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Help-Seeking Attitudes in Chinese International Students in Community

Colleges: A Study of the Impact of Acculturative Stress and Coping Strategies

By

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#### Abstract

The primary purpose of this mixed methodology study is to explore the psychological help-seeking attitudes amongst the Chinese international students attending community colleges when facing acculturative stress. The social-behavioral model (Andersen & Newman, 1995) of help-seeking behaviors that included the variables of personal factors (e.g. age, gender), environmental factors (e.g. social support), and acculturation level were considered. A mixed-methods design was implemented using 39 Chinese international students and seven assessments. These assessments included the Attitudes toward Seeking Professional Psychological Help Scale (ATSPPHS), a modified version of the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA), Acculturative Stress Scale for International Students (ASSIS), Asian Value Scale-Revised (AVS-R), Multidimensional Scale of Perceived Social Support (MSPSS), Brief Religious Coping (Brief RCOPE), and a demographic questionnaire. Additionally, two focus groups with students and four interviews with administrators were conducted to understand students' acculturated challenges, their coping strategies, and their psychological help-seeking attitudes.

Keywords: help-seeking attitudes, Chinese international student, acculturation.

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## **Dedications**

To my parents, Sai-Mei and Tu-Ching Tu. You have instilled in me the virtue of hard work and perseverance, and you have always given the best to me with your sacrificial love. This dissertation would not have happened if you had not sent me to study in the United States as an international student.

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Faith is taking the first step even when you don't see the whole staircase.

~Martin Luther King Jr.

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Soli Deo Gloria!

# **Table of Contents**

Abstract	2
Dedications	4
Acknowledgements	5
Chapter 1	11
The Problem of Mental Health	12
Help-Seeking Attitudes	14
Definition of terms	16
Literature Review	17
Social-behavioral model	18
International students	18
Chinese international students	20
International students studying at community colleges	21
Chinese international students' cross-cultural adjustment	22
Acculturative stress	23
Language barriers	24
Pre-sojourn and post-sojourn cultural perspectives	25
Academic system and style	26
Academic stress and maladaptive perfectionism	29
Length of stay in United States	30
Impact of ethnicity and culture on help-seeking attitudes and behavior	32
Ethnicity differences	32
Traditional cultural beliefs	33

Coping mechanism and stigmatization	35
Lack of resource	36
Perceived discrimination	37
Social support system	38
Parental and familial support	39
Connectedness with American students	40
Roles of technology and social media	40
Roles of spiritual connectedness and religion	43
Demographic variables	44
Age	44
Gender	45
Purpose of the study	46
Research hypotheses	48
Chapter 2 Research Design and Methodology	49
Purpose Overview	49
Participants	50
Procedures	52
Materials	54
Demographic questionnaire	55
Attitudes toward seeking professional psychological help scale	55
Acculturative stress scale for international students	56
Suinn-Lew Asian self-identify acculturation scale	57
Asian value scale-revised	58

Multidimensional scale of perceived social support	59
Brief RCOPE	60
Interview guide	61
Summary	61
Chapter 3	63
Findings	63
Quantitative data analysis	63
Descriptive statistics	63
Inferential statistics	67
Qualitative data analysis	72
Chinese international students' cross-cultural adjustment	72
Language barriers	72
Acculturative stress	73
Academic system and style and maladaptive perfectionism	75
Chinese international students' impact of ethnicity and culture	76
Traditional cultural beliefs	76
Discrimination	78
Impact of social support system	81
Roles of religious and spiritual connection	81
Roles of technology and social media connection	82
Summary	82
Chapter 4	84
Discussion	84

Acculturation86
Traditional cultural beliefs
Social support system and coping strategies
Religious coping
Technology connectedness
Subscales 91
Psychological help-seeking attitudes
Gender 92
Previously sought professional psychological help93
Previously taken psychology-related class
Knowledge of others who experienced psychological challenges94
Knowledge of others who experienced psychological challenges
Limitations and assumptions96
Limitations and assumptions
Limitations and assumptions 96  Future directions 99  Future research 99  For community colleges 100  For Christian organizations 103  Summary 105

Help-Seeking Attitudes in Chinese International Students in Community Colleges:

A Study of the Impact of Acculturative Stress and Coping Strategies

## Chapter 1

Accepted into an American community college in the Pacific Northwest, Ted excitedly left his home in China to study abroad in 2010. At age 18, he traveled by himself for the first time to the United States of America to pursue his dream of an American college education. Through an arrangement made by a fee-based agency, he stayed with an English speaking family that also hosted several other international students in order to practice speaking English on a daily basis. Faced with language barriers, cultural differences, homesickness, academic challenges and acculturative stress, Ted had an altercation with a housemate, resulting in a phone call to 911 emergency services. Ted was subsequently escorted by policemen to a local emergency room and transferred to an Inpatient Psychiatric Unit. In a matter of hours, he was given oral and injectable psychotropic medications. Ted's parents arrived in the U.S. two weeks later after they became concerned that they were unable to reach him by phone, email, or face interaction for a few days. Confused and in despair with the situation compounded by language and cultural barriers. Ted's parents voluntarily discharged Ted against medical advice and flew him back to China. Ted's ambitious dream of pursuing an American education ended abruptly. Representing thousands, Ted's story serves as a reminder that psychological difficulties caused by acculturative stress for international students are a growing concern.

Globalization, development of medical research, advanced technology, increased life expectancy, and a rising middle class are all factors that have enhanced the overall

life quality of the Chinese people (Farrell, Gersch, & Stephenson, 2006). Westernized psychology and culture have permeated every major city in China. Pursuing an American education has become not only attainable but also easier. Nonetheless, the ability to seek appropriate help for mental health issues continues to lag, and Ted's experience remains the reality for many Chinese international students who are unaware of the significant impact of acculturative stress and generally uninformed about issues of mental health. The combination of these factors influence their help-seeking attitudes and behaviors. As the number of Chinese students seeking educational opportunities in community colleges continues to rise, it is important for U.S. mental health professionals to understand the unique issues they may face during their acculturation process.

### The Problem of Mental Health

The release of the World Health Organization's (WHO) world health report in 2001 defines mental health as "a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community" (WHO, 2001). In fact, mental health is a state of successful performance of mental function resulting in productive activities, fulfilling relationships with others, and the ability to adapt to change and to cope with adversity. Emerging evidence suggests that positive mental health is associated with improved physical health outcomes (Keyes, 2007). Moreover, mental health is essential to an individual's ability to establish and maintain interpersonal relationships and overall well-being. Sound mental health has an immeasurable impact on people all the way from the individual level to the societal level. The United States Department of Health and Human Services (USDHHS, 1999) suggested that mental

health serves as a foundation for critical thinking abilities and good communication skills. Mental health serves as a springboard for learning, emotional growth, resilience, and self-esteem from early childhood until death (USDHHS, 1999). In summary, mental health is fundamental to individual, familial, and societal well-being.

In contrast, mental illness refers collectively to all diagnosable mental disorders. The financial and emotional burdens of mental illness are enormous on individuals, their families, and society as a whole (USDHHS, 1999; WHO, 2001). The direct costs of mental illness include medical resources and social services provided for care, treatment, and rehabilitation with outpatient prescription drugs being the fastest-rising expense. The indirect costs include emotional pain of individuals and families, untold suffering, disruption of quality of life, years lived with a disability, and reduced or lost productivity (WHO, 2001). In 2002, the National Institute of Mental Health (NIMH) conservatively estimated that the total costs associated with serious mental illness to be in excess of \$300 billion per year based on 2002 data conducted by Substance Abuse and Mental Health Services Administration (SAMHSA), the Social Security Administration, and National Comorbidity Survey-Replication (NCS-R).

Although some elements of mental wellness may be identifiable, a definition of wellness may be difficult. Specifically, what it means to be mentally healthy could be subject to many different interpretations rooted in value judgments that vary across cultures. In 2009, the Chinese Center for Disease Control and Prevention (CCDC; Zhong Guo Ji Bing Yu Fang Kong Zhi Zhong Xin-中国疾病预防控制中心), an agency equivalent to the Centers for Disease Control and Prevention (CDC) in the U.S., published a study that predicted over 100 million people suffer from mental health

illnesses in China. At that time, less than 5 percent of the Chinese public understood mental illnesses. An even lower rate sought mental health treatment. The CCDC (2009) suggested that there were 16 million Chinese that met the criteria for a diagnosable mental disorder. This prevalence of mental health illnesses in China could imply that a significant population of Chinese international students come to the U.S. with potential preexisting psychological issues. Mental health in China is only beginning to be acknowledged. It is essential to understand cross-cultural differences. These psychological issues may exacerbate or manifest in the presence of acculturative stress.

## **Help-Seeking Attitudes**

In a study published by the CCDC in 2009, over 60 percent of the 3,872 Chinese participants could not differentiate between neurological (神經病 shen jing bing) and psychological disorder (精神病 jing shen bing). This finding importantly reveals the lack of awareness in separating mental health from physical health concerns. In the same study, over 20 percent of the participants knew someone who had suffered from mental health issues; yet, over 46 percent of the sample population did not know where to seek help. While 64 percent of the same sample population acknowledged that everyone faces various psychological difficulties in life, less than half of the sample population recognized that anxiety, stress, chronic headaches, lack of appetite, sleep difficulties, nerves, shenjing shauiruo (American Psychiatric Association, 2013), suicidality, amongst other factors, may be symptoms of mental health illnesses. Furthermore, the same study found that more than 10 percent of the participants experienced symptoms of depression within the previous week. The CCDC (2009) reported a total of 572 psychiatric hospitals, 132,881 psychiatric beds, and 16,383 psychiatric physicians in China—the equivalent of

one physician per 10 million patients and one bed per 10,000 psychiatric patients. This report indicated that there are several factors that impede Chinese individuals from seeking professional mental health support. These factors include general lack of knowledge regarding mental health concerns, inadequate structural mental health services, and significant culturally-rooted stigmatization toward mental health illnesses.

In particular, stigmatization of mental illness hinders help-seeking behavior crossculturally (CCDC, 2009). In 2009, a study of stigma and help-seeking among college students was conducted by Eisenberg, Downs, Golberstein, and Zivin. Eisenberg and colleagues (2009) used a random sample of 5,555 college students from a diverse set of 13 universities. These researchers found that public stigma, the perception held by others that the mentally ill individuals are socially undesirable, was considerably higher than personal stigma. Individuals with public stigma may internalize perceived prejudices, thus develop negative feelings about themselves. Personal stigma where individuals developed negative feelings about themselves was significantly and negatively associated with measures of help-seeking and barriers to the treatment of mental illnesses (Latalova, Kamaradova, & Prasko, 2014; Eisenberg et al., 2009). Specifically, personal stigma was highly associated with students and individuals with any of these characteristics: male (Latalova et al., 2014; Eisenberg et al., 2009), between the ages of 18-22 years old, of Asian ethnicity (Eisenberg et al., 2009), African American (Latalova et al., 2014), international (Eisenberg et al., 2009), high religiosity, or from a low socio-economic background (Latalova et al., 2014; Eisenberg et al., 2009).

Furthermore, Asian Americans may be among the most underserved populations with respect to mental and behavioral health services (USDHHS, 1999). Specifically, A

Report of the Surgeon General (USDHHS, 1999) suggested that racial and ethnic minorities have less access to mental services than do Caucasian populations. They are less likely to receive needed care and when they receive care, it is more likely to be poor in quality (USDHHS, 1999). An extensive body of research supports the view that Asian Americans are consistently less likely to seek help for psychological problems than other ethnic minorities (e.g. Abe-Kim et al., 2007; Atkinson & Gim, 1989; Chang & Chang, 2004; Eisenberg et al., 2009; Sue & McKinney, 1975; USDHHS, 1999). Specifically, the social, cultural, and psychological determinants common to the Chinese people's mental health, such as stigma, feelings of humiliation, lack of resource, and other factors, contribute to limited access and underutilization of mental health care services and may influence help-seeking behaviors (Takeuchi, Hong, Gile, & Alegria, 2007).

**Definition of terms.** The following terms will be used throughout the explanation and implementation of this research. As such, the scope of each term is given below so that the reader will better understand both the denotation and connotation.

*Acculturation:* Culture change that results from continuous, first-hand contact between two distinct cultural groups (Berry, 1998).

Acculturative stress: A reduction in the mental, physical and social aspects of individuals who are undergoing acculturation, and for which there is evidence that these health phenomena are related systematically to acculturation phenomena (Berry, Kim, Minde, & Mok, 1987).

*Help-Seeking:* Reaching out for assistance in the context of seeking professional psychological services (Merriam-Webster, 2014).

Chinese international students: Students who are citizens of Mainland China and are issued a legal student visa by U.S. Embassies and Consulates to enter the U.S. for the sole purpose of attending an educational institute (U.S. Department of State Bureau of Consular Affairs, 2014).

Cross-cultural: The act of dealing with the intersection of two or more different cultures or cultural areas (Merriam-Webster, 2014).

*Culture*: A series of values, beliefs, habits, ideas, and behaviors shared by a group of individuals such as age, gender, ethnicity, race, religion, sexual orientation, physical and mental ability, and socioeconomic status (Patton, 2001).

Mental illness: Health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning (WHO, 2001).

*Post-90s:* A generation in China, born between 1990 through 1999. This cohort is alleged to be "spoiled brats" and to have a knack for information technology, and capitalism (Wikipedia, 2014).

### **Literature Review**

The purpose of this chapter is to review the literature surrounding the numerous factors that affect Chinese international students' psychological well-being as they adjust to living in the United States. Specifically, this literature review seeks to explore Chinese international students' attitudes toward professional psychological help-seeking in relation to their acculturative stress, culture of origin and other environmental and demographic factors.

Social-behavior model. Andersen and Newman's social-behavior model (SBM; Andersen, 1995; Andersen & Newman, 1973) developed a framework to explain why individuals utilize health services. Although the social-behavioral model was originally developed to examine help-seeking behaviors, it may be useful in guiding research on help-seeking attitudes. Help-seeking attitudes can determine whether the individual intends to follow through with seeking support and is an important precursor to actual help-seeking behaviors (Ajzen, 1991; Ting & Huang, 2007).

According to the social-behavioral model (Andersen, 1995; Andersen & Newman, 1973), certain individual's personal predisposing characteristics may influence their attitudes on help-seeking. These predisposing factors include demographic characteristics (e.g. age and gender), social structure characteristics (e.g. education, ethnicity, and social networks that are thought to determine the status of individuals in the community), and general beliefs and attitudes about the service, which may further explain why some individuals are more inclined than others to use health services. (Andersen, 1995). Andersen (1995) further suggested that the environmental enabling characteristics include family and personal resources (e.g. socioeconomic status and awareness of service), and community resources (e.g. distance and availability of the service). Concurrently, the need for services includes an individual's subjective assessment and/or professional evaluations. Taking these into account, the present study, guided by SBM, examines variables associated with psychological help-seeking attitudes among Chinese international students at the community college level.

**International students.** With increased globalization, there has been a steady rise in the number of international students who have chosen colleges and universities in the

United States as their learning destination for higher education opportunities. According to *Open Doors Report* (2014), an official publication of the Institute of International Education (IIE), in the 2003-04 academic year, a total of 573,000 international students attended American colleges and universities. A decade later, in the 2013-14 academic year, a total of 886,000 international students attended American colleges and universities, a 55 percent increase in the number of international students in comparison to the prior decade.

Two-thirds of the total 886,000 international students at American colleges and universities are from Asia (IIE, 2014). In the 2013-14 academic year, students from China, India, and South Korea, the top three sending countries, comprised 51 percent of the total international students enrolled in U.S. higher education institutions. Saudi Arabia, Canada and Taiwan, the fourth, fifth and sixth sending countries, comprised 12 percent of the total international students enrolled. The Open Doors report (IIE, 2014) demonstrated that these top six places of origin comprised over 60 percent of the total number of international students (see Table A).

Economic, cultural, and political factors indicate that the number of international students will be increasing significantly (Pedersen, 1991; Sandhu & Asrabadi, 1994; Zhai, 2002). Multiple studies (e.g. IIE, 2014; Andrade, 2006) reported that the U.S. is the largest destination for international students seeking higher education. Concurrently, higher education ranks among the top ten service exports in the U.S., according to the U.S. Department of Commerce (2012). The economic impact of international students and their dependents is significantly more valuable than many might expect. NAFSA: Association of International Educators (2013) estimated that international students and

their dependents contributed \$24 billion to the U.S. economy during the 2012-13 academic year, as they generated and supported nearly 313,000 U.S jobs. In other words, for every seven international students enrolled in the U.S. colleges and universities, three U.S. jobs were created and/or sustained by their expenditures (IIE, 2014). In addition to having paid out-of-state tuition, books and supplies, international students, annually spent money across many other sectors. These expenses included: room and board, dining, retail (e.g. consumer goods), transportation (e.g. cars, gasoline), financial service (e.g. credit cards), personal services (e.g. mechanics, salon), telecommunication (e.g. phone, phone bill), mandatory health insurance, and healthcare expenditures (IIE, 2014). Over 70 percent of the primary sources of funding for international students occurred outside of the U.S. and the percentage is even higher for undergraduate students; more than 80 percent of all undergraduate international students received the majority of their funding from personal and family sources.

Chinese international students. Of the 886,000 international students that came to the U.S. in the 2013-14 academic year, there were 274,439, or 31 percent, that came from China; this was a significant 17 percent increase from the previous year (IIE, 2014). Over the past decade, the number of Chinese international students studying in U.S. colleges and universities has increased by 445 percent from nearly 62,000 in 2003-04 to 274,439 in 2013-14. The U.S. is the premium destination for education for Chinese international students (Andrade, 2006) largely due to career prospects (Binsardi & Ekwulugo, 2003).

With a closer look at the academic level trend of the Chinese international students, the Open Doors data indicated growth in particular is largely driven at the

undergraduate level students. IIE (2014) suggested that from the 2003-04 academic year to the 2013-14 academic year, graduate students from China increased 127 percent (from 50,796 in 2003-04 to 115,727 in 2013-14). On the other hand, during the same period of time, undergraduate students from China increased 1,276 percent (from 8,034 in 2003-04 to 110,550 in 2013-14), a substantial uptrend that cannot be ignored (see Table B).

With a growing population of students in China seeking higher educational opportunities in the U.S., the traditional model of higher education is not equipped to absorb the sheer number of the international students (Hartenstine, 2013). Similar to the trend report conducted by IIE (2014), International Consultants for Education and Fair Monitor (ICEF, 2013) also suggested that the average age of Chinese students studying overseas has decreased significantly. There has been an increased number of younger Chinese students intending to study in the U.S. which is evidenced by the changing undergraduate-graduate composition of Chinese international students in the U.S. (IIE, 2014). This trend of a younger cohort is demonstrated by standardized college admission examination data, such as the Test of English as a Foreign Language for international students (TOEFL) and Scholastic Aptitude Test (SAT), which indicated many of these test-takers are under the age of 18. ICEF (2013) noted that in the 2012-13 academic year, this younger cohort phenomenon increased by 30 percent from the previous year. As a result, community colleges may be admitting a group of younger Chinese international students who may face different acculturative stressors than an older cohort.

International students studying at the community colleges. In particular, there have been upsurges in the number of international students studying in community colleges in the Puget Sound region of Washington State in the Pacific Northwest. The

Open Doors data (IIE, 2014) showed that in the 2004-05 academic year, three of the top 35 community colleges that host international students in the U.S. were located in the Puget Sound region, hosting a total of 1,785 international students. In the 2012-13 academic year, seven of the top 35 community colleges that admitted international students in the U.S. were located in the Puget Sound region, hosting a total of 7,652 international students, a 329 percent increase. In an interview with US-China Today, O'Connell (2010) explained that the occurrence of the undergraduate international surge in students in the U.S. is due to the fact that college programs within the U.S. seem to be accredited anywhere in the world, thus contributing to the Chinese students' enrollment in American community colleges. In addition, Hartenstine (2013) suggested that much of the interest in acquiring a community college education has centered on their role in workforce training, concept of transfer missions, and open access and flexible educational pathways. In his book, Obama, in His Own Words-Pre-election, President Obama stated, "with the changing economy, no one has lifetime employment but community colleges provide lifetime employability" (Palmieri, 2009, p.23). This statement further confirms the value of receiving an education from a community college.

Chinese international students' cross-cultural adjustment. International students are known to be prone to acculturative stress given that most of these students strive to reach their academic goals in a new culture while adjusting to the loss of familiar coping resources (Berry, 1998; Dadfar & Friendlander, 1982). The acculturative adjustment and cross-cultural transition process of international students has been studied quite extensively (e.g. Berry, 1998; Wang, Heppner, Fu, Zhao, Li, & Chuang, 2012) which includes learning new social customs, language, (Miller, Yang, Farrell, & Lin,

2011) and academic system (Chen, 1999; Poyrazli, Kavanaugh, Baker, & Al-Timimi, 2004).

Acculturative stress. Acculturative stress refers to the mental, physical and social difficulties that are associated with the acculturation process between a host culture and an incoming culture (e.g. Berry, Kim, Minde, & Mok, 1987; Berry, 1998; Redfield, Linton, & Herskovits, 1936). The stress that is associated with the process of acculturation can strongly contribute to somatic complaints and other mental health issues as individuals experience a significant change in their environments (Barrett & Huba, 1994; Jung, Hecht, & Wadsworth, 2007). Acculturative stress can lead to a reduction in one's mental health status (Constantine, Okazaki, & Utsey, 2004; Mori, 2000); the variation in and intensity of the stress significantly depends on the similarities or dissimilarities between the host culture and the new entrants (Berry, 2001).

As Chinese international students bring their diverse cultural perspectives to the American higher education system, these students also face challenges and predispositions to mental health issues while adjusting to American culture. Various factors have been noted to influence international students' adjustments to living in the United States (Chen, 1999; Cross, 1995; Dao, Lee, & Chang, 2007; Leong, Mallinckrodt, & Kralj, 1990; Poyrazli, Kavanaugh, Baker, & Al-Timimi, 2004; Wang & Mallinckrodt, 2006; Yeh & Inose, 2003; Ye, 2006). Stressors included: academic pressures (Yan & Berliner, 2009), language and communication challenges (Yeh et al., 2003), feelings of inferiority (Sandhu et al., 1994), and difficulties in adjusting to new food and cultural values, lack of support, perceived discrimination and homesickness (Pedersen, 1991; Yeh et al., 2003; Poyrazli & Lopez, 2007). In fact, many empirically-derived research studies

demonstrated how acculturative stresses were positively associated with depression among Taiwanese international students (Ying & Han, 2006), Korean international students (Lee, Koeske & Sales, 2004), Japanese international students (Matsumoto, 2004), Mexican American college students (Crockett, Iturbide, Torres-Stone, McGinley, Raffaelli, & Carlo, 2007) and Asian international students (Chen, Mallinckrodt, & Mobley, 2002; Yang & Clum, 1995; Wei, Ku, Russell, Mallinckrodt, & Liao, 2008).

Language barriers. One well-studied stressor with regard to acculturation is the language barriers (Mori, 2000; Sandhu et al., 1994; Yeh et al., 2003). Andrade (2006) suggested that language barriers were demonstrated to be a significant obstacle to both academic achievement and adjustment. Students who did not have a strong grasp of the English language had greater difficulty in comprehending and absorbing material in the classroom settings. For instance, international students with higher TOEFL scores had greater academic success. Students who received English as Second Language (ESL) support from peers or study partners earned better grades than those without the support. These two observations strongly suggested a direct correlation between language proficiency and academic achievement. As a result, Andrade (2006) found that some students with language barriers had a negative academic experience, thus perpetuating their academic obstacles by reducing their desire to study. Compounding the issue, professors and other faculty members misunderstood the hardships of international students' adjustments—they perceived international students were not taking ownership of their own learning (Nilsson, Butler, Shouse, & Joshi, 2008).

Additionally, the response of the educators indicated a lack awareness or concern for the emotional and psychological issues international students were encumbered with

during this acculturation period. This misunderstanding may have further contributed to the academic burden and stress, communication and social pressures already existing for the international students. Constantine, Okazaki, and Utsey (2004) suggested that similarly to academics, lower proficiency in the English language was correlated with higher likelihood of depression. The mechanism or correlation by which this association occurred was believed to be lower levels of English proficiency resulting in higher levels of acculturative stress.

Overall, it is clear that language is a strong factor in social integration, academic adjustment and academic accomplishment (Constantine et al., 2004; Dadfar & Friedlander, 1982; Mori, 2000; Yeh et al., 2003). In addition, language barriers prevented international students from developing meaningful relationships with domestic students. Without friends and family in close proximity to support them, international students suffered more from homesickness and loneliness, thereby affecting their adjustment in the U.S. in a negative manner (Wang et al., 2012; Yakunina, Weigold, Weigold, Hercegovac, & Elsayed, 2013). Significantly, Andrade (2006) suggested that international students who had a "host student" to help them adjust demonstrated higher social adjustment than their peers that did not have the resource.

Pre-sojourn and post-sojourn cultural perspectives. Many studies have suggested that Asians experience more acculturative stresses than international students from other countries due to greater cultural differences (Cross, 1995; Kaul, 2001; Pedersen, 1991). Chinese culture is based upon collectivist thought, whereas Americans are known to value independence and self-assurance (Wan, 2001). Differences in cultural values, social mores and behavioral practices led to feelings of confusion and uncertainty

in many Chinese international students, particularly regarding norms of American culture (Bertram, Elasasser, & Kumar, 2014). Their experiences of culture shock and confusion led them to feel inadequate, misunderstood and dejected because they did not know how to conduct themselves in various situations and settings (Zhang & Dixon, 2003; Zhang & Xu, 2007b).

It is also necessary to consider Chinese international students' preparedness for American culture by determining their perception compared to the reality of American society. Rawlings and Sue (2013) investigated this discrepancy and suggested that students were not entirely prepared for culture in America due to widely different cultural and learning environments. Adjustment to learning abroad was dependent on the number of similarities between the culture of the students' home country and the country where they attended school abroad (Bertram et al., 2014; Sue et al., 1985; Sun & Chen, 1997).

Additionally, many Chinese students were not prepared to live in an American culture. Their knowledge of American culture was influenced by and limited to Eastern perspectives and their narrow exposure to media. The discrepancy between prior perception and the reality of American culture affected Chinese students' adjustment and acculturation. The correlation between adjustment and acculturation and positive educational and social experiences for international students demonstrated that students' preparedness for American culture clearly affects their mental health (Bertram et al., 2014).

Academic system and style. Dissimilarities in the classroom also contributed to Chinese international students having greater difficulty in adjustment. Chinese students found the teaching and learning environment in the United States to be very different

from their educational experiences in China. Chinese classrooms continue to maintain a distinct relationship between students and teachers in which instructors are esteemed and distant from students. Conversely, the American educational system creates a classroom environment that encourages students' interaction with instructors and prioritizes student-focused attention (Hofstede, 2005; Wan, 2001).

Furthermore, Chinese education traditionally focuses on proficiency in written English over verbal usage (Wan, 2001). In other words, these international students are not accustomed to the delivery of instruction style or the emphasis on student verbal demonstration of knowledge prevalent in U.S. public schools or colleges. As a result, lower English speaking proficiency affects participation in class discussions which reduces learning and comprehension (Han, 2007). Additionally, although some students are successful academically, they remain quiet in class due to their lack of English speaking proficiency and/or due to fear of embarrassment of making a mistake (Jacob & Greggo, 2001; Zhang & Xu, 2007b).

Chinese international students described specific factors that may inhibit or limit their interactions with faculty and are significant causes of academic stress (Yan et al., 2009). First, language insufficiencies, repeatedly, are a source of stress (Yan et al., 2009). Students believe that their lack of proficiency and inability to small-talk affect their rapport with academic faculty. Others report their academic capabilities are crippled or masked by their language insufficiency. Second, students are not familiar with the degree of initiative and autonomy American students possessed. Students report difficulties adjusting to the free nature of American education, especially in contrast to China's rigorously disciplined format. In the United States educational system, self-directedness

is valued over blind discipline; students' individual autonomy enhances the relationship between the mentors and students (Liberman, 1994; Jin & Cortazzi, 1998; Bordes & Arredondo, 2005). This American style greatly contrasts with China's authoritarian style of structured education. Chinese international students describe discomfort with the ambiguity of and a lack of exposure to independent learning. These students are unprepared for the mentor-student relationships that guide self-learning, organization of academic work and academic and professional career development as this relationship is non-existent in their home country's school system (Wan, 2001; Yan et al., 2009). Third, many Chinese international students are uncomfortable with the active learning environment of American classrooms. Students report stress from class discussions including activities that require engagement with other students. Specifically, students describe their low-profile personalities, humble attitudes, and quiet demeanors as a contributing factor to their professor's negative perceptions of them. In reality, the behaviors demonstrated by the Chinese students are shaped by customs within the Chinese educational system where professors control the classroom and do not expect or welcome participation or interaction. Chinese students describe how passivity and silence are praised in China, as the expectation for students is to learn and absorb knowledge (Bertram et al., 2014; Sue et al., 1985; Sun et al., 1997). Questions, which are heavily relied upon as an engaging mode for evaluating student comprehension and learning in American universities, are viewed as disruptive and disrespectful learning behaviors in the Chinese educational system (Jin & Cortazzi, 1998; Liberman, 1994; Yan & Berliner, 2009). This teaching-learning model continues to be practiced throughout China today. However, in Western countries, silence may be assumed as lack of initiative or lack of

passion to learn, especially when traits such as self-expression, self-confidence, and independent thinking are valued (Jin & Cortazzi, 1998; Liberman, 1994; Yan & Berliner, 2009).

Finally, international students are most comfortable with an indirect mode of communication. Students report that they are indirect when speaking with others in order to preserve harmony in interactions (Yan & Berliner, 2009). This involves using vague language rich in hints with indirect requests when communicating with faculty (as opposed to being demanding, refusing, criticizing, or communicating in other more observable manners). Asking questions is observed as a challenge to authority and potentially a reflection of a teacher's ineptitude in Chinese culture. Chinese international students found that their indirectness affected their relationships with American professors and other academic faculty, especially when asking for clarification of instructions. Chinese culture values meekness; those with the fewest questions or comments are valued for their intelligence and hard work. This type of communication creates problems in Western society where directness and assertiveness are not only valued but also required in order to meet academic and professional expectations (Yan et al., 2009).

Academic stress and maladaptive perfectionism. Academic achievement is a significant psychological stressor for Chinese international students (Yan et al., 2009). Students frequently associated academic excellence with filial duty, financial security, determinants in future career opportunities for upwards mobility, self-worth, acceptance, and even family pride. Stress level only increased when previously mentioned elements

were combined with high motivation and high expectations for academic excellence (Yan et al., 2009).

Chinese international students are expected to be successful in their academic performance while studying in America in order to honor their family back home (Leong & Chou, 1996; Sandhu et al., 1994). Most believed that a degree from China did not guarantee a comfortable standard of living; as a result, many pursued higher education degrees in the U.S. due to the prestige and reputation American Degrees carried (Lin, 2010; Sue & Zane, 1985). Studying abroad provides Chinese international students with the opportunity to be educated for a globalized market. Furthermore, some Chinese view education in China as inflexible and out-of-date, thereby limiting creativity. Pursuing a degree outside China may forge a path for immigration and an opportunity for a better lifestyle (Rawlings et al., 2013).

Accordingly, Chinese international students have enormous pressures to succeed academically. This pressure or need to succeed and its relationship to mental health were manifested as maladaptive perfectionism whereby an individual feels that he/she does not meet their personal standard for performance (Sue et al., 1985; Ying & Lau, 2008). Specifically, one's performance is equated with self-worth, and poor performance is a personal, even familial, failure. Individuals with this characteristic are more likely to focus on the negatives of their performance and thus be more susceptible to depression (Hewitt et al., 2003; Mori, 2000).

Length of stay in United States. Wei, Heppner, Mallen, Ku, Lian, and Wu (2007) investigated the relationship between acculturative stress and depression in Chinese international students with regard to their length of stay in the United States. Wei and

colleagues (2007) suggested a strong three-way interaction between acculturative stress, maladaptive perfectionism and length of stay in the United States. Wei and colleagues (2007) posited that when Chinese international students had been in the U.S. for a short time (less than 6 months), and had high maladaptive perfectionism, there was evidence of acculturative stress and depression. A student with a short stay and high maladaptive perfectionism might interpret acculturative stressors as resulting from perceived personal failures or imperfect performance. However, a short stay and low maladaptive perfectionism was still correlated with acculturative stress and depression. Although a short stay with low maladaptive perfectionism demonstrated realistic expectations, these perspectives alone may not have been strong enough to meet the demands of everyday life (Wei et al., 2007).

On the other hand, Wei and colleagues (2007) suggested that acculturative stress and depression were still seen in students with long stay (over a year) and high maladaptive perfectionism. These students may have felt added pressure to reach certain academic milestones. Similar to a short stay with a high maladaptive perfectionism, Chinese international students with a long stay that demonstrated high maladaptive perfectionism may have viewed unmet goals as personal failures. Finally, Wei and colleagues (2007) pointed out that a long stay in conjunction with low maladaptive perfectionism resulted in less acculturative stress and depression in the long term. These students still experienced initial stress and depressive symptoms, but they were able to become aware of stressors and reduce overreaction (Wei et al., 2007).

In combination, these elements contributed to the difficulties Chinese international students experienced as they underwent the process of acculturation.

Ultimately, the literature clearly demonstrated that Chinese international students experienced immense stresses related to acculturation and were therefore at high risk for mental health issues (Sun et al., 1997; Wan, 2001; Wei et al., 2007).

Impact of Ethnicity and Culture on Help-Seeking Attitudes and Behavior.

There is a belief that ethnicity and culture may be significant determinants in patterns of Asian American utilization of mental health services (Atkinson et al., 1989), especially regarding the relationship between cultural variables and help-seeking attitudes (Chang et al., 2004; Tata & Leong, 1994). The role of ethnicity and culture was examined with inconsistent results. Some studies suggested that acculturated Asians may hold more positive attitudes regarding seeking psychological help (e.g. Tata et al., 1994; Ting & Huang, 2007; Zhang et al., 2003), while other studies indicated that Asians at large preferred their own cultural values and practices and did not feel comfortable using psychological services (e.g. Mori, 2000; Sue & Sue, 2003; Uba, 1994).

Ethnicity differences. Race and ethnicity have been demonstrated to be a significant factor in perceptions of mental health and attitudes related to utilization of mental health services (Gonzalez, Alegria, & Prihoda, 2005). Studies examining this relationship have reported that non-Caucasians possessed more negative attitudes, especially with regard to stigma, than Caucasians (Copeland, 2006; Millet, Sullivan, Schwebel, & Myers, 1996). The underutilization of mental health services by Asian Americans has been well documented for nearly half of a century, and similar results continue to be found in recent studies (Bui & Takeuchi, 1992; Kitano, 1969; Leong, 1994; Loo, Tong, & True, 1989; Yamashiro & Matsuoka, 1997; Snowden & Cheung, 1990; Sue & McKinney, 1975; Sue et al., 2003). Multiple studies examined the

differences among various race and ethnicity in their use of mental health services and found that children of African, Hispanic or Asian descent were less likely to both seek and receive mental health services, despite similarities in the prevalence of mental disorders or severity of functional impairment to other populations (Gudino, Lau, Yeh, McCabe, & Hough, 2009; Garland, Lau, Yeh, McCabe, Hough, & Landsverk, 2005; Slade, 2004). Asian Americans, in particular, are less likely to seek mental health services relative to African American or Caucasian American youth, regardless of externalization or internalization of problems (Gudino et al., 2009; Garland et al., 2005; Millet, 1996; Slade, 2004).

Traditional cultural beliefs. Wynaden, Chapman, Orb, McGowan, Zeeman, and Yeak (2005) suggested that the view of health and illness are byproducts of culturally-based experiences and beliefs. The manner in which people conceptualized their physical and psychological illnesses was directly related to their cultural beliefs, including their personal experiences in their country of origin and in their new country of residence.

Studies in Chinese American populations suggested that numerous cultural differences and practical barriers affected their attitudes in seeking mental health services (Sue et al., 2003). Specifically, Chinese culture in contrast to American culture frequently associated mental illnesses with character flaws and retribution for personal, familial, or generational transgressions (Nguyen & Anderson, 2005). Individuals with psychological illnesses were frequently even associated with spirit possession (Kua, Chew, & Ko, 2007).

Wynaden and colleagues (2005) studied cultural factors that impacted Asian communities' access to mental healthcare in Australia. These researchers suggested that

mental illnesses were significantly associated with intense shame and stigma and were viewed as an insult to the family reputation. As a result, Chinese participants in their study frequently hid and isolated themselves from others (Wynaden et al., 2005) which reflected that individual response and approach to mental illness has different cultural and symbolic meanings (Yoon & Lau, 2008). Researchers also indicated that Asian communities underutilized mental health services in general; if Asians engaged in treatment, they terminated treatment earlier than their non-minority counterparts (Wynaden et al., 2005; Leong & Lau, 2001).

Although reducing stigma is important, Eisenberg and colleagues (2009) suggested that reducing cultural stigma alone may not necessarily enhance helpseeking attitudes if other facets of stigma such as low self-esteem persisted. Leong and Lau (2001) divided the help-seeking barriers into cognitive, affective, value orientations and physical-practical factors, while Kung (2004) consolidated the help-seeking barriers into cultural and practical factors. Based on a community sample over 1700 Chinese Americans from the Chinese American Psychiatric Epidemiological Study, research indicated cultural and practical obstacles influenced attitudes on help-seeking. Kung (2004) noted that in order from greatest to least obstacles, cost of treatment, language, time, knowledge of access, recognition of need and fear of loss of face dissuaded Chinese Americans from seeking mental health services. In this manner, the study suggested that lack of mental health service utilization was primarily based on practical reasons rather than cultural barriers. However, primary considerations compounded together with cultural beliefs revealed why Asian American populations grossly underutilized mental health services.

Coping mechanism and stigmatization. The concept of applying coping mechanisms is closely related to the idea of survival. Specifically, coping mechanisms may save lives but they have human (e.g. selling organs) and social (e.g. migration) costs. Coping is the capacity to respond and to recover from something stressful. There are no standards for coping strategies as they vary depending on and are influenced by sociocultural factors (WHO, 1999).

As a cultural coping mechanism, Chinese international students may internalize and/or avoid problems to resolve stress and emotional disturbances. Furthermore, when these stressors could not be resolved by culturally accepted coping mechanisms, individuals were found to be more vulnerable to depression (Ying & Han, 2006). Rather than seeking help from mental health professionals, Asians declined the need for service and instead used passive coping strategies. For instance, avoidance, withdrawal, minimizing the problem, wishing the situation would go away and resignation to and acceptance of fate have all been commonly identified as behaviors through which Asian people groups cope (Bjorck, Cuthbertson, Thurman, & Lee, 2001; Chang, 2001).

The severe stigmatization of mental illnesses frequently prevented students from utilizing mental health services. Specifically, many of these students feared how others, especially their associates, would perceive them (Ho, Yeh, McCabe, Hough, 2007; Sue, et al., 2003; Sue & Morishima, 1982). Instead, Asians were more likely to seek general medical providers, herbalists, acupuncturists, fortune tellers or clergy for support rather than mental health professionals (Kung, 2004; Spencer & Chen, 2004; Sue et al., 2003).

Constantine and colleagues (2004) explored whether or not self-concealment and self-efficacy behaviors served as mediators in acculturative stress experienced by

international students and if that stress contributed to symptoms of depression. Social self-efficacy was defined as the willingness to initiate behavior in social situations (Sherer & Adams, 1983). While Americans used social self-efficacy to mediate between stressful life events and depressive symptoms, international students may be influenced by cultural norms. Many cultures have embodied collectivistic perceptions of society and valued "saving face," self-concealment, the predisposition to shield distressing and shameful information from others, which seemed to be the predominant behaviors of international students (Constantine et al., 2004). However, unlike American populations, self-concealment and lack of social self-efficacy were not necessarily correlated with depression. Consequently, social self-efficacy may not be the most effective mediator in mitigating stress and depression in international students. However, many of these studies were conducted through Western perspectives of mental health; it is imperative to be aware of Western biases and avoi generalization of other cultures.

Lack of resource. In general, there seemed to be a lack of knowledge regarding available mental health treatment facilities among Asians and Latinos, which was a major contributor to low service utilization (Takeuchi et al., 2007). Moreover, financial costs have been identified as a potential barrier to seek professional help (Kung, 2004). More often than not, many Asian American families are self-employed small business owners or have low-paying jobs (Kang & Kang, 1995). Due to long work hours, the complexity of arranging a medical leave and the shame incurred when taking leave to obtain mental health treatment, individuals were likely dissuaded from seeking help, especially as treatment was a considerable time commitment (Sue & Sue, 2003; Uba, 1994).

Additionally, there were a high percentage of medically uninsured Asian American

immigrants (USDHHS, 1999; Jang, Lee, & Woo, 1998; Kang & Kang, 1995; Takeuchi et al., 2007). Mental health treatments could put a strain on financial resources. The high cost of mental health treatment, including significant time commitment, may reduce help-seeking attitudes and subsequent behaviors in this population.

**Perceived discrimination.** Wei et al. (2008) suggested that perceived discrimination is a unique source of stress that is different from general stress. Perceived discrimination is also a significant factor in a pursuant's decision to seek psychological help. Poyrazli and Lopez (2007) found that international students were at greater risk of perceived higher levels of discrimination and were more likely to experience homesickness than did U.S. college students. In addition, age, English proficiency, and perceived discrimination predicted homesickness among the international students (Poyrazli & Lopez, 2007). Furthermore, Spencer and Chen (2004) found that only 10 percent of Chinese Americans who suffered from mental illnesses visited formal professional mental services due to perceived discrimination. Instead, individuals were much more likely to seek informal services from friends and family members. However, Spencer and Chen (2004) reported that only 24 percent of those with mental illnesses sought support from friends and family members due to perceived discrimination. In fact, 18 percent of the participants believed they had been treated poorly because of their racial and ethnic status, and of those, 13 percent reported that such treatment was due to different language and accent when speaking English. Those individuals who reported discrimination were more likely to turn to informal services for help. For these Chinese Americans, family frequently acted as the active support system for those with psychological problems, especially in taking collective care of emotionally distressed

individuals (Uba, 1994; Nguyen et al., 2005). If the family unit was unable to resolve emotional distress, then individuals were more likely to turn to indigenous healers, community elders, and physicians (Zhang, Snowden, & Sue, 1998; Uba, 1994).

Discrimination could have delayed the pursuit of professional mental health help until symptoms of emotional distress became unmanageable for these individuals.

Ultimately, Spencer and Chen (2004) indicated that there is a link between discrimination and mental health service utilization. Specifically, those who perceived discrimination were more likely to seek the help of friends and family for informal services. There was strong association between language-based and racial discrimination, and patterns of service utilization. Lack of English proficiency and discrimination due to language differences can affect the types of service individuals pursue when seeking help, which further emphasizes the need for culturally and linguistically sensitive mental health services for Chinese Americans (Spencer & Chen, 2004).

Social support system. Social support networks had been found to moderate the effects of stress in predicting depression, hopelessness and even suicide ideation (Flannery & Wieman, 1989; Yang & Clum, 1994). Furthermore, social support was viewed as a key element in the negotiation and adaption to a new culture (e.g Mori, 2000; Bertram, Poulakis, Elasasser, & Kumar, 2014). Bertram and colleagues (2014) suggested that international students with a large social support network adjusted better post-sojourn when adapting to a new culture than those individuals who did not have a social support network. As such, it is important to investigate the role of social support networks on help-seeking attitudes amongst Chinese international students.

Social support networks took the form of tangible assistance, informational support, and emotional support (Salem, Bogat, & Reid, 1997). Bertram and colleagues (2014) suggested that after arriving in the U.S., Chinese international students commonly identified fellow Chinese international students as their newly established social network. Relationships with friends and family from home were viewed as additional social support. Furthermore, local churches were viewed as being supportive, warm and available as additional support. While the number of sources of support due to social networking may have grown, the level of depth with any of these support groups did not. As a result, international students had lower levels of satisfaction with their post-sojourn social support resulting from acculturative stressors such as feeling of isolation (Bertram et al., 2014).

With recent advancements in technology, the post-90s Chinese international students have virtually 24/7 access to family and friends, a distinct difference from those who studied in the 1980s and 90s. With a rising middle class and improved economy, Chinese international students' financial ability to purchase a vehicle and travel freely to and from China is prevalent and common. The acculturative experience for Chinese international students may change as students are able to connect easily with family and friends via travel or through the use of technology.

Parental and familial support. Bertram and colleagues (2014) suggested that most Chinese international students identified their parents as their main source of support prior to coming to the United States. These students would often seek counsel from parents in light of significant life events, especially events related to extreme stress or financial matters. For other day-to-day stress, such as course work or relationships,

students reported that they would go to friends because parents would not understand, would become too worried, or were too busy working (Bertram et al., 2014).

Connectedness with fellow Americans. Connectedness has been identified to affect individuals' feelings, thoughts and behaviors in social situations. Furthermore, connectedness can either encourage or inhibit the formation of relationships based on how connected an individual feels within a social group. Many international students perceived and reported social relationships in the United States to be somewhat superficial (Cross, 1995; Ying, 2002) and felt disappointed and discouraged with these connections (Bertram et al., 2014). Those individuals who lacked this connectedness were inclined to experience low self-esteem, anxiety, and depression (Lee & Robbins, 1998). One primary hindrance to the development of meaningful social relationships for international students was language proficiency (Yeh & Inose, 2003).

Roles of technology and social media. At the forefront of technology, social media networking and the Internet have become indispensable tools in everyday life. According to the U.S. Department of Commerce National Telecommunication and Information Administration (NTIA; 2011), more Asian households subscribe to high-speed wireless services than Caucasians, African Americans, and Latinos. Furthermore, 18-24 year olds have the highest rate of broadband use compared to any other age group (NTIA, 2011). Advancements in technology have drastically changed how people live and communicate today. Technology serves as a vehicle for communication from professional networking to maintaining personal ties (Tsai, 2004). Using technology as a means of social support is even more evident for Chinese international students who were born post-90s, a term roughly equivalent to the Millennials.

In addition to traditional interpersonal social support, online social groups have created a community with a sense of connectedness through common language, interests, and concerns. Online social groups satisfy the need for friendship and form another source of emotional support (Chang, Yeh, & Krumboltz, 2001). Chang and colleagues (2001) developed an online support group for Asian American male college students with issues of masculinity and identity. Researchers found the response to join this online support group was overwhelming, and participants felt connected and perceived the group to be supportive (Chang et al., 2001). Ye (2006) argued that online social groups enable individuals to maintain a larger social network and reduce stress, similarly to face-to-face social support.

Through social media networks such as Facebook, Face Time, Twitter, Skype, individual and group email, various instant messaging sites (e.g. WeChat), texts, and blogs, just to name a few, Chinese international students can enjoy the benefits of access to a community where they can give and receive professional or personal support at any time. These technological advances eliminate geographical borders and provide Chinese international students with the ability to easily stay connected and supported by family and friends. In addition, advantageous features now available to Chinese international students include information acquisition, probability of anonymity and privacy, decisions of immediate or delayed responding, and opportunities to communicate in their native language; these features facilitate and increase prospects for positive social support. The advancements in technology and social media point toward an even greater social support network accessible to Chinese international students.

Ye (2006) studied Chinese international students' social support through the use of online ethnic social groups. These groups were comprised of various forms of technology, such as electronic bulletin boards, news groups, forums, or other similar technology. Ye (2006) suggested that Chinese international students who participated in online ethnic social groups with a perceived positive interpersonal support network experienced less acculturative stress. Furthermore, these students perceived higher amounts of informational and emotional support through the online ethnic social group compared to those who did not participate in the online group. Informational support through technology may have increased perceptions of control by providing Chinese international students with strategies to manage stress, cope with difficult situations, and provide practical occupational opportunities. On the other hand, emotional support through verbal and nonverbal expressions of caring and concern focused on esteemenhancing remarks or empathic messages that reflected an understanding of the afflicted person's distressed state (Tsai, 2004; Ye, 2006). Both informational and emotional support through technology and social media conveyed a sense of caring and social support for Chinese international students (Tsai, 2004; Ye, 2006). Conversely, Chinese international students who beheld a negative view of interpersonal support network experienced less emotional support. Specifically, these group of students viewed online social groups as informational support, such as advice relevant to the situation, but not emotional support.

Similar to computer technology, the cell phone has become an integral part of daily life. Cell phones have become a highly important form of technology for post-1990s Chinese international students for communication, social connection, and entertainment.

Researchers found that college students spent an average of six hours daily on their mobile phones. Among all the available functions on the participants' mobile phones, text message ("Short Message Service") was the most frequently used feature followed by actual phone calls. Furthermore, text messaging and phone calls were most used amongst peers. In their study, Obermayer, Riley, Asif, and Jean-Mary (2004) found that integration of web and text messages through cell phones helped college-aged students stop smoking, which evidenced the importance of social support. Obermayer and colleagues (2004) found that 22 percent of the college student sample quitted smoking on a seven-day-period criterion based on an individualized smoking cessation plan through text message reminders. At a three week follow-up, 17 percent of the students reported having quit smoking, whereas 28 percent had quit smoking at the six-week follow-up. This study revealed the ability of text messaging as a platform for a support system as it served to remind participants of their desire and commitment to quit. The text messaging system was easy to use and convenient for college-aged students. In the same way, text messaging may facilitate social support, enhance coping strategies for various problems, and promote healthy behaviors for Chinese international students during their acculturation process.

Roles of spiritual connectedness and religion. Another potential source of social support for international students is available through local churches and religious institutions (Bertram et al., 2014). Religion is defined as an organized belief system that includes shared and usually institutionalized moral values and beliefs about God or a higher power; it is inherently associated and connected with a faith community (Walsh, 1999). Awareness and sensitivity to religion and its influence in affecting attitudes

towards seeking mental health services has dramatically increased in the past decade (Bertram et al., 2014; Mitchell & Baker, 2000; Slater, Hall, & Edwards, 2001).

Specifically, Yeh and Wang (2000) suggested that religion has significant influences on the coping strategies and help-seeking attitudes for Asian Americans. Belief in religious values may play a role in the emotional and psychological well-being and help-seeking attitudes of an individual. Some Christian churches have implied that mental illness is a consequence of sin and judgment (Yeh & Wang, 2000). As such, Chinese international students may possess negative attitudes towards mental health services by believing that an inverse relationship exists between religious commitment and the state of one's mental health (Yeh & Wang, 2000). In this instance, lack of utilization could be due to the perception that professional therapeutic helpers minimized religious and spiritual values within their practices (Mitchell & Baker, 2000).

However, Gray (2001) found that Christians in the United Kingdom tend to possess less stigmatizing views of mental illness than a randomized sample and did not view mental illness as a sin or sign of divine judgment. Nonetheless, more research needs to be conducted with regard to the impact of Christianity and religion on Chinese international students' attitudes on professional psychological health seeking behaviors. On one hand, having a faith community may benefit Chinese international students' mental health; on the other hand, religion and religious institutions may reduce help-seeking attitudes due to certain religious beliefs regarding mental illnesses.

## Demographic variables.

Age. Sodowsky and Lai (1997) described the negative impact of age on acculturative stress. Specifically, younger age was highly associated with more

acculturative stresses. Berry (1998) further suggested that teenagers and older adults had significantly more difficulties with acculturative stress.

Gonzalez, Alegria, and Prihoda (2005) investigated the help-seeking attitudes on a probability sample of 8,098 respondents aged 15 to 54 years from the 1990 – 1992 National Comorbidity Survey. Researchers have suggested that age is a predictor of help-seeking attitudes and mental health utilization. Young adults reported to have the most negative attitudes on help-seeking while older adults held relatively positive attitudes toward seeking psychological help (Gonzalez et al., 2005). Specifically, older adolescents and young adults (18 – 24 years old) tended to report less positive attitudes toward help-seeking (Gonzalez et al., 2005).

Researchers also suggested that the first onset of symptoms related to mental disorders reportedly took place in childhood or adolescence (Kessler, Ammigner, Aguilar-Gaxiola, Alonso, Lee, & Ustun, 2007). Specifically, the highest prevalence rates of any psychiatric disorders were found in adolescent and young adults (Kessler, Chiu, Demler, & Walters, 2005; Kessler et al., 2007), and suicide was found to be the third leading cause of deaths among youths and young adults aged 10 to 24 years in the U.S. (Center of Disease Control and Prevention, 2004). As such, there are compelling reasons to provide support to Chinese international students between the ages of 18-24 years, as age plays a significant role when considering help-seeking attitudes.

Gender. There are mixed findings in research examining gender as a predictor of help-seeking attitudes and mental health utilization among Asian Americans. Earlier studies suggested that gender plays a significant role in the acculturation process (Berry, 1998) and that females are at a higher risk than males for acculturative stress potentially

leading to mental health symptoms. Some researchers found that gender also played a significant role in determining attitudes toward seeking professional psychological help for Asian women (Teta & Leong, 1994), and women in general (Fischer & Turner, 1970; Gonzalez et al., 2005; Yeh, 2002; Yeh, 2003). However, other studies proposed that gender did not appear to play a role in predicting attitudes toward seeking professional psychological help (Atkinson et al., 1989; Zhang et al., 2003)

Overall, women were more likely to seek professional help when facing stressful events (Atkinson et al., 1989; Gonzalez et al., 2005). This perspective is important; holding a positive attitude towards seeking mental health treatment was a strong and significant predictor of intention to seek help for mental health symptoms. Study participants that had less favorable views towards mental health symptoms were more likely to delay seeking help (Mo & Mak, 2009). Conflicting results in the available data indicate the need for further research to clarify the relationship between gender and mental health help-seeking behaviors.

# **Purpose of the Study**

There have been many well-documented studies on the impact of acculturation on mental health among Asian international students (Chen, 1999; Leong et al., 1990, Ye, 2006; Yeh et al., 2003; Ying & Liese, 1994), but fewer studies exist that elucidate their help-seeking attitudes (Dadfar & Friedlander, 1982; Zhang et al., 2003). These studies are limited by their aggregation of data. These studies typically grouped Asian international students as one homogenous group and largely ignored ethnic or cultural differences. Researchers have not explicitly examined the factors that may influence attitudes toward mental health help-seeking among Chinese international students. Furthermore, there has

not been any research focused on Chinese international students who study at the community college level. Therefore, the current study extends the existing literature by investigating the following independent variables: religion, technology usage, and acculturative stress, in relation to attitudes toward mental health help-seeking among Chinese international students at the community college level. The current study is unique in that it extends the research on attitudes toward mental health help-seeking beyond universities and four-year colleges to include two year community colleges and also incorporates the impact of technology, religion, cultural adaption and impact on help-seeking attitudes.

The proposed study has significant beneficial implications for educational and clinical contributions concerning the Chinese international student population.

Educationally, the results of this study may be used to improve the current services available to students utilizing the International Student Programs and on-site counseling centers at the community college level. In-depth identification of the Chinese international students' thought processes, including help-seeking attitudes and behaviors regarding psychological support and mental health need, can be identified and addressed. Greater knowledge of the Chinese international students' acculturative experiences will enable community colleges to further develop and offer appropriate, valuable services, and interventions aimed at improving students' adjustment experiences and transition into the American educational system. Workshops, programs, and services that facilitate help-seeking attitudes geared for the Chinese international student population could ultimately lead to higher rates of optimal mental health in these young adults and improve the overall college experience to graduation or completion.

It is important for U.S. mental health professionals to understand the unique issues Chinese international college students may face during their acculturation process. Clinically, multicultural counselors, educators, and psychologists who serve Chinese international students will gain experience with cultural competency and develop culturally appropriate supports and services. As a result of this study, mental health professionals will be better equipped to serve the individual and collective needs of Chinese international students. In addition, this study will provide information pertaining to current rates of mental health utilization among Chinese international students currently attending Pacific Northwest community colleges and examine potential service barriers.

# Research Hypotheses

This proposed study investigates Chinese international students', in community colleges, psychological help-seeking attitudes and the impact of acculturative stress and coping strategies. This younger cohort has never explicitly been studied in the research literature. Based on the extant literature, hypotheses for this study were directional, predicting the following:

- 1. Social support through religion has an inverse relationship in students' psychological help-seeking attitudes. In other words, the more spiritually connected an individual is, the less likely they will seek psychological help.
- 2. The level of acculturation has a positive relationship in students' psychological help-seeking attitudes. In other words, the more acculturated an individual is, the more likely they will seek psychological help.

3. Social support through the use of technology has a positive relationship in students' psychological help-seeking attitudes. In other words, the more an individual uses technology for social support, the more likely they will seek psychological help.

# Chapter 2

# Research Design and Methodology

# **Purpose Overview**

This study examined the relationship and influence of gender, religiosity, age at which students begin their American education, length of time of residence in the U.S., current educational level, perception of social support, use of technology, and level of acculturation on help-seeking behaviors within the Chinese international community college student population in the Puget Sound region. Specifically, adherence to Asian values was studied, along with the social support through family, friends, schools, and students' interactions with local religious fellowships.

Past research has studied the impacts of acculturation on mental health among Asian international students (Leong, Mallinckrodt, & Kralj, 1990; Yeh & Inose, 2003; Ye, 2006; Ying & Liese, 1994), but few studies have focused on help-seeking attitudes (Dadfar & Friedlander, 1982; Zhang & Dixon, 2003). Frequently, international students are grouped into one homogenous group; subgrouping based on ethnic background and cultural influence has not been an evident consideration or variable accounted for in the literature review. Furthermore, these studies do not delineate between two year and four year college programs. Chinese international students comprise 29 percent of the total international students' population (IIE, 2013). Conversely, there is no research that

explicitly examines the factors that may influence attitudes toward psychological help-seeking among Chinese international students studying at the community college level. Therefore, the proposed study extends the existing literature by investigating two categories of independent variables: personal (gender, age, religion, technology usage) and cultural influence (acculturation-related) with two dependent variables (attitudes and perception of barriers toward mental health help-seeking) among Chinese international students who are enrolled in a two-year college program.

## **Participants**

The participants in the study included full-time Chinese international students enrolled in a community college. A purposive sample of 75 participants were recruited from seven community colleges in the Puget Sound region: Bellevue College, Seattle Central College, North Seattle College, Shoreline Community College, Edmonds Community College, Everett Community College, and Lake Washington Technological College in the state of Washington.

These coed community colleges are public institutions of higher learning; participant subjects have completed the enrollment process for the summer and fall quarter of 2015. The international students chosen for this study identified their country of origin from Taiwan, Hong Kong and China. The majority of the students came from China.

Of the 75 participants in this study, only 39 participants' data were included as 36 participants did not meet the research criteria. Specifically, as aforementioned, this study focused only on those student participants whose country of origin is mainland China. Furthermore, the participants were required to be enrolled as full-time students at the time

of survey. Of the 36 participants who were not included in this study, five of them were from Taiwan, three of them were from Hong Kong, five of them had just graduated from community college at the time of the survey, and 18 of them did not complete the survey. As a result, the number of actual participants was decreased to 39.

Of the final 39 samples, 59% were males (n=23) and 41% were females (n=16). The range of age was from 18 to 34 years old with a mean age of 21 years old. Specifically, the distribution of their ages were 18 (18%, n=7), 19 (23%, n=9), 20, (18%, n=7), 21(8%, n=3), 22 (5%, n=2), 23 (5%, n=2), 24 (2%, n=1), 25 (8%, n=3), 26 (3%, n=1), 27, (3%, n=1), 29 (3%, n=1), 30 (3%, n=1), and 34 (3%, n=1).

The participants' age of arrival ranged from 16 to 34 years old with a mean age of 19 years old. Specifically, distribution of their age of arrival was 16 (5%, n=2), 17 (15%, n=6), 18 (33%, n=13), 19 (18%, n=7), 20 (8%, n=3), 21 (8%, n=3), 24 (8%, n=3), 26 (3%, n=1), and 34 (3%, n=1).

In regard to participants' enrollment, 41% of participants (n=16) were enrolled at Bellevue College, 13% of participants (n=5) were enrolled at Seattle Central Community College, 8% of participants (n=3) were enrolled at Edmonds Community College, 10% of participants (n=4) were enrolled at North Seattle Community College, 18% of participants (n=7) were enrolled at Shoreline Community College, 5% of participants (n=2) were enrolled at Lake Washington Technological College and Everett Community College.

In addition, 31% of participants (n=12) self-identified as freshmen; 48% of participants (n=19) as sophomores; and, 21% of participants (n=8) reported taking English as a Second Language courses, a prerequisite for enrollment in credit classes.

Additional demographic information was collected from this sample and was described in more detail in the results section.

### **Procedures**

This study utilized a mixed-methods for data collection. Participants were given a survey with a cover letter (Appendix A) or a consent form (Appendix B) describing the purpose, the risks, the benefits, and incentives for completing the survey. Participants completed a 140-item questionnaire consisting of one demographic background questionnaire (see Appendix C) and six measures (see Appendix D-I) that included questionnaires to self-report their perception of community college life in the U.S., stressors, social support, use of technology, religious coping strategies and their attitudes and behaviors on seeking psychological help.

The survey's consent form explained (1) the purpose of the study concerning Chinese international students' help-seeking attitudes, (2) the risks and benefits of participation, (3) confidentiality or anonymity, (4) voluntary participation and withdrawal clause, (5) incentive details for \$100 Amazon gift card drawing, (6) opportunity for debriefing and sharing of study results. Students were informed the survey would take approximately 30 minutes to complete.

**Data Collection.** This exploratory study was conducted in Seattle, Bellevue, Redmond, and Lynnwood, Washington. Data collection began in June of 2015 after approval by the Institutional Review Board of Northwest University. Data collection concluded on October 31, 2015.

First, community colleges' websites, including: Bellevue College, Seattle Central Community College, Edmonds Community College, Green River Community College,

Shoreline Community College, Highline Community College, and North Seattle

Community College, were studied extensively. Secondly, a combination of cold-calls and emails were made to contact directors and/or administrators of the International

Education Programs, International Programs, International Student Services, international student advisors, Chinese student club advisors, Chinese Christian Fellowship Club advisors, and directors for students' program.

**Recruitment Techniques.** A variety of recruitment techniques were employed for this study. Seven administrators were contacted through the combination of cold-calls and emails. Four administrators consented to be interviewed personally, and appointments were made at their respective school office. After recruiting and gaining approval from the administrators, the researcher's survey was forwarded to students through school's newsletters, clubs' Facebook pages, international student advisors' offices, English as the Second Language (ESL) classes, and Chinese international student clubs. Six additional students from two different colleges participated in the two separate focus groups. Both focus groups were held at students' location of choice, one at Starbucks in June 2015, and the other at a café in July 2015. Both focus groups took 120 minutes to complete. Participants were informed that their names would not be used in any analyses or written reports. Participation was voluntary, and all participants were provided written informed consent (see Appendix B). Participants were informed that data from this study would be held confidentially. Each of these six students was compensated with \$20 gift card for their time and effort. Additionally, these students also served as additional recruiters to find more participants through their personal contacts.

Semi-structured interview. The qualitative part of data collection was obtained through 90-minute interview sessions with three different international student offices and a students' program director from different community colleges. A consent form was presented and signed at the beginning of the session (see Appendix B). Two administrators had worked in the same international student offices for more than fifteen years, while one administrator had worked in the international students' office for more than five years. In addition, six students participated in the focus groups. A consent form (see Appendix B) was presented and signed at the beginning of the session.

In depth semi-structured interviews were conducted with the aid of an interview guide (see Appendix J and K). The interview guide consisted of open-ended questions that prompted discussion on Chinese international students' acculturative stress and their coping strategies. Each administrator participated in a 90-minute interview through semi-structured interview. Each focus group participated in a 120-minute interview through semi-structured interview.

Although college administrators' perceptions of Chinese international students' acculturation process were explored with a specific emphasis on students' help-seeking attitudes, administrators in this study spoke of the acculturative issues broadly in the context of academic behavior. Their responses were transcribed and described in this article.

#### Materials

Translation of the materials. All questionnaires were translated according to the World Health Organization's guidelines (2007) for the process of translation and adaptation of the instruments. All survey questionnaires were administered in Chinese,

students' native language, to improve test reliability. Additionally, there were two semistructured interview guides that were used for interview with the administrators and interview with the students. The interview questions asked the student participants about their experiences as an international student. These questions were asked in Chinese.

Demographic questionnaire. A detailed demographic questionnaire (see Appendix C) was specifically designed for this study. This questionnaire was based on Anderson and Newman's social-behavior model (SBM; Andersen & Newman, 1973) to inquire personal factors and social structural factors that were relevant to the purpose of this study. The core data for personal factors included: participant's gender, age, religion, and age of arrival to the U.S. The social structural factors included: educational level, length of time in the U.S., frequency of returning home, and frequency of family visits to the U.S. Other additional social structural factors included: students' knowledge of and attitudes toward the school counseling center, knowledge of fellow Chinese international students' drug, alcohol and/or psychological related issues, and students' attitudes in pursuit of on-campus and off-campus professional psychological help. In addition, participant's technology usage and spiritual connectedness were explored.

Attitudes toward seeking professional psychological help scale (ATSPPHS).

The 29-item Attitudes Toward Seeking Professional Psychological Help Scale was developed by Fischer and Turner (ATSPPHS, 1970). The responses were arranged in a 4-point Likert scale ranging from 1 (*disagree*) to 4 (*agree*). Fischer and Turner (1970) suggested the internal consistency factors (need, stigma, openness, confidence) were .67, .70, .62, and .74, respectively. The internal consistency factors for the entire scale were .83 and .86 in two samples. Fischer and Turner (1970) suggested that ATSPPHS

demonstrated consistent validity. In addition, women (p < .0001) appeared to have more positive attitudes than men (p < .001).

Fischer and Farina (1995) developed a simplified 10-item measurement to measure attitudes toward seeking professional psychological help for college students. The sample items included: "If I believed I was having a mental breakdown, my first inclination would be to get professional help," and "I might want to have psychological counseling in the future" (see Appendix D). The responses are arranged in a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The test-retest internal consistency was reported at 0.80 (Fischer & Farina, 1995).

Vogel and colleagues (2005) employed the shortened version of the ATSPPHS with college students and reworded the test questions (e.g., mental problems was replaced with emotional/personal problems or difficulties, mental health clinic was replaced with counseling center, and mental hospital was replaced with psychiatric inpatient unit). With these changes, Vogel and colleagues (2005) reported an internal consistency of .84 using ATSPPHS-SF. Fischer et al. (1995) and Vogel et al. (2005) suggested that higher scores of ATSPPHS and ATSPPHS-SF indicate an overall favorable attitudes toward seeking professional psychological help.

Acculturative stress scale for international students (ASSIS). The 36-item ASSIS developed by Sandhu and Asrabadi (1994; Appendix E) measures perceived acculturative stress of international students. This scale provides a summative score for total acculturative stress and individual scores for the subscales. The seven subscales include: Perceived Discrimination (eight items), Homesickness (four items), Perceived Hate (five items), Fear (four items), Stress Due to Change/Culture Shock (three items).

Guilt (two items), and Nonspecific Concerns (10 items). The responses are rated on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The sample items include "homesickness bothers me" and "I feel uncomfortable adjusting to new foods"

Sandhu and Asrabadi (1994) assessed overall levels of acculturative stress of international students and recommended further studies to verify its validity and reliability. ASSIS-Chinese version was translated and followed a 3-step back translation guidelines. Researchers suggested ASSIS' internal consistency ranged from .92 to .94 when they studied Chinese international students' acculturative stress (Wei et al., 2007; Wei, Liao, Heppner, Chao, & Ku, 2012). In addition, a correlation existed between students' self-reported perception of acculturative stress and higher composite scores in the Chinese international student. Specifically, construct validity was evidenced by the correlation between positive relationship with depression and negative relationship with adjustment among Chinese international students (Wei et al., 2007; Wei et al., 2012). The researchers reported Cronbach's alphas of 0.93 for the English version and 0.91 for the Chinese version. These researchers suggested either version of the ASSIS determined high internal consistency reliability (Wei et al., 2007; Wei et al., 2012).

Suinn-Lew Asian self-identity acculturation scale (SL-ASIA). ). The 21-item Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Appendix F) by Suinn, Rickard-Figueroa, Lew, and Vigil (1987) measures the acculturation level of Asians. It focuses on Asian American college students in four content areas: language familiarity, ethnic identity, cultural behaviors, and ethnic interactions. The subscales include: language (4 questions), identity (4 questions), friendship choice (4 questions), behaviors

(5 questions), generation/geographic history (3 questions), and attitudes (1 question). The responses are rated on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Suinn and colleagues (1987) stated that individuals with scores close to 1 are identified as Asian with a low level of acculturation, whereas individuals scoring close to 5 are Western-identified with a high level of acculturation. With high internal consistency, the reliability coefficient of the scale was .88 (Suinn et al., 1987). A participant with a score of 3 is considered bicultural (Suinn et al., 1987). For the purpose of this research, ten questions (1, 2, 3, 4, 5, 6, 7, 12, 13, and 14) that address participants' generational/geographic history, parents' ethnic identification, and childhood friends were eliminated to reduce redundancy as all participants were ethnic Chinese from China.

The SL-ASIA studied generational differences in acculturation by Suinn, Rickard-Figueroa, Lew, and Vigil (1987). Suinn and colleagues (1987) suggested that the mean values on the scale were significantly different (p < .0001) and consistent with the predicted increase in acculturation scores for each of the five generations sampled (Suinn et al., 1987). Specifically, statistically significant results were found when comparing mean values to length of stay in the U.S. (p < .0001) and self-perceived acculturation (p < .0001; Suinn et al., 1987).

Asian value scale-revised (AVS-R). The 25-item Asian Values Scale-Revised was developed by Kim and Hong (2004, Appendix F) to measure an individual's adherence to Asian values and beliefs. AVS-R was based on the original 36-item Asian Value Scale (AVS) developed by Kim, Atkinson, and Yang (1999). The original Asian Value Scale consisted of six major Asian values: conformity to norms, family recognition through achievement, emotional self-control, collectivism, humility, and filial piety. It

used a 7-point Likert-type scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Kim and colleagues (1999) reported internal consistency coefficient alphas of .81 and .82 and a test-retest reliability coefficient of .83 for the original AVS.

The AVS-R, a streamlined version of the AVS (Kim & Hong, 2004), specifically measures the Asian American college student population. It uses a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). A sample item includes "One should not deviate from familial and social norms" (Item 1; Kim & Hong, 2004). A coefficient of .93 between the AVS and the AVS-R implied concurrent validity for the AVS-R scores (Kim & Hong, 2004).

Multidimensional scale of perceived social support (MSPSS). The 12-item Multidimensional Scale of Perceived Social Support (MSPSS; Appendix H) developed by Zimet, and Farley (1988) measures perceived social support. This measure uses a 7-point Likert-type scale ranging from 1 (*Very strongly disagree*) to 7 (*very strongly agree*). A sample item includes "there is a special person in my life that cares about my feelings."

Zimet and colleagues (1988) reported that MSPSS demonstrated good internal and test-retest reliability as well as moderate construct validity among undergraduate students. The use of three subscales, family, friends, and significant other, addressed different support systems with internal reliability scores of .87, .85, and .91, respectively, with a total reliability scale of .88. Specifically, researchers found high levels of perceived social support correlated with low levels of depression and anxiety symptomatology as measured by the Hopkins Symptom Checklist (Zimet et al., 1988).

Brief RCOPE. The 14-item Brief RCOPE was created by Pargament, Koenig, and Perez (2000; Appendix I) to measure how participants use religious coping skills to alleviate major life stressors. Brief RCOPE was streamlined from the full RCOPE which originally consisted of five items for each of the 21 subscales for a total of 105 items (Pargament, Feuille, & Burdzy, 2011). The psychometric properties of the RCOPE were analyzed using samples of 540 college students and 551 hospitalized adults. Factor analysis validated a high internal consistency and incremental validity with alpha values of 0.80 or greater.

Brief RCOPE is a frequently used measure of religious coping which retains the theoretical and functional foundation of the RCOPE. It is helpful to understand the role spiritual connectedness serves in the process of facing stress, trauma, and transition (Pargament et al., 2011). The Brief RCOPE consists of two subscales. The Positive Religious Coping scale includes: seeking spiritual support, religious forgiveness, collaborative religious coping, spiritual connection, religious purification, benevolent religious appraisal and religious focus. The Negative Religious Coping scale includes: spiritual discontent, punishing God reappraisals, interpersonal religious discontent, demonic reappraisal, and reappraisal of God's power.

The preliminary Brief RCOPE demonstrated satisfactory internal consistency of .87 for positive coping and .78 for negative coping in a study of church participants by Pargament, Smith, Koenig, and Perez (1998). Confirmatory factor analyses of Brief RCOPE were conducted with a sample of college students. Pargament and colleagues (1998) suggested that Brief RCOPE exhibited excellent internal consistency with positive religious coping scores at .90 and negative religious coping at .81. Another confirmatory

factor analyses of the Brief RCOPE with a sample of hospital elderly patients indicated the two-factor solution was a reasonable fit (Pargament et al., 2011). Cross-culturally, Brief RCOPE demonstrates strong internal consistency in Mexican older adults (Rivera-Ledesma & Lena, 2007), and Muslim college students in Pakistan. All in all, researchers suggested that the use of positive religious coping methods is associated with fewer psychosomatic symptoms, greater sense of connectedness with a transcendent force, and a belief that life has a greater benevolent meaning; on the other hand, negative religious coping is associated with more problematic psychological distress, negative reappraisals of God's powers, spiritual questioning and doubting and increase in callousness toward God and other people (Pargament et al., 2011).

Interview guide. Two simple questionnaires were used as the interview guide. The first questionnaire (see Appendix J) was used to guide the semi-structure interview with the college administrators and inquired about their perspectives and experiences in working with Chinese international students. The second questionnaire (see Appendix K) was used to guide the semi-structure focus groups with six Chinese international students and inquired students' experiences as international students and their coping strategies in alleviating acculturative stress.

## Summary

The purpose of this study is to explore psychological help-seeking attitudes and behaviors among Chinese international students who study at the community college level. This study extends the existing literature by investigating independent variables: gender, age, religiosity, technology usage, and acculturative stress in relation to Chinese international students' help-seeking behaviors and attitudes. The manner in which

Chinese international students studying in the U.S. cope with the language, academic, and social-cultural challenges of living and studying in a foreign country directly impacts the quality of their educational experiences in addition to their overall mental health and sense of well-being. Because China is the number one country of origination for international students, it is imperative for U.S. mental health workers and community colleges to understand the complexity of acculturation. Questionnaires and testing instruments were administered in partnership with the community colleges in summer 2015. The data were collected and analyzed.

As this study is exploratory in nature, a correlational method of analysis will be used. These analyses explored the relationship between help-seeking attitudes and level of acculturative stress (ASSIS), perceived social support, religious affiliation, and technology usage. Participants' gender, age, and length of stay in U.S. were explored as well.

To summarize, the participants in this study represented Chinese international students currently studying at Bellevue College, North Seattle Community College, Shoreline Community College, Seattle Central Community College, Lake Washington Technological College, Everett Community College, and Edmonds Community College. Participants were recruited through college newsletters, listservs, Chinese student clubs, and Chinese Christian Fellowship via Google Doc. Participants provided demographic information and completed six measures: Attitudes Toward Seeking Professional Psychological Help Scale-Short Form (ATSPPHS-SF), Acculturative Stress Scale for International Student (ASSIS), a modified Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA), Multidimensional Scale of Perceived Social Support (MSPSS), Asian

Value Scale-Revised (AVS-R), and Brief RCOPE. In addition, six students participated in focus groups, and four administrators participated in follow-up interviews. The follow-up interview questions asked student participants about their experiences as an international student and administrators about their experiences working with Chinese international students. In addition, six students participated in focus groups, and four administrators participated in follow-up interviews; their responses were transcribed and described in the result sections.

# Chapter 3

# **Data Analysis Process and Procedures**

# **Findings**

To examine the relationship between Chinese international students' help-seeking attitudes and the impact of their acculturative stress and coping strategies, sequential exploratory mixed methods research designs were used. First, this chapter connects the details of the quantitative and qualitative research that were implemented. Secondly, the research questions through semi-structured interviews were incorporated to guide the qualitative part of the study. The research hypotheses were assimilated to direct the quantitative part of the study. Lastly, this chapter includes the quantitative and qualitative data analyses results.

## **Quantitative Data Analysis**

**Descriptive statistics.** Of the 39 participants, 33% of participants (n=13) self-identified as freshmen; 41% of participants (n=16) self-identified as sophomores; and, 17% of participants (n=7) reported taking English as a Second Language courses, a prerequisite for enrollment in credit classes, and 9% of participants (n=3) did not identify

any educational level (see Table C). The length of their stay in the U.S. ranged from 2 months to 84 months with a mean length of stay of 24 months.

In regard to their daily language usage, 69% of participants (n=27) identified Chinese as their primary daily language while 10% of participants (n=4) identified English as their primary daily language, and 21% of participants (n=8) identified using both English and Chinese equally as their daily language (see Table D). In regard to their religion, 49% of participants (n=19) self-identified as Christian, 10% of participants (n=4) self-identified as Buddhist, and 41% of participants (n=16) self-identified as Atheist (see Table E).

The frequency for participants who had trips home since arriving in the U.S. were categorized into: never (23%, n=9), once (33%, n=13), twice (31%, n=12), three times (8%, n=3), four times (0%, n=0), five times (2.5%, n=1), to over five times (2.5%, n=1), with a mean frequency of 1.4 times. The frequency of the participants' family visits in the U.S. ranged from: never (49%, n=19), once (31%, n=12), twice (8%, n=3), three times (10%, n=4) to over four times (2%, n=1; see Table F).

Of the 39 participants, 46% of participants (n=18) owned a car whereas 54% of (n=21) participants did not. All participants reported owning a smart phone where they had access to internet and instant text messages at all times. Specifically, 8% of participants (n=3) reported spending less than an hour on the phone daily, 38% of participants (n=15) reported spending between one hour to three hours daily, 38% of participants (n=15) reported spending between three hours and five hours daily, and 16% of participants (n=6) reported spending more than five hours on the phone daily (see Table G). In addition, participants reported communicating with their family through the

internet, e.g. phone, Facetime, Skype or WeChat, between multiple times a day (5%, n=2), once daily (21%, n=8), two to three times a week (31%, n=12), weekly (28%, n=11), or two to three times monthly (15%, n=6; see Table H).

In regard to history of taking psychology classes, 51% of participants (n=20) had taken at least one psychology class in the past whereas 49% of participants (n=19) had never taken a psychology-related class. In regard to history of receiving counseling in the past, 8% of participants (n=3) reported they had personally received counseling in the past, whereas 92% of participants (n=36) had not. In addition, 62% of participants (n=24) reported having heard or known about fellow Chinese international students who had suffered from addiction issues whereas 38% of participants (n=15) had not. Similarly, 67% of participants (n=26) had heard or known about fellow Chinese international students who had suffered from psychological difficulties such as depression or anxiety, whereas 33% of participants (n=13) had not.

In regard to participants' knowledge and awareness of their respective colleges' free counseling service, 54% of participants (n=21) acknowledged their awareness of the free counseling services at school whereas 46% of participants (n=18) did not. In regard to participants' attitude towards utilizing on-campus free school counseling services for personal reasons, 15% of participants (n=6) reported having an open attitude toward free on-campus counseling services for personal use whereas 85% of participants (n=33) did not. In regard to participants' attitude towards referring friends to free school counseling services, 64% of participants (n=25) reported as willing and open to refer their friends to free school counseling services whereas 36% of participants (n=14) did not. In regard to participants' attitude towards referring their friends to professional counseling services

off-campus, 56% of participants (n=22) reported as willing to refer their friends to professional counseling services off-campus whereas 44% of participants (n=17) did not (see Table I).

Of the continuous variables, the total ATSPPHS-Short Form scores in this study ranged from 9 to 30, with the full potential for the score of the ATSPPHS-SF being 0 to 30. The mean score was 16.54 (SD=4.06), representing an average item response of 1.65 on a scale of 1 to 4. The total ASSIS scores in the sample ranged from 47 to 109 with the full potential for the score of the ASSIS being 36 to 180. The mean score was 90.38 (SD=14.86), representing an average item response of 2.51 on a scale of 1 to 5. The total SL-ASIA scores in the sample ranged from 1.82 to 3.18, with the full potential for the score of the SL-ASIA being 1 to 5. The mean score was 2.50 (SD=0.35). The total MSPSS scores in the sample were from 46 to 84, with the full potential for the score of the MSPSS being 12 to 84. The mean score was 64.49 (SD=9.58). The total AVS in this study ranged from 2.08 to 2.64, with the full potential for the score of the AVS being 1 to 4. The mean score of AVS was 2.42 (SD=0.10), representing an average item response of 1.65 on a scale of 1 to 4. Lastly, the total RCOPE scores in this study were from 25 to 44, with the full potential for the score of the RCOPE being 14 to 56. The mean score of the RCOPE was 32.71 (SD=4.41). The total Positive Religious Coping scores in this study were from 14 to 28, with the full potential for the PRC score being 7 to 28. The mean score for PRC was 19.13 (SD=4.12). The total Negative Religious Coping scores in this study were from 7 to 18, with the full potential for the NRC score being 7 to 28. The mean score for NRC was 13.59 (SD=2.45).

Inferential statistics. First, the Pearson's two-tailed, product-moment correlation coefficient analysis was used to examine the relationship between the Attitudes Toward Seeking Professional Psychological Helping Scale (ATSPPHS) and a variety of acculturation and coping variables. The Pearson's correlation found no relationship between ATSPPHS and the following variables: ASSIS, MSPSS, SL-ASIA, or Negative Religious Coping (*p*=ns). Furthermore, there was no relationship between ATSPPHS and the subscales of the ASSIS, including: Discrimination, Guilt, Hate, Fear, Culture Shock, or Homesickness (*p*=ns).

*Hypothesis one:* Social support through religion has an inverse relationship in students' psychological help-seeking attitudes.

Contrary to hypothesis one, this study found that there was a significant positive relationship between ATSPPHS and Positive Religious Coping (PRC), r (37)=47, p < .005, and RCOPE, r (37)=.36, p < .05. In other words, participants who used religion as a part of their coping strategies had open attitudes toward psychological help-seeking. Furthermore, participants who experienced Positive Religious Coping were even more significantly open to professional psychological services.

*Hypothesis two:* The level of acculturation has a positive relationship in students' psychological help-seeking attitudes.

As predicted by hypothesis two, this study found that there was an approaching significant relationship between ATSPPHS and Asian Value Scale r (37)=.31, p = .059. These data suggested that the stronger the participants identified with American culture, the more likely they were to be open to psychological help-seeking. In contrast, the

stronger the participants adhered to Asian values, the less likely that they were to be open to psychological help-seeking.

Secondly, a series of one-way ANOVA tests were conducted to further examine the relationship between ATSPPHS and a series of demographic variables. Based on the results of the study, there was not a significant main effect (p > .05) for participants' primary daily language F(2, 36)=.40; religion F(2, 36)=1.41; educational level F(2, 36)=1.05, length of stay F(3, 35)=2.20, or age of arrival F(3, 35)=.43. More specifically, the relationship between AVS and these demographic variables also did not show a significant main effect (p > .05). These findings indicated that participants' usage of Chinese, English, or both English and Chinese as their primary spoken language had no effect on their attitudes toward psychological help-seeking. Additionally, participants' self-reported religion - Christian, Buddhist, or Atheist - had no effect on their attitudes toward psychological help-seeking. Lastly, participants' age of arrival, length of stay, and educational attainment had no main effect on their attitudes toward psychological help-seeking (p > .05).

To confirm these findings, a series of the nonparametric Kruskal-Wallis tests were conducted to further evaluate the relationship between ATSPPHS and the same group of independent demographic variables that had three or more groups and nominal data. Based on the results of the study, there was no statistically significant value (p > .05) on help-seeking attitudes between participants' primary daily language  $X^2(2) = 2.13$ ; religion  $X^2(2)=2.83$ ; educational level  $X^2(2)=1.99$ , or length of stay  $X^2(3)=5.19$ . More specifically, the relationship between AVS and these demographic categorical variables also did not show any statistical significant value (p > .05). These findings further

confirmed that participants' usage of Chinese, English, or both Chinese and English as their primary spoken language had no effect on their attitudes toward psychological help-seeking. Additionally, participants' self-reported religion - Christian, Buddhist, or Atheist - had no effect on their attitudes toward psychological help-seeking. Lastly, participants' age of arrival, length of stay, and educational attainment had no main effect on their attitudes toward psychological help-seeking (p > .05).

*Hypothesis three:* Social support through the use of technology has a positive relationship in students' psychological help-seeking attitudes.

Contrary to hypothesis three, through one-way ANOVA tests, this study found that there was not a significant main effect (p > .05) on participants' perceived social support through technology, specifically phone and car usage. This means that participants' time spent on the phone F(3, 35)=.42, on WeChat F(3, 35)=1.05, and on actual phone calls F(4, 34)=.37 had no main effect on their attitudes toward psychological help-seeking. Moreover, there was no main effect on attitudes toward help-seeking among participants who used their car to visit friends F(5, 33)=.57, or to attend church F(4, 34)=.43.

To confirm these findings, a series of the nonparametric Kruskal-Wallis tests were conducted to further evaluate the relationship between ATSPPHS and the same group of independent demographic variables that had three or more groups and nominal data. Based on the results of the study, there were no statistical significant value (p > .05) between participants' time spent on the phone  $X^2(1)=.17$  and participants who owned a car  $X^2(1)=.03$ . These data suggested that participants' social support through phone,

social media, and technology had no main effect on their attitudes toward psychological help-seeking (p > .05).

Contrary to hypothesis three, there was correspondingly not a significant main effect (p > .05) on participants' social support through frequency of communicating with their families F (4, 34)=1.55, or frequency of returning home since their arrival F (5, 33)=1.34. This means that participants' social support through connecting with the family had no main effect on their attitudes toward psychological help-seeking. Furthermore, there was not a significant main effect (p > .05) on participants' knowledge of free school-based counseling services F (1, 37)=.01, participants' willingness to use free school-based counseling services F (1, 37)=.69, participants' knowledge of fellow Chinese international students who have experienced drug or alcohol related issues F (1, 37)=3.08, and participants' willingness to refer friends to school-based counseling services F (1, 37) = .90 (p > .05). These findings suggested that although participants were aware of the free school-based counseling services, they would not necessary utilize these services for themselves or refer their friends to school-based counseling services (p > .05).

Of note, this study found that there was a statistically significant difference between groups as determined by one-way ANOVA on specific types of social support. Explicitly, the social support through the frequency of participants' family visits F (4, 34)=1.55, p < .005 and the social support through referring friends to off-campus professional psychological services F (1, 37)=15.57, p < .005 showed statistically significant differences on positive attitudes toward psychological help-seeking. These data suggested that participants' family visits had a significant main effect on their

attitudes toward professional psychological help-seeking; it also suggested that Chinese international students had positive attitudes towards referring their friends to off-campus psychological counseling services.

Thirdly, a series of secondary analyses were explored to understand participants' overall help-seeking attitudes and coping strategies. By examining through one-way ANOVA, three groups of participants showed statistically significant differences on positive attitudes toward psychological help-seeking, specifically:

- 1) Participants who had studied psychology in the past F(1, 37)=8.18, p < .01;
- 2) Participants who had received counseling in the past F(1, 37)=5.85, p < .05;
- 3) Participants who had known fellow Chinese students who have experienced psychological issues F(1, 37)=6.25, p < .05.

These data suggested that there were significant statistical differences on participants' attitudes toward psychological help-seeking (p < .05) for participants who had taken at least one psychology-related class (p=.007), participants who had received counseling in the past (p=.021), and participants who had known fellow Chinese international students who experienced psychological challenges (p=.017). Additional secondary analyses were further examined through Pearson's correlation analysis. This study found that there were statistically significant positive correlations between participants' acculturative stress and their coping strategies through their religion and social support. Specifically, there was a significant correlation between RCOPE and ASSIS, r(37)=.39, p < .05; RCOPE and Discrimination, r(37)=.36, p < .05; RCOPE and Fear r(37)=.38, p < .05; RCOPE and Hate r(37)=.34, p < .05; and, RCOPE and Guilt, r(37)=.40, p < .05. In addition, there was a significant correlation between MSPSS and

Hate r(37)=.34, p < .05. These data suggested that participants who self-identified as having acculturative stress, with perception of being hated and discriminated against, and experiencing feelings of guilt and fear, were positively correlated to use religious coping as a coping strategy. Furthermore, participants who perceived being hated were also positively related to using social support as a coping strategy.

# **Qualitative Data Analysis**

The qualitative part of the findings were through semi-structured interview of six additional Chinese international student participants, who described individual experiences in their acculturation process and their coping strategies. Additional discoveries about administrators' views and specific colleges' focus on working with international students became emerging themes in this study and expanded on the foundation discussed in Chapter Two. Common themes pertaining to Chinese international students' cross-cultural adjustment were language barriers, acculturative stress, and academic related issues. Common themes pertaining to Chinese international students' impact of ethnicity and culture on help-seeking attitudes and behaviors were traditional cultural beliefs and discrimination. Common themes pertaining to students' social support system were connectedness with technology as well as spiritual and religious connection.

## Chinese international students' cross-cultural adjustment.

Language barriers. Despite the aforementioned finding that Chinese international students' primary daily language had no statistically significant difference in their help-seeking attitudes, one administrator indicated that language barriers have been the first and greatest challenges for Chinese international students ("Rob," personal

communication, June 29, 2015). Across the data source from focus groups, participants described that even though some of the students had paid hefty fees to receive language preparation classes prior to their arrival to the U.S., these English preparation classes were not practical and participants felt that they were ill-prepared. Before students ever started their academic pursuit, the impact of language barriers and daily challenges stemmed from a lack of language proficiency sufficient to understand the host family's expectations, resulting in frequent miscommunication with roommates and the host family. Participants shared that they had to set up a bank account right away in order to register for classes, pay rent and purchase living necessities. Without proficient language ability or familiarity of the area, many students relied on their host family or others to take care of these essential tasks. As a result, misunderstandings and tensions arose between students and their host homes. Data sources indicated that these day-to-day living situations have become the most significant acculturative stresses for many Chinese international students upon their arrival because students often lack enough language proficiency to express themselves or understand others appropriately.

Acculturative stress. Data from college administrators showed that many Chinese international students face acculturative stress immediately upon their arrival. One administrator generalized these acculturative stresses and called them "life issues" ("Beth," personal communication, June 30, 2015). These issues were predominantly related to housing and conflicts with landlords and roommates as students were totally reliant on the agency to prearrange their room and board. Student participants indicated that living with their prearranged host family had many challenges and resulted in a major part of acculturative stress as the host family's qualifications were not

standardized. Frequently, the host homes had significant discrepancy from what was promised. One participant described that he was contracted for a private room with a private bathroom, but he later found that he had to share the bathroom with other homestay students ("Bob," personal communication, July 6, 2015). Another participant shared that although his host family was kind and supportive, his "commute to and from school was two hours each way and required three bus transfers," which created additional stress in a foreign country ("AJ," personal communication, July 6, 2015). Participants concurred that nearly all of the Chinese international students had never visited the host homes prior to their arrival. Even though students were informed that there would be other homestay students, many of the participants were from single child families and had never lived with "siblings." Learning how to live with fellow homestay students and the homestay family created significant stress.

The stresses that emerged from living with a host family that students had never met ranged from the host family's food preparation and preferences and the host family's own cultural traditions, especially around mealtime and expected table manner. In particular, one participant shared that she was "required" to pass both the salt and pepper when the host family asked her to "pass the salt," and she was "required" to pass only the pepper when the host family asked her to "pass the pepper" ("Helen," personal communication, June 30, 2015). Another participant described that his host family had a family shrine right at the dining table where the host family placed their deceased ancestors' pictures and worshiped them with various foods every day. Those foods would then become a part of his meal, and he had to eat "dead people's foods in front of dead people every day" which caused huge tension ("Tony," personal communication, July 6,

2015). These day-to-day challenges exacerbated Chinese international students' acculturative issues in addition to language barriers. Participants noted that the Chinese have a saying that "close neighbors are better than distant relatives." These "immediate family" created the instantaneous acculturative stresses students experienced upon their arrival. As a result, student participants were in the "survival mode" of trying to adjust to the host family. It was very challenging to consider psychological help-seeking when the concept of getting help was "foreign" to them in the first place ("Tony" & "AJ," personal communication, July 6, 2015).

Academic system and style and maladaptive perfectionism. Dissimilarities, specifically in the classrooms, also contributed to Chinese international students having greater difficulty in adjusting to living in the U.S. Administrators shared that one primary issue was that Chinese students did not speak up in class. At times, these students were "known for not contributing to classroom discussion or group projects" ("Beth," personal communication, June 30, 2015). One particular concern that was voiced by all administrators was academic honesty. Data sources indicated that Chinese international students have a notorious history of academic dishonesty and frequently were seen to cheat on the test or plagiarize work. Two administrators concurred that some of the Chinese international students were not able to pass their English as a Second Language (ESL) basic level classes but were able to obtain a graduate level scores on the Test of English as a Foreign Language (TOEFL) examination, an advanced test for foreign students ("Beth," personal communication, June 30, 2015; "Kyle," personal communication, July 6, 2015). In addition, administrators realized that many international students, specifically Chinese international students, had a tendency to take many online

classes so that their work could be done by others. As a result, colleges implemented limits on how many online classes international students were allowed to take.

Likewise, student participants in the focus groups frankly acknowledged that they had seen firsthand or heard that fellow Chinese students cheated on tests. One participant shared that he heard fellow Chinese students "wrote answers on an energy drink bottle, and hid a cheat sheet in his socks" ("Jay," personal communication, July 6, 2015). Another participant reported that some students "used a smart phone to access answers during midterms or finals or asked those who had taken the test already for test questions." ("Bob," personal communication, July 9, 2015). In addition, data sources indicated students frequently received various types of advertisement through WeChat (a popular free network site) offering Chinese international students "academic support services" through "buying grades" that ranged from completing assignments, accessing practice tests from specific professors, or essay writing.

With these vastly different academic styles and systems, it was difficult for peers and administrators to encourage Chinese international students to consider psychological help-seeking because students' superficial academic misconduct took precedence over the underlying psychological root causes of maladaptive academic perfectionism. Hence, psychological help-seeking was frequently overlooked.

### Chinese international students' impact of ethnicity and culture.

*Traditional cultural beliefs.* Across all data sources, participants provided consistent feedback that culturally ingrained values and beliefs were the primary obstacles for Chinese international students to have open attitudes toward psychological help-seeking. Specifically, stigma, lack of knowledge, self-concealment to shield

distressing and perceived shameful information from others, and collectivism all played a significant role in Chinese international students' attitudes toward help-seeking ("Beth," personal communication, June 30, 2015). Furthermore, although Chinese students were in frequent contact and communication with their parents, many of them did not honestly or openly share their struggles because of cultural beliefs and commentaries such as "my parents sacrificed for me," "they won't understand," or "I don't want them to worry when they cannot do anything" ("Jenny," "AJ," "Bob," personal communication, July 6, 2015). In addition, instead of asking school staff or accessing appropriate resources, Chinese international students tended to stay as a collectivist community and relied on their fellow Chinese friends for necessary help or important information ("Sally," personal communication, July 9, 2015).

Moreover, Chinese international students' view of money and their community college educational values were very different from the traditional American community college students. First, Chinese international students' tuition, room and board were primarily provided by their parents. Although internships and jobs were available, students had a tendency to adhere to their cultural beliefs and believed that "all things are beneath education." Students preferred to solely focus on their studies and were less engaged in obtaining internship or job experiences. On the other hand, typical American community college students were older adults who worked part-time or full-time to support themselves for higher education. Although certain American community college students were supported by their parents/family, many of these students' education were financed through student loans, scholarship, financial aid, or personal income. In addition, because of the different banking system, many Chinese international students

"carried lots of cash" ("Rob," personal communication, June 29, 2015). Frequently, these students also "dressed extravagantly and drove luxury cars that cost more than the average American student's yearly income" ("Rob," personal communication, June 29, 2015). In regard to educational values, Chinese students often viewed their community college as the gateway to their next higher education institution. In contrast, some of the typical American community college students viewed their community college as a means for future or better employment opportunity with this educational level as their highest degree attained. Because of the different values and beliefs in their community college education, Chinese international students were "over-represented" for leadership roles in the colleges' extracurricular clubs ("Rob," personal communication, June 29, 2015). Similar to typical college students, pursuing leadership roles could have been due to students' desires to broaden their educational experiences and explore their career paths. Participation in extracurricular activities also could have stemmed from their aspirations to meet like-minded people. However, Chinese international students too frequently perceived the extracurricular club's leadership roles as another credential for future school entrance. As a result, Chinese international students "frequently rubbed the people the wrong way" with their presence on-campus ("Rob," personal communication, June 29, 2015). Again and again, these negative perceptions became another impediment for psychological help-seeking amongst Chinese international students as they acculturated to American society and college campuses.

**Discrimination.** There were three types of discrimination reported throughout the interview with administrators and students. First, regional discrimination, which means that within Chinese international student's own group, there were overt biases against

students from other provinces. Second, students perceived to be discriminated against by others. Third, Chinese international students reportedly discriminated against other ethnic groups or individuals with disability. The different severity and types of discrimination reportedly negatively impacted students' help-seeking attitude. Participants reported that although collectivism and a strong sense of community were present in Chinese culture, there were "secondary cliques amongst different regions of China where Chinese students came from" that divided Chinese international students as a whole. Students frequently fought and discriminated against each other because of this "regionalism" and were not able to reconcile their differences ("Beth," personal communication, June 30, 2015). These regional cliques became a collective influence that either positively or negatively impacted students' attitudes toward help-seeking. In other words, if "one member was open to help-seeking, then more likely other regional group members would be more open to help-seeking." Conversely, if one member of the clique had a negative view on psychological help-seeking, the entire group tended to be more closed-minded towards help-seeking ("Sally," personal communication, July 9, 2015).

Secondly, there was consensus amongst community college staff that many Chinese international students entered into a community college because they "were not the cream of the crop" in terms of academic achievement ("Sally," personal communication, July 9, 2015). School staff suggested that some of the Chinese international students may have had potential preexisting, "unaddressed learning disabilities, and/or undiagnosed medical issues" (e.g. attention deficit hyperactivity disorder, etc.) that impeded their academic success since primary school in China ("Sally," personal communication, July 9, 2015). Specifically, students' families "turned

a blind eye, were in denial, or were in ignorance" with what students had previously experienced and assumed that an American education would change their educational performance. These students may have met the criteria for additional academic support through the American With Disabilities Act (ADA) or Individuals With Disabilities Education act (IDEA). However, due to their foreign student status, these students did not qualify to receive the appropriate academic support that was commonly guaranteed in American society for individuals with disability. Compounded with aforementioned language and acculturative challenges, students who perceived being "discriminated against and felt injustice in general were not open to psychological help-seeking" ("AJ," personal communication, July 6, 2015). Lastly, Chinese international students also lacked knowledge, awareness, and understanding of some American community college students' challenges that were related to their disability, race, ethnicity, gender and other differences other than their own. The disabilities may have included students who suffered from psychological or physical abnormalities, such as loss of a certain organ, bodily function, or the ability to perform an activity in the way that is considered "normal." At the same time, some Chinese international students may have been prejudiced against other community college students who were "other racial, ethnic, gender minority or students of color" ("Rob," personal communication, June 29, 2015; "Sally," personal communication, July 9, 2015). One participant reported that some Chinese international students viewed themselves as "above" the students who were perceived as "disabled and useless" in a Chinese society.

Overall, this study suggested that the various severity and types of discrimination against fellow Chinese international students from different regions, students' perception

of discrimination, and students' biases against other people who were different from them had negative impact on Chinese international students' attitudes toward help-seeking.

## Impact of social support system.

Roles of religion and spiritual connection. In the last theme, the data source suggested that religious and spiritual connection through many local Christian organizations were reported to be one of the primary support systems for Chinese international students. Specifically, Christian organizations such as International Christian Fellowship (ICF), International Talk Time (ITT), Bridges International, InterVarsity Christian Fellowship, as well as local churches, such as Westminster Chapel and Evangelical Chinese Church (ECC), all played a significant role that eased students' acculturation process, supported their adjustment and provided social support through several spiritually connecting activities. Homemade meals that suited Chinese international students' culture, bible study-related activities that connected students to Jesus Christ through student ministry, one-on-one English conversation that enhanced understanding of American culture, one-on-one check-ins with students, and frequent trips to local points of interest around the Puget Sound and Washington State all served as means to support Chinese international students' post-arrival transition.

Explicitly, regular communication with "adoptive grandparents" through respective ministry organizations was reportedly the most valuable support. One participant stated that her church's "caring adoptive grandparents and their prayers have helped me cope" through the acculturation process ("Jenny," personal communication, July 6, 2015). Through these interactive and trusting relationships, students were able to share their stresses and challenges with the caring adults from various ministry

organizations which provided a way to support their acculturation process and thus influenced their attitudes on psychological help-seeking.

Roles of technology and social media connection. Even though some students may have internalized or avoided problems, participants shared how they coped with their acculturative-related stresses or emotional disturbances through social support via WeChat, a social network site that included mobile text, voice messaging communication service, and a personal blog and was used by nearly 100% of the Chinese international students in this study. WeChat provided text messaging, hold-to-talk voice messaging, broadcast (one-to-many) messaging, video conferencing, video games, sharing of photographs, videos, and personal blogs similar to Facebook. One participant reported that WeChat had monthly "active users to be 600 million" ("AJ," personal communication, July 6, 2015). The service was free and users could contact family and friends as well as post their own blogs all within the same system and connect with people in different countries. Through this technological program, students frequently posted their "moments" that ranged from a photo with friends to an emotional disturbance of "sleepless nights in Seattle." Frequently, fellow Chinese international students and family and friends in China could view these moments and reply with messages, ideas, greetings, encouragement, etc. that enhanced social support for Chinese international students' day-to-day living and their acculturation process in the United States.

# Summary

The data analyses revealed that Chinese international students do not have favorable attitudes toward seeking professional psychological help. In general,

participants who experienced language barriers, acculturative stresses, and perceived discrimination or discrimination against others tended not to have open attitudes towards professional psychological services. Additionally, participants who strictly abided to traditional cultural beliefs and who had maladaptive perfectionisms also tended not to have open attitudes toward professional psychological services. However, there were many exceptions according to this study. Specifically, participants who had taken at least one psychology-related class, participants who had previously received counseling services, and participants who had known fellow Chinese international students who experienced psychological issues were more likely to have open attitudes toward professional psychological services.

Additionally, when participants' friends needed psychological services, Chinese international students in community colleges were significantly more open to referring their friends to professional psychological services off-campus than the free school counseling services at their respective colleges. Specifically, when participants knew fellow Chinese international students who had received free school counseling services, they had more open attitudes toward school counseling services. In addition, participants who incorporated religious and spiritual connectedness as means of social support had more positive attitudes toward psychological help-seeking. Lastly, participants who had family visit them as well as participants who adhered less to Asian values and beliefs were more likely to have open and willing attitudes toward professional psychological services.

### Chapter 4

#### Discussion

The purpose of this study was to assess psychological help-seeking attitudes of Chinese international students who study in the community colleges in the Pacific Northwest region, and to explore their coping strategies during their acculturation process. Chinese international students from eight community colleges participated in the 140-question survey through Google Doc between June and October 2015. In addition, two focus groups were held at two of the eight community colleges, and four administrators from three of the eight community colleges participated in the semi-structure interviews. The overall research findings suggest that Chinese international students in general were reluctant to seek professional psychological help when they experienced psychological problems. However, there were several exceptions.

Specifically, Chinese international students who self-identified to use religion and spiritual connection measured by RCOPE as a part of their support system had more open attitudes toward psychological help-seeking. This finding was supported by other data sources. Through direct and indirect church-related activities and cultivated interpersonal relationships, participants reported religious coping as the source of guidance and nurturing during their acculturation process. More specifically, having a group of caring, surrogate, native English-speaking grandparents through various ministry organizations and a close affiliation with church and Christianity-related activities were identified as the most significant social support amongst participants who self-identified as a Christian. Furthermore, Chinese international students who incorporated positive religious coping mechanisms (e.g. "tried to see how God might be trying to strengthen

me in this situation;" "focused on religion to stop worrying about my problems;" see Appendix I), measured by Positive Religious Coping, showed significantly more open attitudes toward psychological help-seeking, and the first hypothesis was not upheld.

Secondly, this study found that the more Chinese international students identified with American culture as measured by the Asian Value Scale, the more likely they were to have open attitudes toward psychological help-seeking. This result was also supported by other data sources where participants reported that feeling accustomed to Western cultures, being open-minded to learn Western values, and being able to connect with non-Asian individuals facilitated and supported participants' transition to new cultures. Conversely, the more the Chinese international students adhered to traditional cultural beliefs and values as measured by the Asian Value Scale, the less likely they were to be open to psychological help-seeking, and the second hypothesis was upheld.

Thirdly, Chinese international students' overall support system through technology usage had mixed results. On one hand, this study found that technology usage was not a significant factor in influencing Chinese international students' attitudes toward psychological help-seeking, and the third hypothesis was not upheld. This study specifically explored multiple technology usage activities, including: participants' time spent on phone, frequency of communicating with the family, frequency of returning home, and participants' car usage for visiting points of interest, friends, church, and other leisure locations such as restaurants or movie theaters. The results of the current study through survey questionnaires found that the technology usage variables did not indicate any significance associated with participants' psychological help-seeking attitudes. However, on the other hand, other data sources indicated some valuable support

mechanisms included: access to a car to become acquainted with the area and the ability to connect with fellow Chinese international students through social media such as WeChat, Facebook, or Skype, etc. Furthermore, the frequency of participants' family visit was a significant factor in positively predicting students' help-seeking attitudes. Explicitly, this study found that the frequency of the participants' family visit had a positive main effect on the participants' psychological help-seeking despite all other technology usage variables that in contrast had no significant effect on the participants' psychological help-seeking attitudes.

**Acculturation.** As aforementioned, acculturation is the dual process of cultural and psychological changes that takes place as a result of contact between two or more cultural groups and their individual members. Being able to live successfully in a different culture is the ultimate acculturation (Berry, 2001).

Traditional cultural beliefs. According to the results of this study, the level of acculturation as evidenced by adherence to Asian values is a predictor in Chinese international students' attitudes toward seeking psychological help, which is aligned with previous research. Specifically, the second hypothesis was upheld, which predicted that lessened Asian cultural values would support positive attitudes toward seeking psychological help. This finding is in agreement with research done by Akinson et al. (1989), Kim & Omizo (2003), Tata & Leong (1994), who found that adherence to Asian cultural values inversely correlated with positive attitudes toward seeking professional psychological help. Baello and Mori (2007) also found that acculturation had a direct and positive relationship with Asian students' attitudes toward help-seeking. In addition, the more participants were in adherence with their Asian cultural values, the less likely they

were to have open attitudes toward seeking professional psychological help. Indisputably, the more acculturated Chinese international students successfully adjusted to the new culture, the more likely they would adapt to the host country's cultural beliefs. As a result, stigmatizations inherent to traditional Chinese cultural beliefs would be lessened whereas open attitudes to psychological services would increase.

Social support system and coping strategies. As aforementioned, social support in general is known to buffer and moderate the effects of acculturative stress (Lee, Koeske, & Sales, 2004). Religious coping and technology usage are found to be a significant part of the social support system and coping strategies in this current study.

Religious coping. According to the results of this study, religious coping was a substantial part of the social support utilized by Chinese international students during their acculturation. The first hypothesis was not upheld, which predicted that social support through religion was to have an inverse relationship in Chinese international students' attitudes toward seeking professional psychological help. Pargament et al. (2001) suggested that individuals who experienced major life stressors could shape a secure relationship with a transcendent force, form a sense of spiritual connectedness with others, and hold a benevolent worldview when incorporating religious coping. Due to the possibility of their shared acculturative as well as spiritual transcendent experiences, Chinese international students may have had greater spiritual connectedness with each other and use these experiences as a part of their social support system. At the same time, the spiritual connection of the community experience and shared emotional connection becomes the primary purpose of religious community (McMillan & Chavis, 1986). In addition, Ano and Vasconcelles (2005) also found that individuals frequently

turned to religion when coping with stressful events, which led to positive psychological adjustment to stress. Therefore, Chinese international students unsurprisingly turned to religious and spiritual connectedness when they faced their acculturative stress because religious coping could have eased life stressors, consistent with previous research. This study found that participants who experienced religious coping were positively associated with their psychological help-seeking attitudes as they opened their hearts and minds to a higher spiritual being and others. By being able to yield to the higher power, and feeling validated through shared spiritual experiences, participants may trust and follow, thus have open attitudes to psychological help-seeking as a result. Despite the first hypothesis predicting that Christian participants would not seek psychological help, this study's results aligned with those of Pargament et al. (2001) and Ano et al. (2005) and found that Chinese international students who readily incorporated religious coping were more open to psychological help-seeking.

Technology connectedness. The third hypothesis predicted that social support through the use of technology was positively correlated to Chinese international students' attitudes toward seeking professional psychological help. There were mixed findings according to the results of this study. On one hand, through questionnaires, this study found that technology connectedness through phone, car, and frequency of returning home were not correlated to participants' help-seeking attitudes. Specifically, there was no correlation between professional psychological help-seeking attitudes and participants' time spent on the phone, frequency of communicating with their family, frequency of returning home, participants' car usage for visiting points of interest, friends, church, and other leisure locations such as restaurants or the movie theater. The

results of these findings may be potentially due to the participants' age. Specifically, the participants' mean age for this study was 21 years old, with 59% (n=23) of the participants between the age of 18 and 20. This age group is considered to be "digital natives" (Prensky, 2001) for their technology usage and is a generation of technology savvy young people who have immersed in an array of established and emerging technologies (Bennet & Malton, 2010). The finding that technology usage was not significantly associated with help-seeking attitudes may be potentially due to the fact that participants were so accustomed to technology as digital natives, thus it did not yield any significant differences when incorporating technology usage to be a part of their helpseeking attitudes. On the other hand, despite these findings, other data source reported that the opportunities to connect with friends and family through the phone and other social media such as WeChat, Facebook, Skype, etc. became a significant social support during the acculturation process. With a closer look, this study agreed that Chinese international students unsurprisingly turned towards technology for social support as a part of their coping strategies, which was aligned with previous research. Specifically, WeChat was identified by 95% of the participants to be the primary means of contact with friends and family. Through social network sites to connect with friends and family, it is not surprising that Chinese international students' social support through technology usage was recognized as one part of coping strategies that influenced their attitudes toward psychological help-seeking. Specifically, Ye (2006) found that Chinese international students reported more satisfaction with their interpersonal support systems when connecting with their friends through technology usage. In addition, Fieseler, Meckel and Muller (2014) found that unemployed individuals found more support

through their online contacts with one another. It is possible that Chinese international students who experienced acculturative stress found their support through their online contacts, which is aligned with previous research. At the same time, Chinese international students who perceived receiving higher amounts of online informational support had experienced a lower level of acculturative stress (Ye, 2006). This study also found that participants were more satisfied with their interpersonal support and their lives in the U.S. when they frequently posted informational support (e.g. buying-selling books, furniture, household items, or needing a roommate, etc.), and other informational inquiry through social network sites, which is aligned with previous research. The prospect of meeting the basic necessities of daily living as international students through social network sites was likely an enormous relief that ultimately led to their adjustment in the U.S. for many Chinese international students. Ye (2006) further found that students who reported receiving higher amounts of online emotional support also experienced lower levels of acculturative stress, which is aligned with a part of the third hypothesis. Additionally, Ellison, Steinfield, and Lampe (2007) also found that the use of social media sites such as Facebook among undergraduate students was found to provide greater benefits for users who experienced low self-esteem and low satisfaction with life. These findings may be due to the possibility that by posting their day-to-day events, emotions, or experiences through social network sites, Chinese international students felt emotionally connected and supported with greater audiences (Fieseler et al., 2014). These students gained a sense of commonality and did not perceive their experiences being unique or felt alone in their challenges; thus, they were empowered to voice their needs through shared experiences that led to open and positive attitudes towards help-seeking.

Concurrently, Ellison and colleagues (2007) found that technology usage online and offline also led to increased social capital and therefore promoted psychological well-being, leading to better life satisfaction, which is also aligned with one part of the third hypothesis in this current study.

Other subscales. This study found that there were several other subscales of ASSIS that significantly corresponded to religious coping, but these results were not intended to support or negate specific hypotheses of the present study. Specifically, this study found that Chinese international students' perceived Discrimination, Hate, Guilt, and Fear were positively correlated to religious coping. Incorporating religious and spiritual connectedness as a likely part of their coping strategies while experiencing acculturative stress may be due to the possibility that participants did not want to burden their friends or family. In addition, participants may be unable or afraid to admit their acculturative stress and challenges, especially when they felt guilty or fear that their family had "sacrificed for me", "they won't understand," or "I don't want them to worry when they cannot do anything" ("Jenny," "AJ," "Bob," personal communication, July 6, 2015). Furthermore, as part of their culture, perhaps Chinese international students were not accustomed to verbally articulating their feelings and stresses. Similar to "known for not contributing to discussion" ("Beth," personal communication, June 30, 2015), these students tended to internalize their challenges and stresses, thus turned to religion and spiritual connection instead. Another possibility may be due to participants' feelings of isolation in the acculturative experience and embarrassment with sharing their perceived Hate, Fear, Guilt, and Discrimination with others. Pargament et al. (2001) and Ano et al. (2005) found that individuals opted to religion when facing life stressors not under their

control. Pargament et al. (2001) also found that spiritual connectedness yielded better coping skills and contributed to psychological well-being. Indisputably, Chinese international students who were newly introduced to the various religious activities may use religious and spiritual connectedness as part of their coping strategies because of the uniformity and conformity of the religious community (McMillan et al., 1986). Corrigan, McCorkle, Schell and Kidder (2004) found that members of the general population who define themselves as religious or spiritual have less psychological distress, more life satisfaction, and greater achievements of life goals, which is aligned with the current study. For Chinese international students, admitting their personal challenges to a higher power was likely easier than admitting to family and friends. Thus, connecting with a transcendent force and a sense of spiritual and emotional connectedness with one another has developed into religious coping strategies that supported Chinese international students' psychological help-seeking attitudes.

**Psychological help-seeking attitudes.** This study found that there were many demographic scales that corresponded to positive attitudes toward psychological help-seeking, but these results were not intended to support or negate specific hypotheses of the present study.

Gender. This study found that female students tended to have more positive attitudes toward psychological help-seeking, which is aligned with extensive previous research (Fischer & Turner, 1970; Atkinson & Gim, 1989; Fischer & Farina 1995; Mallinckrodt & Leong, 1992; Tata & Leong, 1994; Wong, 1998; Leong & Zachar, 1999; Sheu & Sedlacek, 2004; Gonzalez et al., 2005; Baello & Mori, 2007). Fischer and Farina (1995) found that female participants have more positive attitudes than male participants

due to male participants' societal expected gender roles. In addition, Addis and Mahalik (2003) also found that women consistently sought psychiatric help at a higher rate than men because women were more likely than men to recognize and label nonspecific feelings of stress as emotional problems. The results of the current study may be due to the possibility that female participants in general are known to be more articulate or expressive in words (Addis et al., 2003; Rickwood, Deane, & Wilson, 2005) and more willing to share their problems with others, which leads to more open and positive attitudes toward psychological help-seeking.

Previously sought professional psychological help. This study found that prior counseling history was a significant predictor of attitudes toward professional psychological help-seeking, which is also aligned with previous research (Fischer & Turner, 1970; Fischer & Farina 1995; Dadfar & Friedlander, 1982; Gonzalez, Algeria, & Prihoda, 2005; Kilinc & Granello, 2011). This may be due to the possibility that participants who received prior professional psychological help could have had positive experiences, hence more positive attitudes toward future psychological services. Despite prior positive experiences, there is another possibility for participants' willingness to seek professional psychological services: because these participants already understand and recognize the benefits of seeking psychological help when needed, thus endorse positive and open attitudes toward future professional psychological services.

Previously taken psychology-related class. This study found that participants who had previously taken at least one psychology-related class also showed more favorable attitudes toward psychological help-seeking, which is in agreement with previous studies. Other research conducted by Fischer & Cohen (1972) and Fischer & Farina (1995) found

that students who majored in social sciences were significantly differentiated in having more positive attitudes toward seeking professional help than students who majored in natural sciences. This result may be due to the possibility that through psychological related education, participants no longer stigmatized receiving professional psychological services and were able to understand and normalize it. With more psychology-related knowledge, participants could have been more objective in making well-informed decisions and been less influenced or limited by previous negative factors.

Participants' knowledge of others who experienced psychological challenges.

This study found that participants who knew or heard about fellow Chinese international students who experienced psychological challenges had more open attitudes towards professional psychological services, which is aligned with previous research.

Concurrently, this study also found that Chinese international students had positive attitudes toward referring their friends for off-campus professional psychological services. Specifically, Addis et al. (2003) found that individuals who had never known someone struggling with psychological problems were less likely to have open attitudes toward help-seeking and less likely to refer others to get needed help. Conversely, individuals who had known someone struggling with psychological problems were more likely to have open attitudes toward help-seeking and were more likely to refer others to receive professional psychological services.

In the same manner, an individual was less likely to get needed help when others in the community endorsed norms of self-reliance (Addis et al., 2003). The possibility that individuals would not have open attitudes may be due to the costs and risks of seeking help for this individual, such as losing face in a collectivist culture or community.

This finding is aligned with previous research and illustrates that as a collectivist culture. group norms tend to be more influential than individual preferences (Tata et al., 1994; Tung, 2010). Therefore, the result of positive psychological help-seeking attitudes from having known fellow Chinese international students who suffered psychological challenges could be explained by that participants have seen the negative consequences of not getting the needed psychological help. At the same time, participants have seen the positive outcomes of professional psychological services for those who received the needed help. This positive reinforcement thereby generates the open attitudes in referring others to receive needed psychological help off-campus. As a result, the positive outcomes naturally facilitated even more positive psychological help-seeking attitudes as well as future referrals. In addition, Chinese international students who saw how other students prioritized their psychological well-being over "saving face" followed this group norm, thereby having open attitudes toward psychological help-seeking (Tung, 2010), and even more positive attitudes in referring their friends to seek off-campus professional counseling services.

For participants who had less positive attitudes toward the school counseling services, it may be simply due to the lack of awareness of the free psychological counseling services that existed on-campus. It may be potentially due to the possibility of holding inherently negative perceptions, such as stigma, lack of trust, ignorance of confidentiality and understanding of the need regarding counseling services in general. By witnessing or hearing about the negative consequences of Chinese international students' psychological challenges, this awareness could have potentially become a

motivator for participants to seek psychological help when needed or refer others who are in need of psychological services (Tung, 2010).

Lastly, as aforementioned, technology usage was found to serve as a part of informational and emotional social support. It is possible that through technology usage, students connected with each other through social network sites which facilitated a community with validation and better understanding and shared experience (McMillan et al., 1986). More specifically, Chinese international students were reinforced as a collectivist society (Tata et al., 1994; Tung, 2010) and connected each other through informational and emotional support, thus positively influenced with each other's help-seeking attitudes through technology usage (Ye, 2006).

Limitations and assumptions. The findings of the current study are limited in ways typical of survey research. First, sampling and participant recruitment were not randomly chosen but instead were volunteers from local community colleges in the Pacific Northwest region of the United States. Even though this study intentionally targeted local community college students, due to geographical limitations, this study may not be representative of Chinese international students who study in the community colleges in other regions of the country. As a result, it may not be prudent to generalize the results to other Chinese international students in other regions.

Secondly, despite the fact that this study was administered in the participants' native language, factors such as fatigue, boredom and repetition of the same response to the 140-questions survey cannot be ignored. It may have imposed limitations for participants to answer accurately and truthfully, thus potentially influencing the results of the study. In addition, because the survey was fairly long and not randomized, some

participants may have answered the questions arbitrarily without truly reading the questions. In order to enhance the generalizability of this study, future researchers may want to consider focusing on fewer areas of the acculturation process, targeting on less coping strategies, and randomizing the survey to avoid potential arbitrary answers and to increase survey accuracy.

Thirdly, with a closer look, the demographic questionnaire survey questions (number 13 and number 15) that were designed by this researcher specifically to investigate technology usage were too extensive and involved too many areas of technology. Survey question 13 asked participants who owned a car to rank from most frequent (1) to least frequent (5) on their car usage. Categories included driving to church, traveling, visiting friends, going to the movies/shopping, and eating out; the question also asked the participants not to reuse answers. This particular question confused many participants and their surveys were discounted as many of them repeated the answer (e.g. most frequent was used twice for eating out and visiting friends).

Similarly, survey question 15 asked participants to rank their phone usage from the most frequent (1) to least frequent (5) on categories including WeChat, phone calls, social media sites, music/movie, and internet browsing. Again, it asked participants not to reuse the same answer. Likewise, many participants randomly reused the same answer on more than one category.

Even though the purpose of the questionnaire design was to encompass various technology usage questions for the digital native generation, the definitions for technology usage were too broad and incorporated too many areas of technology usage for this study. This limitation may also explain the fact that the relationship between

certain types of technology usage and acculturation were not significant. Future research should simplify the technology usage questions and clarify the definition for more linear results. In addition, because there were many non-response and incomplete response patterns, several colleges had only two to three participants which was again not representative enough to generate school-specific data.

Fourthly, the period in which the data were collected for this study may not be the most appropriate representation for measuring Chinese international students' acculturative stress, coping strategies and their help-seeking attitudes. The data collection for the current study began in June, 2015 when the school year had ended and many students had returned home. For students who had just ended a school year and were in between spring and summer quarters, the acculturative stress, coping strategies, and helpseeking attitudes may appear very differently compared to students who were still in school. Furthermore, even though data collection continued throughout August, September and October, many students had just returned from vacation or visiting family and friends in China; likewise, these participants' acculturative stress, coping strategies, and help-seeking attitudes may not be the most representative point compared to students who had been in school for more extended and continuous periods. Consideration for scheduling the data collection is an essential part of understanding international students' acculturative stress, their coping strategies and help-seeking attitudes. Future data collection may want to target between late October and early December, late January to early March, or early April to late May. Future research may consider repeating data collection at different semesters in order to capture different stages of acculturation, coping, and help-seeking attitudes and compare and contrast the differences. In addition,

future researchers may want to collaborate with IRB to ensure the appropriate scheduling for data collection.

Lastly, school administrators had sent the survey link for this study to Chinese international students through respective colleges' listsery. However, the survey link was not accessible to many students that returned to China for summer break. The Chinese government's censorship and regulation over the survey product that was used for this study indirectly limited the sample size intended for this study. The study's findings are difficult to generalize and apply to a broader range of Chinese international students' help-seeking attitudes when the sample size consisted of 39 participants. A more universal and appropriate survey product cannot be ignored when understanding governmental regulations for future research.

**Future directions.** The findings of the present study have a number of implications for future research, community college's counseling services, and Christian organizations targeting Chinese international students.

For future research. First, a larger study that includes more participants should be replicated with ideal data collection periods and Chinese international students who are in regions outside the Pacific Northwest to improve the generalizability of the study. Adjusting to college life in the United States and leaving behind the family, friends, and customs they grew up with could be hard for any international students. A larger sample size has the potential to improve the structural validity and reliability of the measures (Tieu & Konnert, 2014) and potentially provide further evidence that can better represent Chinese international students who study in the community colleges regarding their acculturative stress, coping strategies, and psychological help-seeking attitudes. In

addition, given that many of the international students' first encounters with American cultures are their host families, it may be valuable to collect data through survey or interviews with these host families to understand their experiences of hosting Chinese international students, and their perceptions of students' acculturative challenges, coping strategies, and help-seeking attitudes. By obtaining host family's perceptions and observations, we may be able to have a better and broader understanding of students' and host family's difficulties and provide better guidance and support for families hosting Chinese international students.

For community colleges. Based on the findings of this study, these recommendations were generated for higher education institutions in the United States, especially for community colleges, on how to assist Chinese international students in becoming successful academically, physically and psychologically. First, given that language barriers continue to inhibit Chinese international students' success in their academic success as well as acculturation process, colleges could consider matching newly arrived Chinese international students with American student ambassadors to facilitate their initial adjustment to the United States and to lessen their acculturative stress (Bordes & Arredondo, 2005; Wei et al., 2007; Tung, 2010), at the same time providing opportunities to connect with American students and practice English to strengthen their language ability (Tata et al., 1994; Tung, 2010).

Second, in addition to the general orientation for new students, international students who "paid three times more in tuition than regular students, and six times more in some cases" ("AJ", personal communication, July 9, 2015) should be offered additional opportunities for special orientation geared towards understanding American

culture (Zhai, 2002) as well as Western academic culture ("Beth", personal communication, June 30, 2015). Pedersen (1991) suggested that orientation is a continuous process requiring contact with students before they arrive and especially during their stay. This special orientation should be incorporated as required credit, and it can be held in the form of a monthly workshop that includes topics such as academic honesty, American culture, social expectations and mental health components that contain recognizing acculturative stress and providing needed resources. These workshops can introduce students who would have been unaware of the free on-campus counseling services. In addition, these workshops can provide opportunity to understand the acculturation process, identify and normalize the psychological stressors, lessen the stigma regarding psychological services, and ultimately enhance psychological help-seeking attitudes. By incorporating and making known of the free on-campus counseling services for Chinese international students, it would benefit and support students' enculturation and overall success (Pederson, 1991; Zhai, 2002; Nilsson et al., 2008).

Furthermore, in addition to English proficiency placement tests, community colleges could consider implementing simple psycho-social-behavioral screening tools to explore and to establish a baseline psychological profile for new international students. Examples of the tools could include depression screening, anxiety screening, and other screening tools related to health habits, drug/alcohol use, sensation seeking, and violent behaviors that include unwanted sexual encounters, at the beginning of each semester (Mackenzie et al., 2011). In addition, international students should be required to have weekly one-on-one psychotherapy with on-campus college mental health counselors during their first semester and at least a monthly check-in at the subsequent semester for

the first year. Community colleges should not wait until international students are in a personal or academic crisis to intervene. By doing so, statements such as "we collected so much money yet failed these kids" would not happen ("Beth", personal communication, June 30, 2015). Considering 90% of the Chinese international students studying in the Puget Sound area are participating in the 2+2 model, 2 years community college plus 2 years at a university = 4 years bachelor's degree, and many Chinese international students arrive at the age of 16 ("Rob", personal communication, June 27, 2015), this mandate counseling service is a proactive way to support Chinese international students' acculturation and psychological well-being (Leong & Sedlacek, 1989; Komiya & Eells, 2001; Pedersen, 1991; Tung, 2010). Since only 54% of the participants knew about free mental health counseling services at their colleges and only 15% of these participants were willing to seek free school counseling services in the current study, this mandate service can facilitate Chinese international students' negative perception about mental health counseling in general as well as support their overall well-being while they study in the community colleges and beyond (Olivas & Li, 2006).

Lastly, academic advisors, school mental health counselors, and faculty who work with international students should understand these students' unique needs and potential acculturative and psychological issues and have ongoing educations to better support these international students (Sue & Sue, 2003; Zhang & Dixon, 2003; Olivas & Li, 2006). In addition, school mental health counselors can serve as the cultural bridge to help Chinese international students understand their perceived discrimination and potential factors related to their own discrimination (Tung, 2010). These on-campus mental health counselors need to be culturally competent, and can explore additional culturally

appropriate coping strategies to support students and help them manage acculturative stress from leading to more serious physical and mental health disturbances (Olivas & Li, 2006; Tung, 2010).

For Christian organizations. Based on the findings of this study, recommendations for Christian organizations and churches were generated on how to assist Chinese international students in coping with their acculturative issues and enhancing their attitudes in seeking psychological services when needed. Christian organizations and churches have reached out to international students and contributed greatly to the evangelization of Chinese international students (Yang, 2005). Many of these Christian organizations have served as multifaceted ministry that organizes activities, trainings, bible study, and fellowship groups surrounding Chinese international students. Because Chinese international students studying in the community colleges are known for their short-term stay ("Rob", personal communication, June 27, 2015), churches and Christian organizations should work together and have a more strategic plan to maximize the time they have with the Chinese international students.

First, similarly to the match that was aforementioned, churches and Christian organizations should have a mentorship program for Chinese international students who are newly arrived. These newly arrived students, mentees, are under the loving care of older Christians, mentors, with the focus on "love your neighbors" and building relationships (D. Zhang, Personal communication, December 12, 2015). Through common language, similar cultural background and weekly check-in at the mentee's campus, trusting relationships can be built, thus ultimately leading mentees to churches where more physical, psychological, academic, social, and spiritual connection could take

place (D. Zhang, Personal communication, December 12, 2015). By having a mentorship program for Chinese international in students, these students can have a path to follow and later can become mentors to other newly arrived students hence lessening the gap between campus and churches.

Secondly, prior to these students joining church services regularly, a curriculum specifically designed for these students should be considered. Churches, especially ethnic churches, should have a Sunday service and student fellowship program explicitly geared towards newly arrived Chinese international students' acculturative need and not combining them with the general church services. Familial cultural foods, Chinese holidays and cultural celebration frequently are the highlight attracting Chinese international students. However, this study also found that religious and spiritual connectedness is ultimately where Chinese international students turn to when facing acculturative issues such as perceived discrimination, guilt, fear, and hatred. Yang (2005) posited that even though Churches and Christian organizations have served as "rice bowl" social services, recent Chinese society has undergone dramatic modernization process where food and activities may not need to be the center of focus. Specifically, Yang (2005) found that Chinese international students who come to Christian organizations are not seeking material advantages, instead, they are looking for connectedness with fellow Chinese and spiritual connectedness with God, which is aligned with the current study. Students can observe and learn how other members of the church showed love and care for one another and eventually participate in the general church services and fellowships (Yang, 2005). By setting life-impact-life example through mentorship, instead of precept, and incorporating relevant biblical stories that

students can relate to, students can have the opportunities to learn about their new host cultures and beliefs thereby open their minds to professional psychological services.

Through these trusting relationships that have been established, students are even more comfortable in conveying their academic, psychological, physical, spiritual and other needs.

**Summary.** In summary, the purpose of this study is to explore, observe, and understand perspectives and experiences, as well as describe Chinese international students' psychological help-seeking attitudes during their acculturation process in their respective community colleges. The results of this exploratory within-subject study supported the positive psychological help-seeking attitudes for a few specific groups of Chinese international students who studied in the community colleges. In addition, the results also indicated the coping strategies Chinese international students readily incorporated when facing acculturative stress. First, Chinese international students studying in the community colleges endorsed that being able to have their family visit them in the United States during their study positively influenced their psychological help-seeking attitudes. In addition, through religion and spiritual connectedness, Chinese international students reported having significant positive attitudes toward psychological help-seeking, especially when facing perceived discrimination, hatred, guilt, and fear. More specifically, Chinese international students also turned to their family and friends for social support when facing perceived hatred, in addition to religious coping.

Secondly, similar to previous research, female students in the current study seemed to have more open attitudes toward seeking professional psychological services. Thirdly, Chinese international students who had taken at least one psychological related

class, who had received psychological counseling in the past, and students who had known fellow Chinese students who have experienced psychological issues such as depression, anxiety, or other acculturative related stress had more positive attitudes toward psychological help-seeking. More specifically, Chinese international students in this study have showed very positive attitudes in referring their friends to professional counseling services when needed. Future research is warranted to explore specific reasons for Chinese international students to seek off-campus professional psychological services instead of free on-campus psychological services. Lastly, the present study has showed that Chinese students who are less adherent to Asian values and more adherent to the host culture tended to have similar cultural beliefs toward its host culture thereby having more open attitudes toward seeking psychological service in the United States.

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Table A

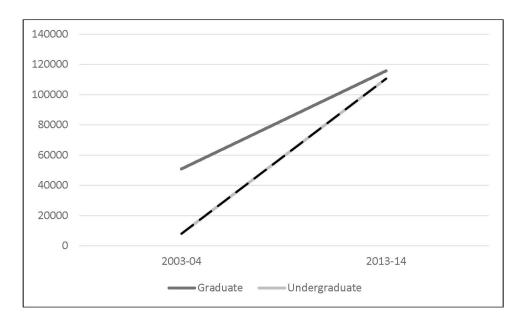
#### **Top Country of Origin of International Students**

Rank	Place of Origin	2013-14	% of Total
	WORLD TOTAL	886,052	100
1	China	274,439	31
2	India	102,673	12
3	South Korea	68,074	8
4	Saudi Arabia	53,919	6
5	Canada	28,304	3
6	Taiwan	21,266	2
7	Japan	19,334	2

Data from Institute of International Education. (2014). Top 25 Places of Origin of International Students, 2013/14. *Open Doors Report on International Educational Exchange*. Retrieved from http://www.iie.org/opendoors

Table B

Comparison of academic level of Chinese undergraduate and graduate international students from 2003-2004 to 2013-2014



Data from Institute of International Education. (2014). International Students by Academic Level, 2003/04 - 2013/14. *Open Doors Report on International Educational Exchange*. Retrieved from http://www.iie.org/opendoors

Table C

#### **Educational Level**

	Freshman	Sophomore	ESL	Other
Percentage	33%	41%	17%	9%

Table D

# Daily Language

Daily Language	Chinese	English	English & Chinese
Percentage	69%	10%	21%

Table E

# **Self-Identified Religion**

Religion	Christian	Buddhist	Atheist
Percentage	49%	10%	41%

Table F

### Frequency of Trip Home and Frequency of Family Visits

	Never	Once	Twice	3 Times	>3 Times
Trips Home	23%	33%	31%	8%	5%
Fam Visits	49%	31%	8%	10%	2%

Table G

### **Daily Average Time Spend on Phone**

Phone Time	< 1 Hour	$\geq 1 \text{ to } \leq 3$	$\geq$ 3 to $\leq$ 5	≥ 5 Hours
Percentage	8%	38%	38%	16%

Table H

# Frequency Communicating with Family

Comm with Fam	Multi/Day	Daily	2-3/Week	Weekly	2-3/Month
Percentage	5%	21%	31%	28%	15%

Table I

### **Demographic Categorical Variables**

Categorical Variables	Yes	No
Taken Psych Class	51%	49%
Received Counseling	8%	92%
Aware Other's Addiction	62%	38%
Aware Other's Psych Issues	67%	33%
Aware School Counseling	54%	46%
Seeking School Counseling	15%	85%
Refer to School Counseling	64%	36%
Refer to Prof Counseling	56%	44%

# Appendix A

#### **Consent Form/Cover Letter for survey**

Dear Chinese international students:

You are invited to participate in a research study conducted by psychology student Daphne Tu in the PsyD program at Northwest University. The purpose of this study is to explore help-seeking attitudes among Chinese international students studying in the community colleges.

If you agree to participate in the study you will be asked to fill out 140-questionnaire survey regarding your attitudes toward seeking mental health services. The duration of your participation should be approximately 25-30 minutes.

There are minimal risks associated with participation. Some individuals may be uncomfortable answering personal questions. You may choose not to participate in this research study. The benefit of taking part in this study is the opportunity to participate in the research process as a research subject. By answering these questions, you may reenact the stress you have experienced which may create more stress. Your participation will help this researcher to better understand the help-seeking attitudes and provide better understanding of the acculturative stress that you may experience.

Participation in this study is voluntary. You may choose not to participate in this study at any time and for any reason. There will not be any negative consequences for you if you refuse to participate. You may refuse to answer any questions asked. All responses are anonymous; therefore it is important that you DO NOT put your name on your response sheet. You may keep this consent form for your records. By turning in surveys and questionnaires, you are giving permission to use your responses in this research study.

The results from this study will be presented to this researcher and Northwest University. All data forms will be destroyed after May 31, 2016. You will be participating in a drawing of \$100 Amazon gift card if you complete this survey.

If you have any questions about this study, contact Daphne Tu at 206-669-8666 or <a href="mailto:daphne.tu11@northwestu.edu">daphne.tu11@northwestu.edu</a>. If further questions, please contact my faculty advisor Dr. Kristin Mauldin Kristin. Mauldin@northweestu.edu. You may also contact the Chair of the Northwest University IRB, Northwest University IRB, Professor Suzanne Barsness, at 425-889-5763 or <a href="mailto:suzanne.barsness@northwestu.edu">suzanne.barsness@northwestu.edu</a>. Thank you for your consideration of this request.

Daphne Tu, daphne.tu11@northwestu.edu

Kristin Mauldin, Ph.D., Northwest University

Appendix B

#### **Consent Form for Interview**

Help-Seeking Attitudes in Chinese International Students in Community Colleges:

An Exploratory Study on the Impact of Acculturative Stress and Coping Strategies

Dear Chinese international students/and school administrators:

You are invited to participate in a research study conducted by psychology student Daphne Tu in the PsyD program at Northwest University. The purpose of this study is to explore help-seeking attitudes among Chinese international students studying in the community colleges. Participation in this interview is voluntary. This may take 10 – 15 minutes of your time.

For Chinese international students: You may have completed other questionnaires and volunteer to have this interview. If you agree to be interviewed as a follow-up study, you will be asked to answer one additional question: what has been your biggest obstacle in help-seeking in regards to your acculturative adjustment.

For school administrators: You may volunteer to be interviewed. If you agree to be interviewed, the question is what existing services and programs are in place at your school for international students' transition and adjustment to your college.

There are minimal risks associated with participation. Some individuals may be uncomfortable answering personal questions whereas others may reenact the stress he/she has experienced which may create more stress.

The information you share will be confidential. If you have any questions about this study, contact Daphne Tu at 206-669-8666 or <a href="mailto:daphne.tu11@northwestu.edu">daphne.tu11@northwestu.edu</a>. If further questions, please contact my faculty advisor Dr. Kristin Mauldin Kristin.Mauldin@northweestu.edu. You may also contact the Chair of the Northwest University IRB, Northwest University IRB, Professor Suzanne Barsness, at 425-889-5763 or <a href="mailto:suzanne.barsness@northwestu.edu">suzanne.barsness@northwestu.edu</a>. Thank you for your consideration of this request.

Daphne Tu, daphne.tu11@northwestu.edu

Kristin Mauldin, Ph.D., Northwest University

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Appendix C

#### **Demographic Questionnaire**

- Currently attending: Bellevue College, Seattle Central, Edmonds, North Seattle
   Green River Shoreline, Highline, Other
- 2. Length of time in U.S.?
- 3. Current age:
- 4. Age at arriving U.S.
- 5. Have you studied in community colleges? Yes or No
- 6. If yes, please continue, if no, please stop
- 7. On a daily basis, you speak Mostly English? Or Mostly Chinese, Or other
- 8. Sex: Male or Female
- 9. Your current academic level: freshman, sophomore, junior, senior, ESL other
- 10. Religion (circle one): Christian; Catholicism, Taoism; Muslim; Jewish; Traditional cultural beliefs; Atheist/
- 11. Nationality (circle one): China; Taiwan; Hong Kong; Malaysia; Singapore; Other
- 12. Car: yes/no; if you don't have a car, please skip this question and next question and go to question 13
- 13. Other than school and grocery store, please rate 1 (most frequent) to 5 (least frequent) where you use your car at:
  - Church/religious related activity (); outing/travel (); spending time with friends/visit friends (); entertainment/shopping/movie (); Restaurant ()

- 14. Cell phone yes/no
- 15. On an average, please rate 1(most frequent) to 5 (least frequent) on how you use your cell phone WeChat (); Call (); Blog/Social media (); Entertainment/music/movie (); browsing online ()
- 16. On average, how much time do you spend on your cell phone a day (circle one):< one hour; between one and three hours; between three and five hours; between six and eight hours; over eight hours</li>
- 17. On average, how often do you talk, Face Time or Skype with your family (circle one): Daily; Two-three times a week; Weekly; Two times a month; Monthly;
- 18. How many times have you returned home since your arrival (circle one):

  One time; two times; three times; four times; five times; more than five times
- 19. How many times have your family visited you in the U.S. since you entered U.S. college (circle one): Once; twice; three times; four times; five times; > five times
- 20. Have you even taken psychological related class? Yes/no
- 21. Have you ever received psychological counseling? yes/no
- 22. Do you know your school has a Wellness Center/Counseling Center that has licensed counselors seeing students who need emotional support for free? yes/no
- 23. Do you know any of your friends or heard someone visited the school Wellness Center/counselor to get psychological/emotional/relational help? Yes/no
- 24. Would you use you school's Wellness Center/Counseling Center to get psychological, emotional, or relationship help? yes/no
- 25. Do you know any of your friends or heard someone who may experience drug/alcohol issues, addiction, or pornography, game addiction issues? Yes/no

- 26. Do you know any of your friends or heard from your friends who may have experienced chronic insomnia, feeling depressed, feeling struggled, feeling down or having other emotional, psychological, or interpersonal relationship issues? yes/no
- 27. Would you recommend friend to see on-campus counselors at school? yes/no
- 28. Would you recommend friend to see licensed psychotherapist outside school? yes/no

Appendix D

## Attitudes Toward Seeking Professional Psychological Help Scale-Short Form

Instruction: Below are a number of statements pertaining to psychology and mental health issues. Read each statement carefully and indicate your agreement, partly agreement, partly disagreement, or disagreement. Please express your frank opinion in rating the statements. There are no "wrong" answers, and the only right ones are whatever you honestly feel or believe. It is important that you answer every item.

ATSPPHS-SF	Disagree	Partly	Partly	Agree
		Disagree	Agree	
1.If I believed I was having a mental breakdown, my first inclination would be to get professional attention	0	1	2	3
2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflict*	0	1	2	3
3.If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy	0	1	2	3
4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help*	0	1	2	3
5.I would want to get psychological help if I were worried or upset for a long period of time	0	1	2	3
6.I might want to have psychological counseling in the future.	0	1	2	3
7.A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help	0	1	2	3
8.Considering the time & expense involved in psychotherapy, it would have doubtful value for a person like me*	0	1	2	3

9.A person should work out his or her own problems;	0	1	2	3
getting psychological counseling would be a last				
resort*				
10.Personal and emotional troubles, like many	0	1	2	3
things, tend to work out by themselves*				

Appendix E

## **Acculturative stress scale for international students (ASSIS)**

Instruction: Below are a number of statements pertaining to your acculturative issues. Read each statement carefully and indicate your 1.strongly disagreement, 2.disagreement, 3.not sure, 4.agreement, or 5.strongly agreement. Please express your frank opinion in rating the statements. There are no "wrong" answers, and the only right ones are whatever you honestly feel or believe. It is important that you answer every item.

ASSIS	Strong  Disagree	Disagree	Not Sure	Agree	Strong Agree
			Suic		rigiee
1.Homesickness bothers me	1	2	3	4	5
2.I feel uncomfortable to adjust to new foods	1	2	3	4	5
3.I am treated differently in social situations	1	2	3	4	5
4.Others are sarcastic toward my cultural values	1	2	3	4	5
5.I feel nervous to communicate in English	1	2	3	4	5
6.I feel sad living in unfamiliar surroundings	1	2	3	4	5
7.I fear for my personal safety because of my different cultural background	1	2	3	4	5

8.I feel intimidated to participate in social activities where most of the people are not of my cultural background	1	2	3	4	5
9.Others are biased toward me	1	2	3	4	5
10.I feel guilty to leave my family and friends behind	1	2	3	4	5
11.Many opportunities are denied to me	1	2	3	4	5
12.I feel angry that my people are considered inferior here	1	2	3	4	5
13. Multiple pressures are placed upon me after migration	1	2	3	4	5
14.I feel that I receive unequal treatment	1	2	3	4	5
15.People show hatred toward me nonverbally	1	2	3	4	5
16.It hurts when people don't understand my cultural values	1	2	3	4	5
17.I am denied what I deserve	1	2	3	4	5
18.I frequently relocate for fear of others	1	2	3	4	5
19.I feel low because of my cultural background	1	2	3	4	5

20.Others don't appreciate my cultural values	1	2	3	4	5
21.I miss the people and country of my origin	1	2	3	4	5
22.I feel uncomfortable to adjust to new cultural values	1	2	3	4	5
23.I feel that my people are discriminated against	1	2	3	4	5
24.People show hatred toward me through action	1	2	3	4	5
25.I feel that my status in this society is low due to my cultural background	1	2	3	4	5
26.I am treated differently because of my race	1	2	3	4	5
27.I feel insecure here	1	2	3	4	5
28.I don't feel a sense of belonging (community) here	1	2	3	4	5
29.1 am treated different because of my color	1	2	3	4	5
30.1 feel sad to consider my people's problems	1	2	3	4	5
31.1 generally keep a low profile due to fear	1	2	3	4	5

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32.1 feel some people don't associate with me because of my ethnicity	1	2	3	4	5
33. People show hatred toward me verbally	1	2	3	4	5
34.I feel guilty that I am living a different lifestyle here	1	2	3	4	5
35.I feel sad leaving my relatives behind	1	2	3	4	5
36.I worry about my future for not being able to decide whether to stay here or to go back.	1	2	3	4	5

Appendix F

#### SUINN-LEW ASIAN-SELF-IDENTITY ACCULTURATION SCALE (SL-ASIA)

Instruction: The questions which follow are for the purpose of collecting information about your historical background as well as more recent behaviors which may be related to your cultural identity. Circle one answer that best describes you.

- 1. What language can you speak? (omit)
  - a. Asian only (for example, Mandarin, or other Chinese dialect etc.)
  - b. Mostly Asian, some English
  - c. Asian and English about equally well (bilingual)
  - d. Mostly English, some Asian
  - e. Only English
- 2. What language do you prefer? (omit)
  - a. Asian only (for example, Mandarin or other Chinese dialect, etc.)
  - b. Mostly Asian, some English
  - c. Asian and English about equally well (bilingual)
  - d. Mostly English, some Asian
  - e. Only English
- 3. How do you identify yourself? (omit)
  - a. Chinese
  - b. Asian
  - c. Asian-American
  - d. Chinese -American
  - e. American
- 4. Which identification does (did) your mother use? (omit)
  - a. Chinese
  - b. Asian
  - c. Asian-American
  - d. Chinese -American
  - e. American
- 5. Which identification does (did) your father use? (omit)
  - a. Chinese
  - b. Asian
  - c. Asian-American
  - d. Chinese -American
  - e. American
- 6. What was the ethnic origin of the friends and peers you had, as a child up to age 6? (omit)
  - a. Almost exclusively Asians, Asian Americans
  - b. Mostly Asians, Asian Americans
  - c. About equally Asian groups and Anglo groups
  - d. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
  - e. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
- 7. What was the ethnic origin of the friends and peers you had, as a child from 6 to 18? (omit)
  - a. Almost exclusively Asians, Asian Americans

- b. Mostly Asians, Asian Americans
- c. About equally Asian groups and Anglo groups
- d. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
- e. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
- 8. Whom do you now associate with in the community?
  - a. Almost exclusively Asians, Asian Americans
  - b. Mostly Asians, Asian Americans
  - c. About equally Asian groups and Anglo groups
  - d. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
  - e. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
- 9. If you could pick, whom would you prefer to associate with in the community?
  - a. Almost exclusively Asians, Asian Americans
  - b. Mostly Asians, Asian Americans
  - c. About equally Asian groups and Anglo groups
  - d. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
  - e. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
- 10. What is your music preference?
  - a. Only Asian music (for example, Hindi, Urdu, Bengali, Tamil, Malayalam, Sinhalese, etc.)
  - b. Mostly Asian
  - c. Equally Asian and English
  - d. Mostly English
  - e. English only
- 11. What is your movie preference?
  - a. Only Asian-language movies
  - b. Mostly Asian-language movies
  - c. Equally Asian/English English-language movies
  - d. Mostly English-language movies only
  - e. English-language movies only
- 12. What generation are you? (Check the generation that best applies to you) (omit)
  - a. 1st Generation = I was born in Asia or country outside the U.S.
  - b. 2nd Generation = I was born in U.S., either parent was born in Asia or country outside the U.S.
  - c. 3rd Generation = I was born in U.S., both parents were born in U.S, and all grandparents born in Asia or country outside the U.S.
  - d. 4th Generation = I was born in U.S., both parents were born in U.S, and at least one grandparent born in Asia or country outside the U.S. and one grandparent born in U.S.
  - e. 5th Generation = I was born in U.S., both parents were born in U.S., and all
  - f. grandparents also born in U.S.
  - g. Don't know what generation best fits since I lack some information.
- 13. Where were you raised? (omit)
  - a. In Asia only
  - b. Mostly in Asia, some in U.S.
  - c. Equally in Asia and U.S.

- d. Mostly in U.S., some in Asia
- e. In U.S. only
- 14. What contact have you had with Asia? (omit)
  - a. Raised one year or more in Asia
  - b. Lived for less than one year in Asia
  - c. Occasional visits to Asia
  - d. Occasional communications (letters, phone calls, etc.) with people in Asia
  - e. No exposure or communications with people in Asia
- 15. What is your food preference at home?
  - a. Exclusively Asian food
  - b. Mostly Asian food, some American
  - c. About equally Asian and American
  - d. Mostly American food
  - e. Exclusively American food
- 16. What is your food preference in restaurants?
  - a. Exclusively Asian food
  - b. Mostly Asian food, some American
  - c. About equally Asian and American
  - d. Mostly American food
  - e. Exclusively American food
- 17. Do you
  - a. Read only an Asian language- Chinese
  - b. Read an Asian language better than English
  - c. Read both Asian and English equally well
  - d. Read English better than an Asian language
  - e. Read only English
- 18. Do you
  - a. Write only an Asian language- Chinese
  - b. Write an Asian language better than English
  - c. Write both Asian and English equally well
  - d. Write English better than an Asian language
  - e. Write only English
- 19. If you consider yourself a member of the Asian group (Asian, Asian American, Indian American, etc., whatever term you prefer), how much pride do you have in this group?
  - a. Extremely proud
  - b. Moderately proud
  - c. Little proud
  - d. No pride but do not feel negative toward group
  - e. No pride but do feel negative toward group
- 20. How would you rate yourself?
  - a. Very Asian (Chinese)
  - b. Mostly Asian
  - c. Bicultural
  - d. Mostly Westernized

- e. Very Westernized
- 21. Do you participate in Asian occasions, holidays, traditions, etc.?
  - a. Nearly all
  - b. Most of them
  - c. Some of them
  - d. A few of them
  - e. None at all
- 22. Rate yourself on how much you believe in Asian (Chinese etc.) values (e.g., about marriage, families, education, work):

do not believe 1-----3-----5 strongly believe in Asian values

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

do not believe 1-----3-----5 strongly believe in American (Western) values

24. Rate yourself on how well you fit when with other Asians of the same ethnicity:

do not fit 1-----5 fit very well

25. Rate yourself on how well you fit when with other Americans who are non-Asian

(Westerners):

do not fit 1-----5 fit very well

- 26. There are many different ways in which people think of themselves. Which ONE of the following most closely describes how you view yourself?
  - a. I consider myself basically an Asian person (e.g., Chinese.). Even though I live and work in America, I still view myself basically as an Asian person.
  - I consider myself basically as an American. Even though I have an Asian background and characteristics, I still view myself basically as an American.
  - c. I consider myself as an Asian American, although deep down I always

know I am an Asian.

- d. I consider myself as an Asian American, although deep down, I view myself as an American first.
- e. I consider myself as an Asian American. I have both Asian and American characteristics, and I view myself as a blend of both.

Appendix G

#### ASIAN VALUES SCALE-REVISED

Instruction: Below are some descriptions of what one should do and should not do in Chinese culture, please indicate how you agree with each description. Read each statement carefully and indicate your 1.strongly disagree, 2. disagree, 3.agree, or 4.strongly agree. Please express your frank opinion in rating the statements. There are no "wrong" answers, and the only right ones are whatever you honestly feel or believe. It is important that you answer every item.

AVS-REVISED	Strongly	Disagree	Agree	Strongly
	Disagree			Agree
1.One should be able to question a person in an authority position.	1	2	3	4
2.One need not minimize or depreciate one's own achievements.	1	2	3	4
3. Younger persons should be able to confront their elders.	1	2	3	4
4.One need not remain reserved and tranquil.	1	2	3	4
5.One need not focus all energies on one's studies.	1	2	3	4
6.One need not be able to resolve psychological problems on one's own.	1	2	3	4
7.One should not make waves.	1	2	3	4
8.One should be discouraged from talking about one's accomplishments.	1	2	3	4
9.One need not follow the role expectations (gender, family hierarchy) of one's family.	1	2	3	4
10.One need not achieve academically in order to make one's parents proud	1	2	3	4
11.Family's reputation is not the primary social concern.	1	2	3	4

12.One should not deviate from family and societal standard.	1	2	3	4
13. The worst thing one can do is to bring disgrace to one's family reputation.	1	2	3	4
14.One should think about one's group before oneself.	1	2	3	4
15.Occupational failure does not bring shame to the family.	1	2	3	4
16.One's achievements should be viewed as family's achievements	1	2	3	4
17.Educational and career achievements need not be one's top priority.	1	2	3	4
18.One need not control one's expression of emotions.	1	2	3	4
19. When one receives a gift, one should reciprocate with a gift of equal or greater value.	1	2	3	4
20. One should consider the needs of others before considering one's own needs.	1	2	3	4
21.One should have sufficient inner resources to resolve emotional problems.	1	2	3	4
22.One should avoid bringing displeasure to ones' ancestors	1	2	3	4
23. Children should not place their parents in retirement homes.	1	2	3	4
24.One should be humble and modest.	1	2	3	4
25.Modesty is an important quality for a person.	1	2	3	4

Appendix H

# **Multidimensional Scale of Perceived Social Support (MSPSS)**

Instruction: Below are a number of statements pertaining to perceived social support. Read each statement carefully and indicate your 1.very strongly disagreement, 2.strongly disagreement, 3.mildly disagreement, 4.neutral, 5.mildly agreement, 6.strongly agreement, or 7.very strongly agreement. Please express your frank opinion in rating the statements. There are no "wrong" answers, and the only right ones are whatever you honestly feel or believe.

MSPSS	Very	Strongly	Mildly		Mildly	Strongly	Very
	Strongly	Disagree	Disagree	Neutral	Agree	Agree	Strongly
	Disagree						Agree
1. There is a special person who is around when I am in need	1	2	3	4	5	6	7
2. There is a special person with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
3.My family really tries to help me	1	2	3	4	5	6	7
4.I get the emotional help and support I need from my family.	1	2	3	4	5	6	7
5.I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6.My friends really try to help me.	1	2	3	4	5	6	7
7.I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8.I can talk about my problems with my family.	1	2	3	4	5	6	7

9.I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10. There is a special person in my life that cares about my feelings.	1	2	3	4	5	6	7
11.My family is willing to help me make decisions.	1	2	3	4	5	6	7
12.I can talk about my problems with my friends	1	2	3	4	5	6	7

Appendix I

#### **BRIEF RCOPE**

Instruction: Below are some descriptions of your religious beliefs. Read each statement carefully and indicate your 1.strongly disagree, 2. disagree 3.agree or 4.strongly agree. Please express your frank opinion in rating the statements. There are no "wrong" answers, and the only right ones are whatever you honestly feel or believe. It is important that you answer every item.

BRIEF RCOPE	Strongly Disagree	Disagree	Agree	Strongly Agree
1.Looked for a stronger connection with God	1	2	3	4
2. Sought God's love and care	1	2	3	4
3. Sought help from God in letting go of my anger	1	2	3	4
4. Tried to put my plans into action together with God	1	2	3	4
5. Tried to see how God might be trying to strengthen me in this situation	1	2	3	4
6.Asked forgiveness for my sins	1	2	3	4
7.Focused on religion to stop worrying about my problems	1	2	3	4
8. Wondered whether God had abandoned me	1	2	3	4
9.Felt punished by God for my lack of devotion	1	2	3	4

10.Wondered what I did for God to punish me	1	2	3	4
11.Questioned God's love for me	1	2	3	4
12.Wondered whether my church had abandoned me	1	2	3	4
13.Decided the devil made this happen	1	2	3	4
14.Questioned the power of God	1	2	3	4

Appendix J

## **Interview Questions for Administrators**

- 1. How long have you worked with international students?
- 2. What is your role and capacity in working with Chinese international students?
- 3. Please share your experiences and perspective in working with Chinese international students.
- 4. What have been your experience in terms of students' acculturative issues?
- 5. What is your point of view in terms of their psychological help-seeking attitudes?
- 6. What have you observed in terms of Chinese international students' challenges?
- 7. Other comments

Appendix K

#### **Interview Questions for Focus Groups**

- 1. Please share your coming to the U.S. experiences.
- 2. What have been the most challenging issues/aspects since starting your community college career?
- 3. Do you know your school has a free counseling office? What do you think about it?
- 4. Would you consider using on-campus counseling service? Why yes and why not?
- 5. What have been the most helpful aspects in your acculturation process?
- 6. Who/where/how would you consider getting help from when you have emotional, academic, relationship issues?
- 7. Other things you would like to share with me in regard to your experience as a Chinese international student?