constraints from their academic responsibilities.

Lastly, Health Belief Model (Rosenstock, 1966) was used as the theoretical framework and operationalized with Greene's (2018) Mental Health Belief Model Assessment (MHBMA), along with other validated survey measures to assess a health assessment baseline. These measures included: General Health Questionnaire-12 (GHQ-12) (Goldberg, 1972); the Acculturative Stress Scale for International Students (ASSIS) created by Sandhu and Asrabadi (1994); Self-Efficacy in Seeking Mental Health Care (SE-SMHC) by Moore et al. (2015); Barriers to Access Care Evaluation Scale (BACE) by Clement et al. (2012); and Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) by Vogel et al. (2013). These tools were used to understand mental health help-seeking behaviors among the study population. While all selected survey items from the validated tools saw high Cronbach alpha values (findings ranged from 0.71 to 0.92), this study was limited in its ability to fully capture the mental health help-seeking behaviors of Southeast Asian international students beyond Westernized lenses that only consider care in clinical settings, such as seeing a therapist or counselor. As evident from the qualitative findings and consistent with the existing literature, Southeast Asian international students preferred to seek alternative forms of care (religion, spirituality, meditation, informal social networks, peer groups, cultural or ethnic student organizations) because of their high stigma levels and fears stemming from their home culture's deeply rooted cultural and religious beliefs. With this in mind, it is important to consider other important sources of support and comfort for Southeast Asian international students who may seek help outside a therapist's office for future studies.

Conclusion

The problem that this present study sought to address was the urgent need to contribute to a body of literature that does not capture the unique mental health experiences and help-seeking

behaviors of a growing international student population at U.S. colleges and universities. The purpose of this study was to identify perceived threats to mental health; perceived barriers faced when seeking out mental health and how students interacted to prevent overall uptake; specific stigmas that informed help-seeking behaviors or the lack thereof; and alternative coping mechanisms among Southeast Asian international students. The qualitative findings provided additional evidence to support the recommended actions that higher education institutions must take to tackle the collegiate mental health crisis, given that Southeast Asian international students are most vulnerable because of their increased risk from acculturative stress and high levels of stigma. At this time, it is imperative to tailor culturally responsive campus mental health resources and services to the unique needs and concerns of vulnerable Southeast Asian international students. This will not only retain the growing enrollment trends seen in this region, but it will also ensure that this understudied population has the access and support they need to thrive academically, mentally, and socially. These interventions must begin with peer support groups and workshops that are hosted by cultural and ethnic student organizations to reduce the stigma that is highly prevalent among our target students.

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Appendix A: IRB Approval Letter

Downloadable Attachments:
Full Board Approved - IRB ID: 24-388.pdf
LD Updated Informed Consent Form (Interview).pdf
LD Updated Informed Consent Form (Survey).pdf

TEACHERS COLLEGE
COLUMBIA UNIVERSITY

Teachers College IRB *Approval Notification*

To: Lynn Dao
From: Karen Froud, IRB Chair
Subject: IRB Approval: 24-388 Protocol
Date: 06/24/2024

Please be informed that as of the date of this letter, the Institutional Review Board for the Protection of Human Subjects at Teachers College, Columbia University has given full approval to your study, entitled "*Understanding Southeast Asian International Students' Mental Health Perceptions, Challenges, and Help-seeking Behaviors During Their Studies in the U.S.*," after a **Full Board Review** on 06/24/2024.

The approval is effective until **06/23/2025**.

The IRB Committee must be contacted if there are any changes to the protocol during this period. **Please note:** If you are planning to continue your study, a Continuing Review report must be submitted to either close the protocol or request permission to continue for another year. Please submit your report by **05/19/2025** so that the IRB has time to review and approve your report if you wish to continue your study. The IRB number assigned to your protocol is **24-388**. Feel free to contact the IRB Office (212-678-4105 or IRB@tc.edu) if you have any questions.

Please note that your Consent form bears an official IRB authorization stamp and is attached to this email. Copies of this form with the IRB stamp must be used for your research work. Further, all research recruitment materials must include the study's IRB-approved protocol number.

As the PI of record for this protocol, you are required to:

- Use current, up-to-date IRB approved documents
- Ensure all study staff and their CITI certifications are on record with the IRB
- Notify the IRB of any changes or modifications to your study procedures
- Alert the IRB of any adverse events

You are also required to respond if the IRB communicates with you directly about any aspect of your protocol. Failure to adhere to your responsibilities as a study PI can result in action by the IRB up to and including suspension of your approval and cessation of your research.

You can retrieve a PDF copy of this approval letter and the official stamped consent(s) materials from Mentor IRB.

Best wishes for your research work.

Sincerely,

Karen Froud, Ph.D.
Associate Professor of Neuroscience & Education
IRB Chair

Appendix B: Study Recruitment Email

Hello,

I'm Lynn, Vietnamese-born, and a Doctoral Candidate at Teachers College seeking your assistance. I'm in the final stages of my dissertation and need YOUR help!

I'm conducting research on the experiences of **Southeast Asian international students** (e.g., **Brunei, Burma, Myanmar, Cambodia, Timor-Leste, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, Vietnam**). If you or someone you know is a Southeast Asian international student feeling stressed, anxious, or overwhelmed about their studies, your participation could be invaluable in helping us develop better mental health resources for students like you.

By sharing your experiences, you could win a **$100 Amazon gift card**. Please find the survey link below or scan the QR code on the flyer:

https://tccolumbia.qualtrics.com/jfe/form/SV_2mnH15jvAMkhOPc

Thank you for your help in spreading the word and making a positive impact together! Looking forward to hearing from you.

Best always,
Lynn

Lynn Dao (she/her) | Doctoral Candidate
Fulbright Scholar | Gates Millennium Scholar
ld2722@tc.columbia.edu | LinkedIn

Appendix C: Study Recruitment Flyer (Electronic Version)

TC Protocol #24-388

Feeling Stressed, Anxious, or Overwhelmed?

You're not alone! This research study explores the mental health experiences, challenges, and help-seeking behaviors of Southeast Asian international students like **YOU.**

Are you:

- Between 18-40 years old
- Enrolled full-time in a community college, or a 4-year college (private or public)
- Interested in helping colleges and universities learn more about **YOUR** mental health needs and challenges

Then participate in our 20-minute survey and/or 60-minute 1-on-1 interview!

By participating, you can:

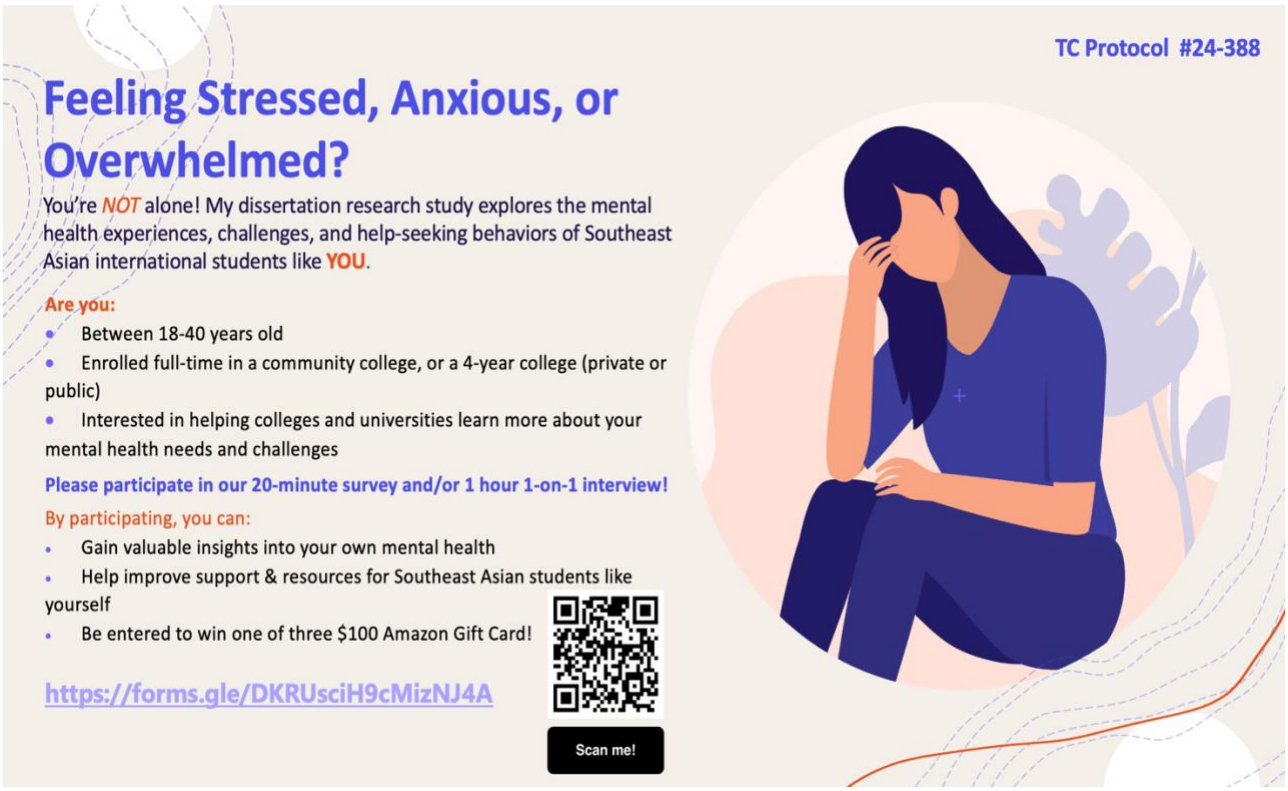
- Gain valuable insights into your own mental health
- Help improve support & resources for Southeast Asian students like yourself
- Be entered to win one of three $100 Amazon Gift Card!

SCAN ME

Click the link below or scan QR to participate:

https://tccolumbia.qualtrics.com/jfe/form/SV_2mnH15jvAMkhOPc

Appendix D: Study Recruitment Flyer (Physical/Printed Version)



Appendix E: Informed Consent Form (Survey)

TEACHERS COLLEGE
COLUMBIA UNIVERSITY
525 West 120th St. New York, NY 10027
212-678-3000 | www.tc.columbia.edu

INFORMED CONSENT

Protocol Title: Understanding Southeast Asian International Students' Mental Health Perceptions, Challenges, and Help-seeking Behaviors During Their Studies in the U.S.
Principal Researcher: Lynn Nha Dao Teachers College
503-484-7366, ld2722@tc.columbia.edu

INTRODUCTION

You are invited to participate in this research study about opinions and attitudes related to mental health and help-seeking. We are interested in Southeast Asian international students who have experienced mental health issues, and those who have not to understand the prevalence of seeking out or lack thereof for mental health resources and services. You may qualify to take part in this research study because you are at least 18 or older, identify as Southeast Asian, and a full-time international college student attending a community college, public or private institution in the U.S. This study will enroll approximately 250 participants to take the online survey questionnaire. It will take approximately 20 minutes of your time to complete the online survey questionnaire. You can choose to complete only the survey questionnaire and not the 1-on-1 hour interview, and still have the opportunity to be entered into the raffle.

WHY IS THIS STUDY BEING DONE?

We are interested in the mental health challenges that Southeast Asian international students face, particularly the underlying factors that impact their help-seeking behaviors. This study helps us understand their overall mental health, challenges they face, attitudes on seeking help, and barriers that prevent them from getting support to help higher education institutions address these issues for the growing student population.

WHAT WILL I BE ASKED TO DO IF I AGREE TO TAKE PART IN THIS STUDY?

If you decide to participate, the primary researcher will ask you to answer 45 questions on Qualtrics in one seating at a time convenient for you. Qualtrics was selected because it is a secured online survey platform that detects fraud (bots and cheaters) and prevents multiple submissions. For the online survey, there will be a total of 5 attention checks within the survey questions. You must pass 3 out of 5 periodic attention checks to ensure you paid attention and read the survey questions to select your answers to have the opportunity to enter the raffle drawing. If you do not pass 3 out of 5 attention checks and

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complete all the survey questions, you will not have the opportunity to enter the raffle drawing to win one of three Amazon gift cards ($25 each).

In this study, you will complete a series of 45 questions that will ask you the following:

- Your demographic background information such as race and ethnicity, school type (private, public community college), geographic location of school, major/academic program type (e.g. undergraduate studying finance or PhD student studying psychology)
- Your emotional state, confidence level, and recent experiences with feeling depressed or sad (e.g., in the past week).
- Additionally, you will be asked about your experience as an international student, including questions regarding acculturative stress:
    - Feelings of social isolation and being treated differently.
    - Concerns about losing your cultural identity and feeling lost.
    - Homesickness and challenges adjusting to new surroundings.
    - Difficulties communicating in English and expressing yourself fully.
    - Culture shock, including struggles adjusting to new foods and social norms.
    - Feelings of guilt related to your situation and lifestyle changes.
- Lastly, you will be asked a series of questions to assess your beliefs about mental health that will include:
    - Your concerns about developing a mental health problem.
    - How you perceive the severity of mental health problems.
    - The potential benefits of seeking therapy.
    - Any barriers that might prevent you from seeking help, such as stigma or logistical challenges.
    - Your confidence in your ability to find help and manage a mental health problem.

WHAT POSSIBLE RISKS OR DISCOMFORTS CAN I EXPECT FROM TAKING PART IN THIS STUDY?

This is a minimal risk study, which means the harms or discomforts that you may experience are not greater than you would ordinarily encounter in daily life while taking routine physical or psychological examinations or tests. However, there are some additional risks to consider. You might feel embarrassed to discuss mental health problems that you experienced in college and/or graduate school. You do not have to answer any questions or share anything you do not want to talk about. You can stop participating in the study at any time without penalty. You might feel concerned that things you say might get back to your school. Your information will be kept confidential.

WHAT POSSIBLE BENEFITS CAN I EXPECT FROM TAKING PART IN THIS STUDY?

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There is no direct benefit to you for participating in this study. Participation may benefit the field of teacher education to better understand the best way to train history teachers.

WILL I BE PAID FOR BEING IN THIS STUDY?

You will not be paid to participate. There are no direct benefits or costs to you for taking part in this study, however, you can opt to enter the raffle drawing for one of three $25 Amazon gift cards if you complete the entire survey and pass 3/5 attention checks.

WHEN IS THE STUDY OVER? CAN I LEAVE THE STUDY BEFORE IT ENDS? The study is over when you have completed the 45-question survey. However, you can leave the study at any time even if you have not finished. You will not have the opportunity to enter the raffle drawing to win one of three $25 Amazon cards if you do not finish the survey questionnaire and fail to pass the 3 out of 5 attention checks. For the raffle drawing, please note that you will have the option to enter your name into a drawing for one of three Amazon Gift Cards valued at $25 each or you can choose not to enter your name into a drawing. Your chances of receiving the gift card are approximately 3/250. You do not have to enter the drawing to complete the study. If you would like to enter the drawing, you will be asked to list your name and email address at the end of the survey. Your contact information and study responses will be stored separately. Your contact information will not be associated with your survey responses. The researcher will only draw raffle names of those who have passed 3 out of five attention checks on the survey. Only the person whose name is drawn for the raffle will be contacted via email by the researchers. Study subjects can expect to hear from the researcher regarding the raffle one week after the study ends.

PROTECTION OF YOUR CONFIDENTIALITY The primary researcher will ensure any electronic or digital information will be stored on a computer with password protection. There will also be no collection of your contact information with the data obtained.

HOW WILL THE RESULTS BE USED?

The results of this study will be published on ProQuest, a platform that houses doctoral dissertations, theses, scholarly articles, and more. Your identity will be removed from any data you provide before publication or use for educational purposes. Your name or any identifying information about you will not be published. This study is being conducted as part of the dissertation of the primary researcher.

WHO CAN ANSWER MY QUESTIONS ABOUT THIS STUDY?

Teachers College, Columbia University
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If you have any questions about taking part in this research study, you should contact the primary researcher, Lynn Dao, at 503-484-7366 (phone or text) or at ld2722@tc.columbia.edu. You can also contact the faculty advisor, Dr. Michelle Odlum at 347-806-2090 or at mlo12@tc.columbia.edu | mlo12@cumc.columbia.edu.

If you have questions or concerns about your rights as a research subject, you should contact the Institutional Review Board (IRB) (the human research ethics committee) at 212-678-4105 or email IRB@tc.edu or you can write to the IRB at Teachers College, Columbia University, 525 W. 120th Street, New York, NY 10027, Box 151. The IRB is the committee that oversees human research protection for Teachers College, Columbia University.

PARTICIPANT'S RIGHTS

- I have read the Informed Consent Form and have been offered the opportunity to discuss the form with the researcher.
- I have had ample opportunity to ask questions about the purposes, procedures, risks and benefits regarding this research study.
- I understand that my participation is voluntary. I may refuse to participate or withdraw participation at any time without penalty.
- The researcher may withdraw me from the research at the researcher's professional discretion. Some conditions that might withdraw you include emotional distress and the potential risk of self-harm.
- If, during the course of the study, significant new information that has been developed becomes available which may relate to my willingness to continue my participation, the researcher will provide this information to me.
- Any information derived from the research study that personally identifies me will not be voluntarily released or disclosed without my separate consent, except as specifically required by law.
- Your data will not be used in further research studies.
- I should receive a copy of the Informed Consent Form document.

Having read the information given above, if you are willing to participate in the survey, please continue on to the next page. By pressing the "I agree" box, and typing your full name below, you are confirming you are 18 years or older and hereby consent to participate in the study.

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212-678-3000 | www.tc.columbia.edu

My signature means that I agree to participate in this study:

Print name: _____ **Date:** _____

Signature: _____

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Appendix F: Informed Consent Form (Interview)

TEACHERS COLLEGE
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525 West 120th St. New York, NY 10027
212-678-3000 | www.tc.columbia.edu

INFORMED CONSENT

Protocol Title: Understanding Southeast Asian International Students' Mental Health Perceptions, Challenges, and Help-seeking Behaviors During Their Studies in the U.S.
Principal Researcher: Lynn Nha Dao Teachers College
503-484-7366, ld2722@tc.columbia.edu

INTRODUCTION

You are invited to participate in this research study about opinions and attitudes related to mental health and help-seeking. We are interested in Southeast Asian international students who have experienced mental health issues, and those who have not to understand the prevalence of seeking out or lack thereof for mental health resources and services. You may qualify to take part in this research study because you are at least 18 or older, identify as Southeast Asian, and a full-time international college student attending a community college, public or private institution in the U.S. Approximately a maximum of 20 participants will be interviewed. Overall, it will take approximately 60 minutes if you wish to participate in the interview on Zoom. You can choose to complete only the hour long interview and be entered into the raffle, and not complete the 20-minute survey questionnaire.

WHY IS THIS STUDY BEING DONE?

We are interested in the mental health challenges that Southeast Asian international students face, particularly the underlying factors that impact their help-seeking behaviors. This study helps us understand their overall mental health, challenges they face, attitudes on seeking help, and barriers that prevent them from getting support to help higher education institutions address these issues for the growing student population.

WHAT WILL I BE ASKED TO DO IF I AGREE TO TAKE PART IN THIS STUDY?

If you consent to participating, you will be asked to answer 8 questions.

All interviews will be conducted virtually on Zoom at a time that is convenient to you.

- The first two questions will ask you to describe your current mental health and how you view it in relation to your identity.
- The second set of questions asks about your coping mechanism to help you manage your mental health and the factors that influence your decisions to seek out support or not.

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- The remaining 4 questions will ask you to share your beliefs about how mental health can influence your perception of yourself and the world around you. Questions also include assessing your understanding and awareness of the current mental health landscape on your campus, and the resources/services that are available or you would like to see added or improved upon to help support your overall well-being.

The interview will last 60 minutes and be conducted online via Zoom at your convenience. Your participation is confidential, and your identity will be protected with a code. Audio recording requires your consent, and the recording file will be deleted after transcription and analysis. The researcher will de-identify the data after it has been transcribed, and destroy the audio recording (deleting the password-protected audio-only file) and only keeping the de-identified transcript for analysis and discussion of results.

WHAT POSSIBLE RISKS OR DISCOMFORTS CAN I EXPECT FROM TAKING PART IN THIS STUDY?

This is a minimal risk study, which means the harms or discomforts that you may experience are not greater than you would ordinarily encounter in daily life while taking routine physical or psychological examinations or tests. However, there are some risks to consider. You might feel embarrassed to discuss mental health problems that you experienced in college and/or graduate school. You do not have to answer any questions or share anything you do not want to talk about. You can stop participating in the study at any time without penalty. You might feel concerned that things you say might get back to your school. Your information will be kept confidential.

The primary researcher is taking precautions to keep your information confidential and prevent anyone from discovering or guessing your identity, such as using a de-identified code (e.g., Participant A, B, C) instead of your name and ensuring that transcripts of interviews and all other data are protected using strong passwords and two-factor authentication log-ins. The investigator will be the only person to have access to these data files and protect participants' information securely and confidentially.

WHAT POSSIBLE BENEFITS CAN I EXPECT FROM TAKING PART IN THIS STUDY?

There is no direct benefit to you for participating in this study. Participation may benefit the field of health education, international education, and psychology to better understand the mental health needs of Southeast Asian international students.

WILL I BE PAID FOR BEING IN THIS STUDY?

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You will not be paid to participate. There are no direct benefits or costs to you for taking part in this study, however, you can opt to enter in the raffle drawing for one of three Amazon gift cards if you complete the entire interview (approximately 1 hour long).

WHEN IS THE STUDY OVER? CAN I LEAVE THE STUDY BEFORE IT ENDS? The study is over when you have completed the 60 minute individual interview. However, you can leave the study at any time even if you have not finished. You will not have the opportunity to enter the raffle drawing to win one of three $100 Amazon cards if you do not answer all 8 questions for the interview. You can also complete the interview only and do not have to enter the raffle drawing. For the raffle drawing, please note that you can enter your name into a drawing for one of three Amazon Gift Cards valued at $100 each or you can choose not to enter your name into a drawing. Your chances of receiving the gift card are approximately 3/20. You do not have to enter the drawing to complete the study. If you would like to enter the drawing, you will be asked in a "Thank You" email to provide your name and email address. Your contact information and study responses will be stored separately. Your contact information will not be associated with your interview responses. The researcher will only draw raffle names of those who have completed the interview and answered all 8 questions. Only the person whose name is drawn for the raffle will be contacted via email by the researchers. Study subjects can expect to hear from the researcher regarding the raffle within 24 hours after the interview ends.

PROTECTION OF YOUR CONFIDENTIALITY The primary researcher will keep all written materials locked in a desk drawer in a locked office. Any electronic or digital information (including audio (and video) recordings) will be stored on a computer that is password protected and will need two-factor authentication to log-in. What is on the audio recording will be written down and stored in a locked desk drawer inside a locked office. The audio recording will then be destroyed. There will be no record matching your real name with your de-identified code. The master list identifying you will be kept locked and separate from the list of codes for the interviews.

For quality assurance, the study team, the study sponsor (grant agency), and/or members of the Teachers College Institutional Review Board (IRB) may review the data collected from you as part of this study. Otherwise, all information obtained from your participation in this study will be held strictly confidential and will be disclosed only with your permission or as required by U.S. or State law.

HOW WILL THE RESULTS BE USED?

The results of this study will be published on ProQuest, a platform that houses doctoral dissertations, theses, scholarly articles, and more. Your identity will be removed from any data you provide before publication or use for educational purposes. Your name or any

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identifying information about you will not be published. This study is being conducted as part of the dissertation of the primary researcher.

CONSENT FOR AUDIO RECORDING is part of this research study. You can choose whether to give permission to be recorded. If you decide that you don't wish to be recorded, **you will not be able to participate** in this research study.

_____I give my consent to be recorded _____
Signature

WHO CAN ANSWER MY QUESTIONS ABOUT THIS STUDY?

If you have any questions about taking part in this research study, you should contact the primary researcher, Lynn Dao, at 503-484-7366 (phone or text) or at ld2722@tc.columbia.edu. You can also contact the faculty advisor, Dr. Michelle Odlum at 347-806-2090 or at mlo12@tc.columbia.edu | mlo12@cumc.columbia.edu.

If you have questions or concerns about your rights as a research subject, you should contact the Institutional Review Board (IRB) (the human research ethics committee) at 212-678-4105 or email IRB@tc.edu or you can write to the IRB at Teachers College, Columbia University, 525 W. 120th Street, New York, NY 10027, Box 151. The IRB is the committee that oversees human research protection for Teachers College, Columbia University.

PARTICIPANT'S RIGHTS

- I have read the Informed Consent Form and have been offered the opportunity to discuss the form with the researcher.
- I have had ample opportunity to ask questions about the purposes, procedures, risks and benefits regarding this research study.
- I understand that my participation is voluntary. I may refuse to participate or withdraw participation at any time without penalty.
- The researcher may withdraw me from the research at the researcher's professional discretion. Some conditions that might withdraw you include emotional distress and the potential risk of self-harm.

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- If, during the course of the study, significant new information that has been developed becomes available which may relate to my willingness to continue my participation, the researcher will provide this information to me.
- Any information derived from the research study that personally identifies me will not be voluntarily released or disclosed without my separate consent, except as specifically required by law.
- Your data will not be used in further research studies.
- I should receive a copy of the Informed Consent Form document.

My signature means that I agree to participate in this study:

Print name: _____ **Date**: _____

Signature: _____

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Appendix G: Operationalization of the Health Belief Model

Health Belief Model Domains		Validated Measures/Tools	Source
MODIFYING FACTORS	Demographic Variables	General Health Questionnaire – 12 (GHQ-12)	Goldberg, 1972
		Acculturative Stress Scale for International Students (ASSIS)	Sandhu & Asrabadi, 1994
	Psychological Characteristics		
PERCEIVED THREAT	Perceived Susceptibility	MHBMA: Perceived Susceptibility and Fears scale[1]	Greene, 2018
	Perceived Severity	MHBMA: Perceived Severity scale[1]	
EVALUATION OF BEHAVIOR	Perceived Benefits	MHBMA: Perceived Benefits scale[1]	
	Perceived Barriers	MHBMA: Perceived Barriers scale[1]	
	Self-Efficacy	MHBMA: Self Efficacy[1]	
		Self-Efficacy in Seeking Mental Health Care (SE-SMHC)	Moore et al., 2015
	Likelihood of Health Behavior	Barriers to Access Care Evaluation Scale (BACE)	Clement et al., 2012
		Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) scale	Vogel et al., 2013

[1] Mental Health Belief Model Assessment (MHBMA)

Appendix H: The Study Survey

Screening Questions (5 questions):

1. Do you identify as Southeast Asian? If yes, enter your country of origin:

(e.g. Brunei, Burma [Myanmar], Cambodia, Timor-Leste, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand and Vietnam)

2. Are you at least 18 years old?

3. Are you enrolled full-time at a 2-year community college and/or 4-year college/university (private or public) in the U.S.?

4. Are you willing to participate and freely share your opinions in an approximately **20-minute survey questionnaire** about your *mental health, attitudes/beliefs, knowledge, experiences, challenges, and help-seeking behaviors*?

5. If you're interested in participating in the interview, please share your contact information below (e.g. Lynn Dao, ld2722@tc.columbia.edu, 212-212-2122):

Short General Health Questionnaire (GHQ 12): 3 questions

Have you recently?

6. Felt you couldn't overcome your difficulties?
   Not at all
   No more than usual
   Rather more than usual
   Much more than usual
7. **Been feeling unhappy and depressed?**
   Not at all
   No more than usual
   Rather more than usual
   Much more than usual
8. **Been losing confidence in yourself?**
   Not at all
   No more than usual
   Rather more than usual
   Much more than usual

Acculturative Stress Scale for International Students (ASSIS)

Social Isolation:

9. **I am treated differently in social situations.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

10. **Some people ostracize me.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Threat to Cultural Identity:

11. **I am losing my ethnic identity.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

12. **I feel lost for being unable to find my roots in this society.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree

4 Agree
5 Strongly agree

13. **I am treated differently because of my race.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Homesickness:

14. **I feel sad leaving my relatives behind.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

15. **I feel sad living in these unfamiliar surroundings.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Communication Problems:

16. **I feel nervous to communicate in English.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree

2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

17. **Due to language difficulties, I feel unable to express myself fully.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Culture Shock:

18. **Multiple pressures are placed upon me after migration.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

19. **I feel uncomfortable to adjust to new foods.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Guilt:

20. **I Feel guilty when I think that I am better off here but my people still suffer.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree

4 Agree
5 Strongly agree

21. **I feel guilty that I am living a different lifestyle.**

1 = Strongly disagree, 2 = Disagree, 3 = Neither agree nor disagree, 4 = Agree, 5 = Strongly agree

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Perceived Susceptibility and Fears (Mental Health Belief Model Assessment – Version 1)

Instructions: Below are statements about mental health problems. By mental health problem, we mean any behavioral or emotional issue that may affect your life. Please read each statement carefully and rate how much you agree or disagree with it.

22. I am concerned about my risk of experiencing a mental health problem.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

23. There is a good possibility that I will experience a mental health problem.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

24. When I think about mental health problems, I am unable to relax.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Perceived Severity:
Instructions: Imagine you are currently having a mental health problem. By mental health problem, we mean any behavioral or emotional issue that may affect your life. While thinking about that situation, please read each statement carefully and rate how much you agree or disagree with it.

25. Having a mental health problem would change my feelings about myself.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

26. Having a mental health problem would result in serious consequences.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

27. Having a mental health problem would change my whole life.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

28. Having a mental health problem would make completing daily activities more difficult.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Perceived Benefits
Instructions: Imagine you are currently having a mental health problem. By mental health problem, we mean any behavioral or emotional issue that may affect your life. Below are statements about going to therapy for a mental health problem. By therapy, we mean talking about a mental health problem with a mental health professional, such as a psychiatrist, psychologist, social worker, or counselor. Similarly, a therapist is a general term for any mental health professional. Please read each statement carefully and rate how much you agree or disagree with it.

29. Therapy would provide me with an environment where I could open up emotionally.
1 Strongly disagree
2 Disagree

3 Neither agree nor disagree
4 Agree
5 Strongly agree

30. Going to therapy can reduce the symptoms of a mental health problem.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

31. Going to therapy can help me cope with a mental health problem.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Perceived Barriers:
Instructions: Imagine you are currently having a mental health problem. By mental health problem, we mean any behavioral or emotional issue that may affect your life. Below are statements about going to therapy for a mental health problem. By therapy, we mean talking about a mental health problem with a mental health professional, such as a psychiatrist, psychologist, social worker, or counselor. Similarly, a therapist is a general term for any mental health professional. Please read each statement carefully and rate how much you agree or disagree with it.

32. I wouldn't want anyone to know if I was going to therapy.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

33. I would prefer to get help from a family member or friend rather than a therapist.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

34. Going to therapy means I'm not strong enough to deal with a mental health problem myself.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree

5 Strongly agree

35. A mental health problem wouldn't bother me enough to get therapy.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

36. I'm embarrassed to talk about a mental health problem with a therapist.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

37. My family would think less of me if I went to therapy for a mental health problem.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Self-Efficacy:
Instructions: Imagine you are currently having a mental health problem. By mental health problem, we mean any behavioral or emotional issue that may affect your life. Below are statements about going to therapy for a mental health problem. By therapy, we mean talking about a mental health problem with a mental health professional, such as a psychiatrist, psychologist, social worker, or counselor. Similarly, a therapist is a general term for any mental health professional. Please read each statement carefully and rate how much you agree or disagree with it.

38. I am willing to open up to a therapist about a mental health problem.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

39. I am confident that I could make it to regular therapy appointments.
1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

40. With therapy, I am capable of making the changes necessary to improve how I feel.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Effects of Stigma on Help-Seeking and Beliefs:

Self-Efficacy in Seeking Mental Health Care (SE-SMHC)
10-point Likert response scale with the anchors of 1 = no confidence to 10 = complete confidence in the respondent's ability to do each behavior.

41. 1 Find a place to get mental health treatment
41.2 Be able to follow the treatment recommendations made by the staff
41.3 Cope well with the consequences of seeking care (for example, treatments, tests, hospitalizations)
41.4 Overcome any embarrassment I may have about seeking mental health treatment

Barriers to Access Care Evaluation (BACE) Scale

42. Being unsure where to go to get professional care.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

43. Being unhappy with the available services.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

44. Preferring alternative forms of care (e.g. spiritual care, non-Western healing/medicine, complementary therapies).

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

45. Not being able to afford the financial costs involved.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

46. Professionals from my own ethnic or cultural group not being available.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

47. Thinking appointments take too much time or inconvenient.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Cross-Cultural Validity of the Self-Stigma of Seeking Help (SSOSH) Scale

48. My self-esteem would increase if I talked to a therapist.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

49. If I went to a therapist, I would be less satisfied with myself.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

50. I would feel worse about myself if I could not solve my own problems.

1 Strongly disagree
2 Disagree
3 Neither agree nor disagree
4 Agree
5 Strongly agree

Appendix I: Interview Questions

SEMI-STRUCTURED INTERVIEW QUESTIONS

Conceptions of Mental Health and Identity

1. How would you describe your mental health/psychological issue, as it is right now?
2. Do you view mental health as a lifelong part of your identity? If so, how important is it in comparison to other identities or parts of your identity? If not, how do you view it? As an acute experience?

Performativity of Mental Health

3. What kinds of actions do you do to manage or cope with your mental health issues/experiences/diagnosis (formal or informal)? What is your goal in doing [expressed actions]?
4. Are there ever times you consider not seeking out mental health help or support because of the opinions of other people?

Beliefs about the Role of Mental Health in Perceptions of Mattering

5. Are there situations where you hide your mental health? If so, how does it feel to hide your mental health? (stigma/added psychological pain)
6. What is your perception of the College's climate toward students with mental health issues?
7. What are available resources and/or services on-campus that you are aware of to help you with your mental health? Have you personally used any?
8. What are some resources, support systems or services would you like to see added (e.g. multicultural centers, disability services, or culturally diverse mental health professionals)to your school to ensure all students feel welcome, valued, and heard?