

Examining Barriers and Facilitators to Professional Mental Health Help-seeking in Asian
American Youth

Carol C. Wong

A dissertation
submitted in partial fulfillment of the
requirements for the degree of

Doctor of Philosophy

University of Washington

2006

Program Authorized to Offer Degree:
Department of Psychology

UMI Number: 3231073

Copyright 2006 by
Wong, Carol C.

All rights reserved.

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

UMI[®]

UMI Microform 3231073

Copyright 2006 by ProQuest Information and Learning Company.

All rights reserved. This microform edition is protected against
unauthorized copying under Title 17, United States Code.

ProQuest Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346

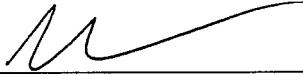
University of Washington
Graduate School

This is to certify that I have examined this copy of a doctoral dissertation by

Carol C. Wong

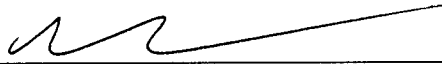
and have found that it is complete and satisfactory in all respects,
and that any and all revisions required by the final
examining committee have been made.

Chair of the Supervisory Committee:

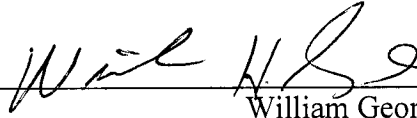


Ana Mari Cauce

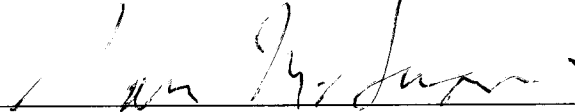
Reading Committee:



Ana Mari Cauce



William George



Jane Simoni

Date: _____

8/10/06

In presenting this dissertation in partial fulfillment of the requirements for the doctoral degree at the University of Washington, I agree that the Library shall make its copies freely available for inspection. I further agree that extensive copying of the dissertation is allowable only for scholarly purposes, consistent with "fair use" as prescribed in the U.S. Copyright Law. Requests for copying or reproduction of this dissertation may be referred to Proquest Information and Learning, 300 North Zeeb Road, Ann Arbor, MI 48106-1346, 1-800-521-0600, to whom the author has granted "the right to reproduce and sell (a) copies of the manuscript in microform and/or (b) printed copies of the manuscript made from microform."

Signature 

Date 8/16/06

University of Washington

Abstract

Examining Barriers and Facilitators to Professional Mental Health Help-seeking in Asian American Youth

Carol C. Wong

Chair of the Supervisory Committee:
Professor Ana Mari Cauce
Department of Psychology

The purpose of the present study was to gain a more comprehensive understanding of help-seeking in Asian American youth. The current study examined three major types of categories that impact whether an Asian American youth seeks help for his or her problems, namely, illness profile, predisposing characteristics, and barriers/facilitators. The present study aimed to investigate how these various factors together predicted help-seeking attitudes (willingness to seek professional mental health help) and actual help-seeking behaviors (mental health treatment in the past year). Past research on Asian Americans has mainly examined help-seeking predictors in isolation, but has not assessed their unique relationship to help-seeking attitudes and behaviors, after accounting for the correlations among the predicting factors. Participants included a sample of 38 Asian American adolescents and a sample of 224 Asian American undergraduate students enrolled in introductory psychology courses.

The results of the present study indicated that the comprehensive model of help-seeking factors accounted for 24% of the variance in scores for willingness to seek professional help among the sample of Asian American young adults. Specifically, the study found that parent income, level of perceived mental health information, perception

of service facilitators, and perception of need barriers were significant predictors of willingness to seek professional help. Likewise, the comprehensive model of help-seeking factors also served to significantly predict actual professional help-seeking in the past year. Namely, prior mental health treatment (lifetime), level of perceived mental health information, and belief in the American dream myth significantly predicted seeking professional mental health help in the past year. These results lend support to using a comprehensive model to examine help-seeking among Asian American youth given the complexities involved in forming help-seeking attitudes and carrying out actual behaviors. These findings may prove to be important targets for intervention efforts aimed at increasing help-seeking and formal service utilization in Asian American youth.

TABLE OF CONTENTS

| | Page |
|---|------|
| List of Figures | ii |
| List of Tables..... | iii |
| Chapter 1: Introduction and Literature Review | 1 |
| Chapter 2: Methods | 35 |
| Chapter 3: Results | 52 |
| Chapter 4: Discussion | 82 |
| References | 97 |

LIST OF FIGURES

| Figure Number | Page |
|------------------|------|
| 1. Model #1..... | 49 |
| 2. Model #2..... | 50 |

LIST OF TABLES

| Table Number | Page |
|---|------|
| 1. Factor Loadings for Belief in the Model Minority Myth Items..... | 53 |
| 2. Factor Loadings for Facilitators to Professional Help-seeking..... | 55 |
| 3. Factor Loadings for Barriers to Professional Help-seeking..... | 57 |
| 4. Means and Standard Deviations of Predictor Variables..... | 58 |
| 5. Lifetime, Past Year, and Current Experiences with Mental Health Treatment or Counseling..... | 59 |
| 6. Problem Severity..... | 60 |
| 7. Sources of Help and Perceived Helpfulness..... | 61 |
| 8. Willingness to seek professional mental health help..... | 62 |
| 9. Perceived level of mental health information gained from each source..... | 63 |
| 10. Perceived Facilitators to Professional Mental Health Help-Seeking | 64 |
| 11. Perceived Barriers to Professional Mental Health Help-Seeking | 65 |
| 12. Belief in the Model Minority Myth..... | 66 |
| 13. Intercorrelations of Study Variables for the Adult Sample..... | 71 |
| 14. Intercorrelations of Study Variables for the Adult Sample Continued..... | 72 |
| 15. Model #1 - Hierarchical Multiple Regression Analysis Predicting Willingness to Seek Professional Mental Health Help..... | 78 |
| 16. Model #2 - Logistical Regression Predicting Actual Professional Mental Health Help-seeking in Past Year..... | 81 |

ACKNOWLEDGEMENTS

I would like to thank my advisor, Ana Mari Cauce for her ongoing support of my personal and professional development. I am also grateful to all of my mentors and supervisors who contributed to my professional development and offered me ample support. Last but not least, I would like to thank my fellow graduate students, family, and significant other for their warmth and support. I would like to especially thank Angela Stewart, Anika Trancik, Eun Young Nahm, Patty Bardina, Karen Toth, Kanthea Chuop, Sina Khun, and Helen Wong for their friendship and always believing in me.

DEDICATION

To my parents who cannot read or understand this dissertation, but have always trusted me to make good decisions and fully supported my decision to get a doctoral degree.

Chapter 1

Introduction and Literature Review

By one estimate, one in ten children in the United States suffers from a mental disorder severe enough to cause some level of impairment (Burns et al., 1995). The MECA Study (Methodology for Epidemiology of Mental Disorders in Children and Adolescents) estimated that approximately 21 percent of U.S. children ages 9 to 17 had a diagnosable mental or addictive disorder resulting in at least mild impairment (Shaffer et al., 1996). Although estimates may vary depending on the sample and diagnostic criteria used, it is evident that a significant proportion of American youth are emotionally disturbed. Despite these alarming statistics, it is estimated that between 60 to 80 percent of children who suffer from mental problems do not receive any mental health services (Burns et al., 1995; Leaf et al., 1996). Sadly, the Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda (U.S. Public Health Service, 2000) cites that unmet need for mental health services continues to be as high now as it was twenty years ago. As an outgrowth of the first ever Surgeon General's Report on Mental Health released in 1999, the Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda was developed to address what is referred to as "a public crisis in mental health for children and adolescents" in the United States.

Likewise, according to the Surgeon General's Report on Mental Health (U.S. Department of Health and Human Services, 1999), an estimated 21 percent of young adults (ages 18 and older) in United States suffer from a diagnosable mental disorder in a given year, yet only roughly one-third of them receive some type of treatment in a one-

year period. Moreover, many young adults suffer from more than one mental disorder at a time. Although there are no available statistics pertaining specifically to young adults, it is evident that they are at particular risk for the development of mental disorders. For instance, the average age of onset for major depressive disorder is the mid-twenties (American Psychiatric Association, 2000). In 2000, suicide was the third leading cause of death among 15 to 24 year olds (Miniño et al., 2002). Individuals between the ages of 18 to 24 have relatively high prevalence rates for the use of every substance including alcohol (American Psychiatric Association, 2000). Dysthymic disorder, Panic disorder, Obsessive Compulsive Disorder, and Social Phobia often begin in adolescence or early young adulthood (American Psychiatric Association, 2000). Moreover, there is much evidence for the continuity of mental health problems from adolescence to young adulthood (Horwath, Johnson, Klerman, & Weissman, 1992). Encouragingly, research has shown that individuals who receive services as adolescents significantly reduce their chance of experiencing later psychological problems (McGee & Stanton, 1993). Thus, adolescence and young adulthood are both critical times for mental health intervention.

The problem of unmet need for mental health services is especially pronounced for ethnic minorities. The supplement to the Surgeon General's Report on Mental Health on culture, race, and ethnicity (U.S. Department of Health and Human Services, 2001) documented startling disparities in mental health care for racial and ethnic minorities in the United States despite available research that suggests their prevalence of mental disorders is comparable to that for Caucasians. Specifically, minorities have less access to mental health services, are less likely to receive needed mental health services, receive a poorer quality of mental health care, and are underrepresented in mental health

research. Likewise, research has demonstrated greater levels of unmet need for ethnic minority children (Bui & Takeuchi, 1992; Yeh et al., 2003). In recognition of the ethnic and racial inequities in children's mental healthcare, one of the eight major goals of the Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda (U.S. Public Health Service, 2000) is to eliminate racial/ethnic and socioeconomic disparities in access to mental healthcare services.

Numerous studies have documented the underutilization of mental health services by Asian American young adults (Cheung & Snowden, 1990; Sue, Fujino, Hu, Takeuchi, & Zane, 1991; Ying & Hu, 1994). Compared to other major racial groups in the United States, Asian Americans seek help at lower rates relative to their population size. Not only are Asian Americans less likely than any other ethnic group to voluntarily seek mental health treatment (Akutsu, Snowden, & Organista, 1996), they are the most severely disturbed of any ethnic group by the time they utilize services because they significantly delay seeking professional help until it is the last resort (Durvasula & Sue, 1996).

Epidemiological studies on Asian American youth are even more limited than those of young adults. Thus, very little is known about the service utilization and help-seeking patterns of Asian American youth. Similar methodological limitations apply. For example, available studies tend to be small in sample size. Moreover, utilization rates of mental health services may be skewed by underreporting. The heterogeneity within and between Asian ethnic groups in terms of religion, language, ethnicity, socioeconomic status, and values also makes it difficult to generalize findings. In the

past, Asian Americans have either been omitted or lumped into an “other” category in large-scale, national studies regarding mental health issues.

In one of the few studies looking at mental health service utilization among adolescent populations (e.g., Bui, & Takeuchi, 1992), it was found that African American adolescents had the highest rates of utilization in a community mental health setting followed by Whites, Latinos, and Asian Americans, respectively. In their study, Bui and Takeuchi (1992) found that Asian Americans tended to stay in treatment longer than Whites and African Americans tended to stay in treatment for a shorter period than Whites. Interestingly Bui and Takeuchi (1992) found no differences in their treatment dropout rates. Instead, the level of poverty and being referred by a mental health professional rather than the family predicted dropout.

In order to better our understanding of the gap between need and service utilization, it is important to examine factors that influence the process leading to receiving professional help. Thus, the present study proposes to examine factors influencing the help-seeking process in Asian American youth. It is especially important to address the disparity in research on Asian American youth, since the Asian American population is growing rapidly. According to the 2000 U.S. Census, Asian Americans make up 4.3% of the total United States population. Compared to the 1990 U.S. Census, the Asian American population has increased 63%, making Asian Americans the fastest growing of all the major racial groups in the United States in terms of percentage growth (U.S. Census Bureau, 2000). Furthermore, it expected that the Asian American population will expand to 8.2% of the total U.S. population by the year 2050 (U.S.

Department of Commerce, 1998). The growing Asian American population translates into a greater need for appropriate services to meet their needs.

Encouragingly, in recent decades, there has been an increasing interest in researching the mental health needs of Asian Americans due their growing population. Nevertheless, the research on Asian American youth remains rather limited. Surprisingly, to my knowledge, there have been no comprehensive studies specifically investigating help-seeking in Asian American youth. Studies of adolescent help-seeking have tended to either include a very small proportion of Asian Americans or none at all. Thus, it is difficult to generalize findings about help-seeking to Asian American youth.

The focus of the proposed study is an examination of the factors associated with help-seeking among Asian American adolescents and college students. The following literature review provides a context for this study with a review of the literature on help-seeking, particularly as it relates to Asian American youth. Given the complexity of reviewing the literature on the vast number of variables related to help-seeking, this paper is organized using the framework of a mental health help-seeking model adapted from Srebnik, Cauce, and Baydar (1996), which will be described below in more detail. Overall, the review of the literature suggests that more research is necessary to understand the factors that influence help-seeking among Asian American youth.

Help-seeking Pathway Model

A comprehensive model that considers various factors influencing help-seeking in children and adolescents was proposed by Srebnik, Cauce, and Baydar (1996), which was adapted from the research of Anderson and Newman (1973), Goldsmith, Jackson, and Hough (1988), and Pescosolido (1992) on young adult help-seeking models. The

proposed help-seeking model for children and adolescents was adapted to include the family context within which help-seeking occurs for this age group. This model delineates three stages of a help-seeking pathway, namely problem recognition, the decision to seek help, and support and service utilization. This model also outlines a variety of factors related to movement through the three stages of the help-seeking pathway. These factors are organized into three major categories: illness profile, predisposing characteristics, and barriers/facilitators. All three categories influence whether a person seeks services for his or her problems. The aforementioned model guided the present study investigating help-seeking factors among Asian American youth.

Illness Profile

The first stage of the help-seeking pathway starts with problem recognition or identification of a mental health need. As portrayed by the model, the illness profile directly leads to problem recognition. The illness profile is typically operationalized in two ways: clinically assessed need and subjectively assessed need (Costello et al., 1993). Although it would make logical sense that the illness profile is a strong predictor of eventual service-seeking, it is evident from research cited previously that the need for mental health services does not necessarily equate to obtaining services. It is important to examine the relationship between clinically assessed and subjectively assessed need to identify the reasons for unmet need and underutilization of mental health services among Asian American youth.

Clinical Assessment of Need

Overall, clinical assessment of need is done through examination of clinical symptoms, diagnostic criteria, and/or functional impairment (Srebnik et al., 1996). One common method of determining clinically assessed need is through diagnosis using the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM). Clinical symptoms have been demonstrated to be a strong predictor of help-seeking for children and moreover, symptom severity distinguishes children who acquire services from formal mental health providers from those who seek help from informal sources (Freeman et al., 1992).

Subjective Assessment of Need

Subjectively perceived need is also important in problem recognition and actual help-seeking behavior. A person will not seek professional psychological help unless he or she perceives that the problem as a mental health problem. Subjectively perceived need is the context of cultural values and beliefs, which guide the expression and experience of psychological distress.

Researchers have become increasingly cognizant of the differences in symptom expression across and within ethnic groups (Dinges & Cherry, 1995; Paniagua, 2000). For example, Kinzie et al. (1982) found that the clinical presentation among Vietnamese Americans in the expression of depressive symptoms to be significantly distinct from the Western notion of depression. Physical states associated with depression among Vietnamese Americans included poor appetite, pains, exhaustion, and diurnal variation in energy patterns. Furthermore, respondents reported feeling angry, shamed and dishonored, feeling desperate, and having a feeling of going crazy. "Being angry" did not

refer to hostile or irritated behavior, but instead to psychomotor retardation beyond the reserved interaction expected of Vietnamese when interacting with people of notably different status (e.g., doctor and patient). “Shameful and dishonored” symptoms were different from the Western concept of guilt, but represented more of a burden in failing to meet current familial obligations and those of the ancestral past. “Going crazy” was associated with feelings of desperation and loss of control resulting from severe discomfort of the affective and physical facets of the depressive experience. Clearly, issues in accurate psychiatric diagnoses may be confounded by the differential expression of symptoms, which are strongly influenced by cultural factors. Thus, these cultural differences in the expression of psychological distress challenge the validity of using the Diagnostic and Statistical Manual of Mental Disorders (Fourth Edition, Text Revision, [DSM-IV-TR], American Psychiatric Association, 2000) for accurate diagnoses in Asian American populations (Canino & Spurlock, 2000).

Research has also shown support for the differential expression of psychological distress for Asian American adolescents. Huang (1997) found that the first signs of anxiety for Asian American adolescents may be somatic complaints, sleep and appetite disturbance, and poor academic performance. Consequently, mental health providers who are not knowledgeable of these cultural differences may either overlook the symptoms or misdiagnose the condition. The issue of somatization has not been adequately examined in Asian American youth despite much literature that documents the tendency toward somatization among Asian American young adults (Sue & Morishima, 1982).

Cultural values that define thresholds for symptom expression and severity of psychological distress that would be considered pathological may lead to different perceptions of psychopathology. John Weisz and his colleagues' research (1997) on cross-cultural differences in child psychopathology between Thailand and the U.S. lent support to the threshold model that asserts that cultures differ in their threshold for child problems generally. For example, it was found that Thai young adults were less distressed over child problems -both internalizing and externalizing and rated both problems as less serious, less worrisome for both parents and teachers, less unusual, and more likely to improve over time than American young adults. Clinic referral of children is dependent on the young adult's judgment that the behavior is maladaptive, the young adult's belief that intervention is helpful to bring about change, who a child is referred to, and whether a mental health specialist is available. Cultural differences may be linked not only to different young adult attitudes toward child problems but also to different young adult beliefs regarding etiology and appropriate treatment. Overall, findings suggest that the interpretation of, expression of, and the tolerance for many child disorders are linked to cultural values and beliefs.

Predisposing Characteristics

Predisposing characteristics are defined as demographic factors (e.g., age, gender, ethnicity) or other individual characteristics (e.g., sociocultural values/beliefs) that impact one's willingness to seek help (Srebnik et al., 1996).

Demographic Characteristics

Age and Developmental Issues

Adolescents undergo significant physical and hormonal changes due to puberty. During this developmental period, individuals also experience psychological, emotional, social, and cognitive changes. Despite individual variability in emotional and social readiness, it is generally assumed that during adolescence, individuals are able to think more abstractly and thus have more mature cognitive abilities to seek help for themselves. It would make intuitive sense that older adolescents and young adults engage in more help-seeking than younger adolescents. In a study of adolescents ages 13 to 18 in a large Canadian city, Schonert-Reichl and Muller (1996) found that older adolescents reported seeking help from mothers, friends, and mental health professionals more than younger adolescents. Research has shown that as children become adolescents, they turn to their friends more often for support and advice and thus are less likely to rely on their parents (Gould & Mazzeo, 1982; Papini et al., 1990). Other research have suggested that children only distance themselves from their parents during early adolescence and may actually go to their parents for support at an increased rate during later adolescence (Fuligni & Eccles, 1993; Windle et al., 1991). Evidently, more research is needed to better understand the age-related differences in help-seeking.

Adolescence is a time when individuals begin to make independent decisions about their health. It is also a time when their attitudes about mental health services begin to solidify and thus set the foundation for help-seeking and service utilization in young adulthood (Hansell & Mechanic, 1985). Thus, it is important to intervene during

adolescence when youth have the cognitive skills to appreciate information given to them about mental health care.

There has been growing discussion about the right of parents to be informed if their young adult child is experiencing critical emotional or behavioral problems during college (Sontag, 2002). Today's college students are being exposed to all kinds of stressors at a much earlier age including leaving home, forming relationships, pressure to compete and fit in, mounting academic pressure, more complicated family compositions, and current societal pressures. Current research indicates that college students are experiencing rising levels of depression and anxiety (Berger, 2002). In fact, the rate of suicides among college students is increasing (Berger, 2002). Most colleges today operate on the premise that college students are young adults and are therefore, entitled to confidentiality. Thus, parents may not have the opportunity to seek help for their young adult children or to be involved in some way in their treatment. Although children and young adolescents do not generally seek help on their own and their parents play an important role in their help-seeking, it remains unclear what role the parents' of older adolescents and young adults play in their help-seeking.

As an individual ages and matures, it is expected that their cognitive capabilities increase, which allow them to become better able to determine their need for help. Consequently, it is expected that college students who have more mature cognitive abilities will be better able to evaluate their need for help and to initiate getting help compared to younger adolescents.

Demographic Characteristics: Gender

An especially consistent and robust finding in the help-seeking literature is that women express more positive attitudes toward seeking help for psychological problems compared to men. The gender difference in help-seeking attitudes has been found in young adults (Fischer et al., 1972; Fischer & Turner, 1970; Price & McNeill, 1992; Sanchez & Atkinson, 1983), adolescents (Garland & Zigler, 1994), and children (Barnett et al., 1990). In a study of adolescents ages 13 to 18 in a large Canadian city, Schonert-Reichl and Muller (1996) found that more adolescent females reported seeking help from mothers, friends, and mental health professionals than adolescent males.

However, in studies of Asian Americans, there has been mixed findings regarding the relationship between gender and willingness to seek professional mental health help. In a study of Asian American college students, Gim, Atkinson, and Whiteley (1990) found that females expressed greater willingness to see a counselor than males for a range of problems of concern to college students including those regarding relationships, academics, conflicts with parents, and ethnic identity confusion. However, Solberg, Ritsma, Davis, Tata, & Jolly (1994) and Atkinson, Lowe, & Matthews (1995) found that gender was not significantly related to willingness to seek professional help for personal or academic problems.

Demographic Characteristics: Ethnicity

Given the small samples of most studies regarding help-seeking among Asian Americans and consequent constraints in conducting analyses, it remains unclear whether help-seeking patterns differ across the various Asian ethnic groups. Atkinson and Gim (1989) found that Chinese, Japanese, and Korean American college students did not

differ across ethnicity in their attitudes toward seeking professional help for mental health problems.

Acculturation

Attempting to assess the effect of culture on the help-seeking process is challenging because culture is not a tightly defined construct. Thus, given that acculturation is a more tangible cultural factor to assess, the role of acculturation in attitudes toward professional help-seeking has been one of the most frequently examined areas in the help-seeking research on Asian Americans. Previous research suggests that more highly acculturated Asian Americans show more positive attitudes toward seeking professional mental health services (Atkinson & Gim, 1989; Tata & Leong, 1994; Ying & Miller, 1992) and demonstrate higher levels of actual help-seeking behaviors (Ying & Miller, 1992). In other words, research generally shows that Asian Americans who hold strong cultural affiliations are less likely to favor seeking psychological help than those who identify with mainstream American culture (Atkinson & Gim, 1989). Interestingly, Leong, Wagner, and Kim (1995) found that Asian American young adults who are able to maintain a balance between retaining their native cultural identity and changing toward the dominant culture tend to have more positive attitudes toward professional help-seeking.

These findings suggest that the barriers to help-seeking may be more pronounced for less acculturated Asian Americans, especially those who identify predominantly with their native culture. Nevertheless, given the difficulties with measuring acculturation and the variations in operationalizing acculturation (Cabassa, 2003), it is too early to reach definitive conclusions regarding the role of acculturation in help-seeking among Asian

Americans, especially given that the influence of acculturation in the help-seeking process has not been closely examined for Asian American youth.

For many ethnic minority and immigrant children, developmental changes during adolescence are compounded by cultural differences in values between parents and children. Immigrant parents are likely to acculturate to the dominant host culture at a slower rate in comparison to their children (Portes, 1997). This differential pattern of acculturation is most evident in parenting beliefs and practices (Phinney, Ong, & Madden, 2000; Szapocznik & Kurtines, 1993). Many immigrant parents may expect their children to abide by cultural values, expectations, and traditions that are different from those their children have adopted from the mainstream culture (Uba, 1994). Cultural differences between parents and children appear to be especially salient during late adolescence and early young adulthood. For example, Greenberger and Chen (1996) found very few differences in the parent-child relationships of European and Asian American early adolescents in middle school but found that Asian American college students reported significantly more parent-child conflict than European Americans. Furthermore, research has suggested that Asian American students tend to attribute psychological distress to their relationship with their parents (Lee, 1997; Uba, 1994). Research has also found that depression in Asian American college students was explained more by parent-child conflicts, which was found to be less influential for Caucasian college students (Greenberger & Chen, 1996). Given that Asian American youth may be subject to unique cultural stressors including acculturative parent-adolescent conflicts in addition to typical developmental stressors associated with

adolescence and early young adulthood, there is a great need to address help-seeking issues pertinent to them in order for them to be served properly.

Nevertheless, there is limited research to elucidate the relationship between acculturation and the potential barriers to help-seeking for Asian Americans. Moreover, the influence of acculturation in the help-seeking process is not as well understood among Asian American youth. It may be hypothesized that similar patterns hold for Asian American youth such those who can successfully integrate their native culture with the dominant American culture may have more favorable attitudes toward help-seeking and accordingly, engage in more help-seeking behaviors.

Sociocultural Values and Beliefs

Numerous hypotheses have been proposed to explain the underutilization of services among Asian Americans. Many of these hypotheses are based on the assumption that there is a conflict between the Western-based psychotherapy process and values of Asian culture. For example, the high value of open communication and emotional expression in psychotherapy is in conflict with traditional Asian values, which may deter Asian Americans from seeking professional help. It has been suggested by researchers that Asian culture socializes Asian Americans to internalize distress and repress their feelings (Sue & Morishima, 1982). Past research has found that Chinese Americans are inclined to view mental illness as a problem that may be resolved by willpower and avoiding negative thoughts (Root, 1985; Sue et al., 1976). Thus, it is hypothesized that their underutilization of professional services is due to their efforts to remedy their problems on their own.

Another hypothesis posits that Asian Americans wait until symptoms are disruptive or dangerous to others to get professional help because they do not view everyday personal problems or distress as symptoms of mental illness (Moon & Tashima, 1982; Tracey, Leong, & Glidden, 1985). Due to collectivistic values, Asian Americans are described as being more concerned about upsetting their social group through their clinical symptoms than the psychological toll on themselves.

One of the persistent hypotheses about the reason for the underutilization of services is that Asian Americans may be reluctant to disclose their problems to another because of shame and stigma associated with having a mental illness (Root, 1985). Despite the stigma of mental illness being prevalent in mainstream American culture, it has been suggested that the stigma may be even more pronounced among Asian American culture due to the cultural emphasis placed on avoiding shame (Uba, 1994). Shame was identified as a barrier to help-seeking in a study of Chinese American female immigrants (Tabora & Flaskerud, 1997). Given that stigma associated with mental illness is pervasive across subcultures in the United States, it is hypothesized that Asian American youth also perceive some level of stigma.

Loss of face is closely tied to the concern over stigma (Zane, 2002). Due to the importance of protecting the family name and reputation, Asian Americans are more inclined to seek help from their families to avoid being negatively judged by others. Therefore, they may have more difficulty expressing their problems to a stranger and thus keep their problems within the family (Leong et al., 1995). Accordingly, Asian Americans demonstrate more family involvement in help-seeking compared to other

ethnic groups once they get to treatment, which is usually the last resort (Lin et al., 1982).

Thus, it may not be unusual for the family to come to an adolescent's intake session.

Thus far, all cultural barriers discussed are in the context of Asian American young adults. It is unknown how Asian American youth perceive these potential cultural barriers and whether they impact attitudes toward professional help-seeking.

Help-Seeking Attitudes

Attitudes toward professional help-seeking have received much attention in the research regarding help-seeking in young adults. Fischer and Turner's (1970) original 29-item scale has been the most widely used measure for assessing attitudes toward seeking professional help for psychological problems in the help-seeking literature. This scale was standardized primarily using college samples, but has been demonstrated to be valid in diverse populations, both in the United States and in other countries (Fischer & Farina, 1995). More recently, Fischer and Farina (1995) developed a 10-item, abbreviated version of the original scale with comparable psychometric properties. Despite having a more concise version, the validity of the Attitudes Toward Seeking Professional Psychological Help (ATSPPH) scale has not been adequately examined in adolescents. At face value, the scale as a whole does not appear to be age appropriate for adolescents given the complicated style in which most of the items are written (e.g., *If I believed I was having a mental breakdown, my first inclination would be to get professional attention; Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me*). For this reason, this scale was not used in the present study, although attitudes toward help-seeking were assessed.

Previous research on help-seeking attitudes has generally investigated simple relationships between Fischer and Turner's measure and demographic variables or scores on other scales. Although this measure has garnered a better understanding of help-seeking attitudes, this measure alone is limited in understanding the relationships among the various influences on the help-seeking process. Attitude is only one factor in the entire help-seeking process. Thus, an examination of help-seeking attitudes alone may not be sufficient to understand how to influence actual help-seeking behaviors. Furthermore, the relationship between help-seeking attitudes and help-seeking behaviors remains elusive. Therefore, a more elaborate research model is important to understand the help-seeking process in Asian American youth. Although the present study did not examine the relationship of help-seeking attitudes and prospective help-seeking behaviors, it attempted to shed light on the relationship between help-seeking attitudes and retrospective help-seeking behaviors among Asian American youth via inquiry about past help-seeking experiences.

Model Minority Myth

Asian Americans have the distinction of being labeled a "model minority," who have uniformly succeeded by merit. While on the surface the "model minority" label appears to be complimentary and harmless to Asian Americans, the effects of this portrayal can be far-reaching and even negative. By over-emphasizing the image of Asian American success, it minimizes the problems that Asian Americans continue to face. The model minority myth has also been used to account for the low utilization rate of mental health services among Asian Americans, implying that they do not need help because they do not have significant problems. Thus, Asian Americans may be

overlooked and rendered invisible because they are perceived to be model minorities.

These assumptions may prevent Asian American youth from receiving help that may be needed, especially for ones who internalize their distress. They may also have a hard time asking for help because of these assumptions.

Realistically, Asian American youth are faced with similar problems as other youth and also have unique needs. Lorenzo, Pakiz, Reinherz, and Frost (1995) investigated the social, academic, emotional functioning and social support of ninth grade Asian American adolescents (age 15) in comparison to ninth-grade White adolescents. Asian American adolescents performed better academically and reported less delinquent and aggressive behaviors. Nevertheless, they reported being significantly more withdrawn, more depressed and anxious, perceived themselves as less popular and attractive, had more social problems, were less inclined to participate in extracurricular activities or seek help for their problems, and more likely to internalize their social problems. In addition, they had fewer role models, less social support, and less satisfaction with their social support. Lorenzo, Frost, and Reinherz (2000) found very similar results for an older (12th graders) Asian American adolescent sample compared to their White peers.

It is not unusual that many Asian American students have encountered the “model minority myth.” According to the myth, those of Asian descent are highly intelligent, hardworking, successful individuals and consequently make up the model minority in the United States. Although Asian American adolescents may not be aware of the model minority myth, it is reasonable to assume that they are aware of the stereotypes about Asian Americans as good children who do well in school. Students and teachers may

assume that Asian American students are innately smart and excel academically.

Although this assumption may not appear derogatory, expectations to succeed created by the myth can place an unreasonable amount of stress on Asian American students to succeed. Some researchers have suggested that the stress to fulfill the model minority myth may result in considerable distress and anxiety (Lee, 1996; Wolf, 1997). Students who internalize the model minority myth may be even more susceptible to the high expectations. Students who cannot live up to the expectations may feel incompetent and become so discouraged that they lose interest in school. The model minority myth may actually be a disservice to Asian Americans because it may suggest that they do not need nor could benefit from professional help.

There is no known research examining whether the belief in the model minority myth affects help-seeking among Asian American youth. Given the perception that parents are tough on their children and put pressure on them to succeed, it may follow that children may feel hesitant to tell their parents that they are having trouble and need help. Filial piety is a strong value in Asian culture. It is important for children to not only obey their parents but also to make them proud. To have a child who underperforms is to lose face. If adolescents internalize the expectation that they must excel in society, there may be undue pressure for them to meet those standards and not to call attention to themselves for underperforming. Children who internalize the model minority myth may be less inclined to seek help if they encounter problems than those who do not. Surprisingly, given the salience of the model minority myth among Asian Americans, there has not been empirical research examining the relationship between the internalization of the model minority myth and help-seeking attitudes/behaviors.

Barriers and Facilitators

Examination of barriers and facilitators to help-seeking is necessary to understand the problem of underutilization of mental health services by Asian American youth. Based upon the help-seeking model presented by Srebnik, Cauce, and Baydar (1996), barriers and facilitators to help-seeking refer to external or situational factors that may influence the help-seeking process. These external factors include social, environmental, and contextual concerns that may impact help-seeking at the individual, community, or broader policy level. For the purpose of this literature, the following section on barriers and facilitators to help-seeking focuses primarily on ones examined in this study.

Adolescent Help-seeking Barriers

In a large study of junior and high school students in a semirural Midwestern community in the United States, adolescents identified four of the main reasons for not seeking help: feeling that their help-seeking would not be confidential, feeling that no person or mental health service would help, feeling that the problem would be too personal to tell anyone, and feeling that they could handle the problem on their own (Dubow et al., 1990). Low rates of formal help-seeking are also attributed to adolescents' perceptions of mental health services as inaccessible, undesirable, or a lack of awareness about their need for professional help (West, Kayser, Overton, & Saltmarsh, 1991).

It is unknown whether high school adolescents or college students are more concerned about help-seeking being a threat to their autonomy and their competence. Youth may be concerned that asking for help may be negatively perceived by others as evidence that they lack the ability to solve their own problems and are therefore,

incompetent. For example, in academic settings, research has demonstrated that the need of help is most threatening for low-achieving students. Drawing from a large body of research that shows adolescents value the opinions of their peers (Brown, 1990) and are particularly self-conscious with marked sensitivity to social comparison, it is hypothesized that youth who are in most need of help will perceive more barriers to help-seeking because they may be the most threatened by the negative judgments of others.

Knowledge about Mental Health Services

Several studies on Asian American young adults have cited the lack of knowledge of existing services as a perceived barrier to help-seeking for psychological problems (Takeuchi, Leaf, & Kuo, 1988; Loo, Tong, & True, 1989). It has been suggested by researchers that education about the utility of mental health service is critical in the Asian American community, especially among less acculturated individuals in order to tackle the persistent problem of underutilization of mental health services among Asian Americans (Ying & Miller, 1992). In a large study of junior and high school students in a semirural Midwestern community in the United States, adolescents reported that they were generally unaware of available professional mental health resources in their community (Dubow et al., 1990).

It remains unknown to what extent Asian American youth have knowledge of available mental health services and where they obtain this information. Although the present study cannot determine the accuracy of the information that Asian American youth have about mental health care, it attempted to shed light on where they obtain information and how much information they perceive that they have about mental health.

Structural/Economic Factors

In understanding the barriers to help-seeking for Asian American youth, financial impediments should not be overlooked. Obviously, adolescents are not financially independent and do not have sufficient financial means to seek out costly mental health services. Likewise, many college students are not yet financially independent and are not likely to have the disposable income to spend on mental health services, even if they are necessary. Thus, financial barriers may be especially salient for young adults as they are trying to establish financial independence from their parents. Encouragingly, free mental health services are available to adolescents at many middle and high schools through school-based health centers. Even though many college and university counseling and student health centers provide low-cost services to their students, their fees are likely to be a financial burden to many college students, especially if there are long-term needs. Furthermore, insurance plans vary enormously and costs may or may not be covered by the student's insurance.

Although these school- and campus-based mental health settings offer convenient and free/low-cost services, these sites can only provide short-term mental health services given the enormous load of students they carry. Students who need longer-term counseling or have more acute mental health needs are typically referred to agencies or providers in the community who typically charge higher fees than campus-based settings. In addition, there may be associated physical barriers for Asian American youth to get to these community mental health settings on their own such as lack of transportation and inconvenient means to get to sites that are far away.

Although data suggest that Asian Americans as a group have the highest average family income in the United States, it is important to recognize that there are striking ethnic group differences in average family income (Lee, 1997). For example, 66% of Laotians, 49% of Cambodians, and 34% of Vietnamese live below the poverty line. Furthermore, there is significant variability in income within ethnic groups. Thus, some Asian American youth may also be deterred from help-seeking due to financial difficulties in their family. For example, Asian American adolescents who clearly see their parents are struggling to make ends meet by holding down multiple jobs and working long hours may not be inclined to tell their parents if they need professional psychological help. They understand that their parents cannot afford to pay for such services, take time off to seek services, nor perhaps have the means of transportation to get to their appointments.

Interestingly, some research has shown that there is a curvilinear relationship between socioeconomic status and formal mental health service utilization (Cohen & Hesselbart, 1993; Koot & Verhulst, 1992). In other words, children at the extreme ends of the socioeconomic spectrum, such as those from very low or very high socioeconomic backgrounds are more likely than working class children to utilize professional mental health services. This finding has been partly explained by their greater access to insurance coverage for mental health treatment, whether through private insurance or government-funded programs such as Medicaid. It has also been suggested that being poor is associated with increased contact with the social service system, which may lead to a higher probability of problem recognition by social service providers and thus mental health referrals (Takeuchi et al., 1993). Unfortunately, a huge proportion of youth who

come from working class or lower middle class families may not have any insurance to cover mental health services. According to the U.S. Census (2003), 12.1% of all youth under the age of 19 were uninsured in 2001. Among Asian American children, 70.4 percent had private health insurance and 22.4% had some type of government health insurance. Only Caucasian children had a higher rate of private health insurance and a lower rate of government health insurance than Asian American children. At this time, it is unclear from the research to what extent Asian American adolescents and college students perceive economic factors as significant barriers to help-seeking.

Policy

Although the examination of mental health policy issues is not at the core of the present study, the recognition of policy issues at the local, state, and federal levels is important in understanding the barriers and facilitators to help-seeking. For example, when the economy is down such as the current situation in the United States, governmental funding for mental health services as well as research is likely to be compromised. Thus, policy changes affect the accessibility and delivery of mental health services. Nevertheless, it is unclear how policy changes adversely affect mental health care for different populations (e.g., various age groups, ethnic groups).

Other institutional barriers may also affect the accessibility of mental health services. For example, although there have been increased efforts to increase the number of ethnic minorities in the mental health field, relatively few Asian Americans enter the field, especially at the doctoral level. Thus, without well-trained Asian American mental health providers who have bilingual and bicultural skills, it may be hypothesized that Asian Americans may expect that they will not be understood nor appropriately treated

and consequently, not seek help. Nevertheless, it is unclear from the current research to what extent the visibility and availability of Asian American mental health professionals make it more likely for Asian American youth to seek help for psychological problems, especially on their own.

Service Characteristics

The characteristics of services available at mental health agencies may also function as barriers or facilitators to help-seeking. Yeh, Takeuchi, and Sue (1994) evaluated the differences between ethnic-specific and mainstream outpatient mental health services for Asian American children and adolescents and found that those who received services at ethnic-specific centers were less likely to drop out of treatment after the initial session, utilized more services, and had higher functioning scores at discharge than those who used services at mainstream centers. The study also found that ethnic-specific centers were linked to better service utilization and outcome beyond the effects of ethnic match between the client and therapist. The authors suggested that Asian American parents may feel more comfortable bringing their children to an ethnic-specific center due to the availability of bilingual staff, culturally-sensitive services, a culturally familiar environment, and community support. Studies of Asian American young adults have also revealed similar results. Compared to those in mainstream programs, Asian American young adult clients who participated in ethnic-specific programs stayed in treatment longer and had lower dropout rates even when the significant effect of client-therapist ethnic match was controlled for (Takeuchi, Mokuau, & Chun, 1992; Takeuchi, Sue, & Yeh, 1995; Zane, Hatanaka, Park, & Akutsu, 1994).

Yeh et al. (1994) also found that Asian American youth receiving services at ethnic-specific centers were less disturbed than those utilizing services at mainstream centers. The authors suggested that services tailored specifically for ethnic minorities may appeal more to the less severely disturbed, which would have otherwise not sought any services because of language and cultural barriers. Encouragingly, the availability of ethnic-specific centers and corresponding culturally-sensitive services appear to serve as a facilitator to help-seeking and thus, may increase service utilization. Nevertheless, it is premature to reach this conclusion definitively until more empirical research is conducted to examine the various ingredients of ethnic-specific programs (e.g., ethnic and language match between therapist and client). Furthermore, more research is needed to understand to what extent these service characteristics matter to Asian American adolescents and college students, especially those who seek professional help on their own. For example, certain Asian American youth may prefer to seek services at mainstream centers because they do not want to bring their problems to the attention of a provider who is of the same ethnic background, especially in smaller, more close-knit communities. They may fear that others in their community or social network may find out about their psychological problems, bringing shame to their families.

Ethnic and language match

Past research has indicated that ethnic and language match between client and therapist is associated with better treatment outcomes for Asian American young adults (Sue et al., 1991). Sue and his colleagues found that ethnic match between client and therapist was related to increased utilization of services and decreased likelihood of premature termination in a large sample of Asian American young adult clients in the Los

Angeles County Mental Health System. In addition, ethnic and language match predicted both length and outcome of treatment for Asian American clients who did not speak English as their primary language. These findings lend support to the hypothesis that the ethnic and language match offered by bilingual and bicultural mental health providers may play an important role in the delivery of more culturally sensitive mental health services. Nevertheless, given the heterogeneity among Asian Americans, it is not entirely clear whether ethnic and/or language match matters for all Asian Americans. For example, Ying and Hu (1994) demonstrated that ethnic match between therapist and client did not predict increased service use for Southeast Asian young adults. Indeed, more research is necessary to understand the relationship between ethnic and/or language match and other predisposing characteristics associated with the client (e.g., ethnicity, acculturation, education, age, values) to implement more tailored interventions.

The issue of ethnic and language match for ethnic minority children and adolescents has not received as much attention in research. Yeh, Eastman, and Cheung (1994) undertook this mission by examining the effect of language and ethnic match on the mental health treatment of thousands of Asian American, Mexican American, African American, and Caucasian American children and adolescents in the Los Angeles County Mental Health System. As a whole, adolescents who were ethnically matched to their therapists were less likely to drop out of treatment, attended more sessions, and obtained higher functioning scores at discharge than those who were not matched. Specifically, ethnic match was a significant predictor of both dropout and total number of sessions for Mexican and Asian American adolescents and of dropout alone for African American adolescents, but was not significant for White adolescents.

Interestingly, when language match was added to the model for Mexican American adolescents regardless of primary language preference, it was a significant predictor of dropout after the initial session and the total number of sessions while ethnic match was no longer a significant predictor. In contrast, when language match was added to the model for Asian American adolescents, language match was not a significant predictor of dropout after one session or total number of sessions, while ethnic match continued to be a significant predictor for both variables. Language match may not be as important to Asian American adolescents because the diversity of Asian languages may make the common physical appearance more significant than language (Yeh, Eastman, and Cheung, 1994). These findings provide support for the benefits of ethnic match to increase the utilization of services by Asian American youth. Moreover, these findings suggest that the availability of bicultural and bilingual mental health professionals may contribute to increased utilization of mental health services among Asian American children and adolescents.

Nevertheless, given that children and most adolescents generally do not seek or terminate mental health services on their own, it is unclear from Yeh et al.'s study to what extent the importance of language and/or ethnic match was determined by their parents. Overall, it is estimated that 35 percent of Asian Americans live in households where no one age 14 or over speaks English fluently (President's Advisory Commission on Asian Americans and Pacific Islanders, 2001). The rate is even higher for Southeast Asians (e.g., 61 percent of Hmong Americans, 56 percent of Cambodian Americans). A significant proportion of Asian American youth have parents who have limited English skills. Thus, language may be a substantial barrier to help-seeking, especially for youth

who involve their parents in the help-seeking process and may be concerned about language match with the therapist in order for their parents to be fully involved.

Sources of Mental Health Information

Given the importance of information in making the decision to seek help, it is necessary to know where youth today receive information about mental health problems and services. There is certainly no shortage of information sources given the growing mass media, especially the Internet. The mass media has played a powerful role in shaping our perceptions and attitudes toward individuals with mental illness. Research has shown that people with mental illness have been stereotypically portrayed as unreliable, dangerous, and socially incompetent across various types of media including television (Wahl, 1995). Given the growing popularity and importance of the Internet especially among youth, it is not surprising that there has been increased interest in the potential benefits of using the Internet as a source of information and possibly even services for mental health care (Gould et al., 2002). For example, a quick search generates numerous hits for “teen support groups.” Nevertheless, it is virtually unknown where youth receive information about mental health problems and services. In understanding where youth typically obtain mental health information, service providers will be informed about where to intervene in terms of outreach.

Service Selection

Pescosolido (1992) argued that help-seeking is a process that involves a sequence of decisions rather than an isolated decision about whether or not to seek professional help for mental health problems. Therefore, it is important for research in help-seeking to address the whole process involved in help-seeking rather than solely casting attention on

the rates of service utilization in order to gain knowledge regarding how and at what point of the help-seeking process to intervene. She contended that individuals make decisions about seeking help based upon interactions they have with members of their social network. These interactions influence recognition of a problem as well as how to approach the problem. For example, an individual may consult with a range of support sources such as friends, family, doctors, teachers, ethnic/traditional healers, community elders, and mental health professionals regarding a problem until it is resolved or all alternatives have been attempted. In the case of adolescents, their social network may be smaller than older young adults and thus, opportunities to gain support or information about possible problem solutions may be more limited. Children and adolescents rarely seek mental health treatment on their own. Thus, they often need other young adults like parents and teachers to help them identify problems in order to begin the process of seeking services (Srebnik, Cauce, & Baydar, 1996).

In the study by Burns and colleagues (1995) cited in the introduction, of the children who had both a diagnosis and impaired functioning and received services, only about 40 percent received services in the specialty mental health sector. Of note, 70 percent received services from the schools. Children in the study also received services from other settings including the health sector (11%), child welfare sector (16%), and juvenile justice sector (4%). The finding that schools are the primary providers of mental health services for children is consistent across other studies (Hoagwood & Erwin, 1997).

Tracey, Leong, and Glidden (1986) found that Asian American college students used university vocational and academic counseling centers at a disproportionately higher rate and psychological services at a disproportionately lower rate than their student body

makeup. In other words, Asian American college students are more likely to seek help for educational and vocational issues than for emotional concerns.

School-Based Health Centers

School-based health centers are part of a growing national public health movement to reach the hard-to-serve adolescent population. They are otherwise known as Teen Health Centers or Wellness Centers. These centers offer comprehensive medical and mental health services to youth in a convenient, confidential, and teen-friendly environment on school grounds. Furthermore, the professionals at these centers are trained to work with adolescents. The goal of school-based health centers is to address barriers that may discourage youth from utilizing medical and mental health services such as concerns about confidentiality, the high cost of services, inconvenient appointment times, and discussing personal problems.

School-based health centers are partly designed to meet the immense demand for mental health services considering the discrepancy between mental health need and service use among children and adolescents. National data estimates that mental health services delivered through school-based health centers account for 32.2% of all high school visits and 58% of all middle school visits (Brindis et al, 2003). Clearly, school-based health centers play an important role in the provision of mental health services for adolescents.

Summary

In summary, the research on the mental health needs of Asian Americans remains limited and premature. Much of what we know about Asian American youth is inferred from research on Asian American young adults and even that body of research is very

small. In order to improve our understanding of the mental health needs and service underutilization among Asian American youth to meet the demands of the growing population, it is important to examine factors that influence the help-seeking process. There have been no comprehensive studies specifically investigating help-seeking among Asian American youth. Studies of adolescent help-seeking have tended to either include a very small portion of Asian Americans or none at all. Thus, it is difficult to generalize findings about adolescent help-seeking to Asian American adolescents. This present study was designed to address the gap in this line of research. Hence, the focus of the present study is a comprehensive examination of the various factors associated with help-seeking among Asian American adolescents and young adults.

In order to better understand the help-seeking process among Asian American youth, the present study examined the relationships among various factors that have been proposed in previous research to be associated with help-seeking including the illness profile (clinical assessment of need and perceived need), predisposing characteristics such as demographic variables and acculturation, and barriers and facilitators to professional help-seeking. Specifically, these factors include age, gender, ethnicity, parent income, acculturation, prior mental health treatment, psychological distress, problem severity, level of perceived mental health information, perceived facilitators and barriers to help-seeking, and belief in the model minority myth. The present study examined how these various factors together related to help-seeking attitudes (willingness to seek professional mental health help) and actual help-seeking behaviors (mental health treatment in the past year) in the sample of Asian American adolescents and young adults.

Several studies of Asian Americans have examined help-seeking predictors in isolation, but have not determined the unique relationship to help-seeking attitudes and behaviors, after accounting for the correlations among the predicting factors. Given the limited amount of empirical research on help-seeking among Asian American adolescents, hypotheses were drawn from previous research on Asian American young adults and adolescents in general. Hypotheses regarding the help-seeking among the Asian American young adults were drawn from previous research on Asian American young adults, although it is limited and has produced mixed results. The present study sought to help clarify these relationships by examining them using a comprehensive model. The present study also sought to extend current understanding of help-seeking factors among Asian American youth. These factors may prove to be important targets for intervention efforts aimed at increasing help-seeking and formal service utilization in Asian American youth.

Chapter 2

Methods

Procedures

After receiving approval from the human subject review committee, two samples were recruited for this study. For the young adult sample, undergraduate students over the age of 18 were recruited from the Department of Psychology Human Subject Pool. Only participants who identified themselves as Asian, Asian American, Pacific Islander, or Asian Pacific American were invited to participate in this study. Interested participants were directed to an online consent form. Those who agreed to participate in the study were linked to a separate website address to complete the online version of the questionnaire at their convenience. Participants were instructed to complete the questionnaire alone and under minimal distractions. None of the questionnaire responses were linked to direct subject identifiers. The online questionnaire took about 30 to 45 minutes to complete. After the participants completed the questionnaire, they were sent to a separate web page where they read an online debriefing statement and filled out information to obtain class credit for their participation.

For the adolescent sample, participants were recruited from a local, non-profit organization located in a major city in the Northwest that offers a broad range of ethnic/cultural-specific social and mental health services to Asian Americans. These adolescents were voluntary participants in several youth prevention/early intervention programs offered by this agency aimed at promoting cultural identity, peer support, leadership skills, and healthy development. The majority of the participants in these programs were female. The agency noted that it has been difficult to recruit males for

their programs. Adolescents learned about these programs primarily through the agency's outreach efforts at their respective high schools such as advertising through culturally-themed student organizations and school-based health centers, counselor referrals, and word-of-mouth. These programs were offered for free at several public high schools in the city. These adolescent participants were not considered high-risk youth by the local organization. Adolescents between the ages of 13 and 18, who identified themselves as Asian, Asian American, Pacific Islander, or Asian Pacific American were invited to participate in this study.

The primary investigator approached these adolescent participants during one of their group meetings to invite them to participate in this study. Paper-and-pencil versions of the questionnaires were distributed to participants who returned signed adolescent and parent consent forms at the following group meeting (a week later). The questionnaire took about 30 to 45 minutes to complete during these mass administrations. Participants were offered a movie voucher after completion of the questionnaire. After completion of the questionnaire, all adolescent participants were verbally debriefed about the purpose of the study and provided with a written debriefing statement to keep. They were also provided with a local teen resource guide (available to the public), which included detailed information about where they could seek professional help in a range of areas including mental health. They were also reminded that they have access to services at the local social agency or can talk to the primary investigator if they experience any discomfort, stress, or adverse effects as a result of participating in this study.

For both samples, it was emphasized that participation is strictly voluntary and that their responses are guaranteed to be anonymous and confidential at all times. No

names or identifiers were attached to each questionnaire. Participants were informed of their right to refuse participation, skip any questions that they do not want to answer, and withdraw participation at any point in the study without penalty. All materials used in this study were written in English.

All participants were also informed during the consent process that there may be a risk of stress, a risk of disclosure of sensitive and private information, and a risk of discomfort as a result of answering sensitive questions about their emotional, personal, or health problems. However, these risks are expected to be minimal and generally short-lived. It is possible that some participants may have been distressed that their endorsement of emotional, personal, or health problems may indicate that there is something wrong with them. During debriefing, they were informed that the study's questions cannot accurately diagnose any problems since the questions are based on self-report and intended for the general public. However, if participants are concerned that they may have emotional, personal, or health problems, they were encouraged to consult with a professional for information, assessment, and/or treatment. Furthermore, a list of professional help resources was provided to both groups at the end of the study. However, no subjects in either sample expressed any concerns about the study.

Participants

Participants of the young adult sample consisted of 224 Asian American undergraduate students enrolled in introductory psychology courses at a large public university in the Northwest. Eighty (36%) were men and 144 (64%) were women. They ranged in age from 18 to 26 years, with a mean age of 19.7 years ($SD = 1.4$ years) and a median age of 19. With respect to year in school, 49.6% ($N = 111$) were first-year

students, 22.8% (N = 51) were second-year students, 16.5% (N = 37) were third-year students, 9.4% (N = 21) were fourth year students, and 1.8% (N = 4) were fifth-year students. In terms of ethnicity, 33% (N = 74) of participants identified themselves as Korean, 22.3% (N = 50) as Chinese, 13.4% (N = 30) as Vietnamese, 7.6% (N = 17) as Multiracial Asian Americans (those of mixed racial heritage), 6.7% (N = 15) as Multiethnic Asian Americans (heritage consists of 2 or more Asian ethnicities), 6.7% (N = 15) as Filipino, 4% (N = 9) as Japanese, 2.7% (N = 6) as Asian Indian, 2.7% (N = 6) as Cambodian, and 0.9% (N = 2) as Thai. Forty-nine percent of participants described themselves as first-generation (both participant and parents were born outside of the United States), 42.9% as second-generation (participant was born in the United States with parents born outside of the United States), and 8% as third-generation (both participant and parents were born in the United States) or beyond. The length of residence in the United States ranged from 1 to 22 years with a mean of 12.7 years (SD = 6.6) and a median of 14 years. In terms of citizenship status, 11.1% (N = 25) were international students while the rest were U.S. citizens or permanent residents.

Forty-one percent of participants in the young adult sample reported that their parents' total annual income was under \$40,000, while 34% reported their parents' income was between \$40,000 and \$80,000, and 25% reported their parents' income was over \$80,000. 51% of participants' fathers and 47% of participants' mothers had a bachelors degree or higher. Seventy-eight percent of the participants reported that their parents were still married and 9% were divorced. Seventy-eight percent of participants reported having some form of health insurance, with 66% of them covered by their parents' private insurance, 19% covered by student health insurance, and 15% covered by

another form of health insurance. In terms of Grade Point Average (GPA), 67% of participants reported receiving between 3.00 and 4.00 GPA, 29% receiving between 2.00 and 3.00 GPA, and 4% receiving below 2.00 GPA.

Participants in the adolescent sample consisted of 38 Asian Americans participating in youth programs offered by a local agency in a major city in the Northwest. Three (8%) were male and 35 (92%) were female. They ranged in age from 13 to 18 years, with a mean age of 16 years ($SD = 1.3$ years) and a median age of 16. With respect to grade in school, participants in the sample ranged from being in the 7th to 12th grade, with the median in the 11th grade. In terms of ethnicity, 29% ($N = 11$) of participants identified themselves as Vietnamese, 21% ($N = 8$) as Chinese, 21% ($N = 8$) as Multiracial Asian Americans, 16% ($N = 6$) as Filipino, 5% ($N = 2$) as Hmong, 3% ($N = 1$) as Korean, 3% ($N = 1$) as Lao, and 3% ($N = 1$) as Mien. Thirty-two percent of participants described themselves as first-generation (born outside of the United States), 57% as second-generation (born in the United States with parents born outside of the United States), and 11% as third-generation or beyond. The length of residence in the United States ranged from 7 to 18 years with a mean of 14.3 years ($SD = 3.0$) and a median of 15 years. In terms of citizenship status, all participants were U.S. citizens or permanent residents.

Fifty percent of participants in the adolescent sample reported that their parents' total annual income was under \$40,000, while 41% reported their parents' income was between \$40,000 and \$80,000, and 9% reported their parents' income was over \$80,000. Twenty-two percent of participants' fathers and 19% of participants' mothers had a bachelor's degree or higher, while 26% of participants' fathers and 32% of participants'

mothers had a high school degree or equivalent. Seventy-one percent of the participants reported that their parents were still married and 18% were divorced. Ninety percent of participants reported having some form of health insurance, with 58% of them covered by their parents' private insurance and 42% covered by a government health plan. In terms of Grade Point Average (GPA), 82% of participants reported receiving between 3.00 and 4.00 GPA and 18% receiving between 2.00 and 3.00 GPA.

Measures

A 20-page questionnaire was developed to examine help-seeking among Asian American youth for the present study. Item and scale construction were informed by existing literature on help-seeking in Asian Americans and adolescents in general. The following scales were either adapted from existing measures or developed specifically for this study based upon available literature. In addition, the questionnaire was developed in consultation with professionals who have expertise with youth and/or Asian American populations. Furthermore, questionnaire items were revised based upon feedback from a small group of Asian American youth piloting the study questionnaire. Although analyses were not performed on the pilot sample, face validity of the questionnaire items appeared to be adequate based upon feedback from the pilot sample of adolescents and mental health professionals who have familiarity with youth, ethnic minorities, and Asian American populations. Both the adolescent and young adult versions of the questionnaire were essentially the same except for several items that required slight modification to ensure that the questionnaire is developmentally appropriate for the respective age groups. The adolescent version of the questionnaire was slightly abbreviated to shorten

the length of the questionnaire in order to reduce participant burden. The exceptions are noted below.

Demographic Variables

The questionnaire began with a section inquiring about the following demographic variables: gender, age, grade or year in college, parents' marital status, parents' annual income, parents' educational level, ethnicity, length of residence in the United States, country of birth, citizenship status, health insurance coverage, and recent Grade Point Average (GPA) as an index of academic performance.

Acculturation

The Suinn-Lew Asian Self Identity Acculturation Scale (SL-ASIA, Suinn, Ahuna, & Khoo, 1987) was utilized to assess the acculturation level of participants. Questions included "What language can you speak?" and "How do you identify yourself?" A composite acculturation score was calculated by taking the mean of the 21 responses with higher means indicating higher acculturation. In the present study, the Cronbach alpha for this scale was 0.92.

Lifetime, Past Year, and Current Experiences with Treatment or Counseling

All participants were asked whether they have received treatment or counseling for personal, emotional, or behavioral problems ever in their life, in the past year, and currently as a measure of mental health service utilization.

Psychological Distress (Clinical Assessment of Need)

Level of psychological distress in the past month was measured by 12 items that assess depressive and anxiety symptoms. These 12 items comprised the Psychological Distress II scale <<http://www.rand.org/health/surveys/core/mos-qol.pdf>>, a validated

subset of questions from the original, 38-item, self-report Mental Health Inventory (Veit & Ware, 1983). This shorter version was chosen for this study to reduce participant burden without sacrificing reliability. For the purpose of this study, this measure of psychological distress was an index of clinical assessment of need (part of the illness profile) by examining clinical symptoms, although it was assessed via self-report. Questions included the amount of time in the past month that the participant has felt depressed, nervous, tense, anxious or worried, fidgety/restless, and down in the dumps on a scale of 1 to 6, from “all of the time” to “none of the time.” After reverse coding, the items were summed and a mean was generated with higher means indicating higher levels of psychological distress in the past month. In the present study, the Cronbach alpha for this scale was 0.86.

Problem Severity (Perceived, subjective need)

This scale consisted of twelve categories of problems representing a range of problems pertinent to youth: *problems or conflicts with my parents, other problems in my family, problems with my friends, classmates, or peers; problems with dating or with my boy/girlfriends (romantic relationships), problems with school, feeling depressed or moody, feeling anxious or worried, feeling pressure to be successful, dissatisfaction with my body, medical or physical health problems, drug and/or alcohol problems, and problems related to my racial/ethnic background.* All participants were asked to rate the level of severity of each problem as it had affected them in the past year on a scale of 1 (*not a problem*) to 5 (*a very big problem*). Items were summed and a mean was generated for the total problem severity scale with higher scores indicating greater perceived problem severity. This measure is adapted from a scale used by Gim,

Atkinson, Whiteley (1990) in their study assessing the severity of 24 problems for Asian American college students. For the purpose of this study, this measure of problem severity is an index of subjectively perceived need, as it allows participants to identify what they perceive as a problem. In both samples of this study, reliability analysis of the twelve items suggests that they form a reliable scale ($\alpha = 0.83$).

Sources of Help Sought

After rating problem severity, all participants were asked to specify where they sought help for each of the problem types that they experienced in the past year. Participants are asked to indicate all the sources of help that they sought for each problem type from a choice of 16 different help sources including informal (e.g., parents, other family members, friends, significant others), collateral services (e.g., faculty, doctors), and formal mental health services (e.g., mental health professionals, Teen Health or Wellness Center). This scale was developed to assess service selection.

Perceived Helpfulness of Sources of Help Sought

This scale was adapted from the Social Support Rating Scale (Cauce, Felner, & Primavera, 1982) to assess how helpful the sources of help sought were to the participant on a 5-point scale from very unhelpful to very helpful. Higher scores indicated higher perceived helpfulness. In the present study, reliability analysis of the 15 items suggests that they form a reliable scale ($\alpha = 0.89$).

Willingness to Seek Professional Mental Health Help

This measure asked all participants to imagine that they have each of the problems mentioned earlier in the Problem Severity section and then to rate their willingness to see a counselor or other mental health professional for each problem type

(on a 5-point scale with higher scores indicating more willingness to seek help). This measure was adapted from a scale used by Gim, Atkinson, and Whiteley (1990) in their study assessing the severity of 24 problems for Asian American college students and their willingness to see a counselor for each problem. This measure was developed to gauge attitudes toward seeking professional psychological help. In the present study, the Cronbach alpha for this scale was .92.

Young adult participants were also asked two related questions about their willingness to see non-mental health providers (e.g., school staff, doctors) for non-psychological problems (e.g., academic, medical) to explore whether their willingness to seek help differs depending on the nature of the problem and the service provider.

Sources and Perceived Level of Information about Mental Health Problems and Services

This measure consisting of 12 items was developed for this study to explore where Asian Americans obtain mental health information. Participants in the young adult sample were asked to rate how much information they have learned about mental health problems and mental health services from each of the 12 sources presented (e.g., parents, school, television) on a scale of 1 to 5 (from “no information learned from this source” to “learned a lot of information from this source”). Higher scores indicated more perceived information gained from each source. In the young adult sample, the Cronbach alpha for this scale was .85. Participants in the adolescent sample were not administered this measure to shorten the length of the questionnaire in order to reduce participant burden.

Perceived Facilitators to Seeking Professional Mental Health Help

This scale of 34 items was developed for this study based upon the available literature on potential facilitators to help-seeking for youth and Asian Americans in general. All participants were asked to indicate to what extent each potential facilitator (if it was true) would make it more likely for them to seek help from a counselor or mental health professional if they needed help for an emotional or personal problem on a scale from 1 to 5 (from “I would be much less likely to seek help” to “I would be much more likely to seek help”). Higher scores indicated that a potential facilitator is perceived to be a facilitator leading to a higher likelihood of professional help-seeking.

A principal-components analysis of the facilitator items with varimax rotation resulted in two subscales: Cultural Facilitators ($\alpha = 0.85$) and Service Facilitators ($\alpha = 0.93$). Only items loading .50 or above on a given factor were included in the scale and thus the number of facilitator items were reduced to 16. To generate subscales, items that loaded on a given factor were summed and a mean was generated for each subscale.

Perceived Barriers to Seeking Professional Mental Health Help

This scale of 37 items was developed for this study based upon the available literature on potential barriers to help-seeking for youth and Asian Americans in general. All participants were asked to indicate to what extent each potential barrier would stop them from seeking help from a counselor or mental health professional if they needed help for an emotional or personal problem by indicating how true is statement is for them on a scale of 1 to 5 from “not at all true for me” to “extremely true for me.” Higher scores indicated a higher level of perceived barriers to professional help-seeking.

A principal-components analysis of the barrier items with varimax rotation resulted in four subscales: Stigma ($\alpha = 0.86$), Cultural Barriers ($\alpha = 0.66$), Structural Barriers ($\alpha = 0.74$), and Perception Barriers ($\alpha = 0.81$). Only items loading .50 or above on a given factor were included in the scale and thus the number of barrier items were reduced to 23. To generate subscales, items that loaded on a given factor were summed and a mean was generated for each subscale and the total scale ($\alpha = 0.87$).

Belief in the Model Minority Myth

This scale was developed by the primary investigator for this study to assess one's belief in the model minority myth as it pertains to Asian Americans. The 18 items of this scale pertained to common aspects of the model minority myth. Participants were asked to rate how much they agree with each statement. Higher scores indicate a stronger belief in the model minority myth as it pertains to Asian Americans.

A principal-components analysis of the model minority myth items with varimax rotation resulted in three subscales: Achievement Myth ($\alpha = 0.89$), Problems Myth ($\alpha = 0.83$), and American Dream Myth ($\alpha = 0.72$). To generate subscales, items that loaded on a given factor were summed and a mean was generated for each subscale.

Somatic Complaints

Frequency of somatic complaints in the past month was measured on a scale of 1 to 6, from "all of the time" to "none of the time" using 13 questions to assess a range of typical physical symptoms such as sleep problems, bodily pains, headaches, and stomach problems. After reverse coding, the items were summed and a mean was generated with higher means indicating higher levels of somatic complaints in the past month. Items were adapted from the Medical Outcomes Study: Measures of Quality of Life

<http://www.rand.org/health/surveys/core/core-instrument.pdf>, a measure of physical health used in a study of patients with chronic conditions. In this study, the Cronbach alpha for this scale was 0.85.

Confidentiality Concerns

Given this study's consideration of developmental issues in help-seeking, all participants were asked whether they think young people over the age of 13 should have the right to seek treatment or services from a counselor or mental health professional without the permission of their parents. The purpose of this question is to explore the participant's opinion regarding age of consent for mental health services. Young adult participants were additionally asked the following question: If a college student (over the age of 18) was in critical condition involving an emotional, personal, and/or behavioral problem(s), do you think the college administration or mental health professionals on campus should notify the parents of the college student?

Hypotheses

Two models were tested for the present study as a comprehensive examination of the various factors associated with help-seeking among Asian American adolescents and young adults. The present study examined the relationships among various factors that have been proposed in previous research to be associated with help-seeking including the illness profile, predisposing characteristics, and barriers and facilitators to professional help-seeking. The present study aimed to examine how these various factors together predicted help-seeking attitudes (willingness to seek professional mental health help) and actual help-seeking behaviors (mental health treatment in the past year).

In the first set of regression analyses (Figure 1: Model #1), contributions that the predisposing factors, illness profile, and barriers and facilitators make to help-seeking attitudes were examined. In the second set of regression analyses (Figure 2: Model #2), the predictive effects of predisposing factors, illness profile, and barriers and facilitators to help-seeking behaviors in the past year were examined.

The following hypotheses were tested:

1. Being older and female
2. Higher acculturation
3. Having past treatment experience (lifetime)
4. Higher levels of problem severity and psychological distress
5. Having higher levels of perceived mental health information
6. Perceiving a higher level of facilitators
7. Perceiving a lower level of barriers
8. Endorsing a lower level of the model minority myth

is associated with greater willingness to seek professional mental health help and seeking professional mental health help in the past year.

The direction of the aforementioned hypotheses was guided by previous research. No specific hypotheses were made regarding ethnic group differences in terms of the two outcome variables because there has been very limited research examining this issue. Parent income was included as a control variable; therefore, no specific hypothesis was made regarding its effect on the two outcomes.

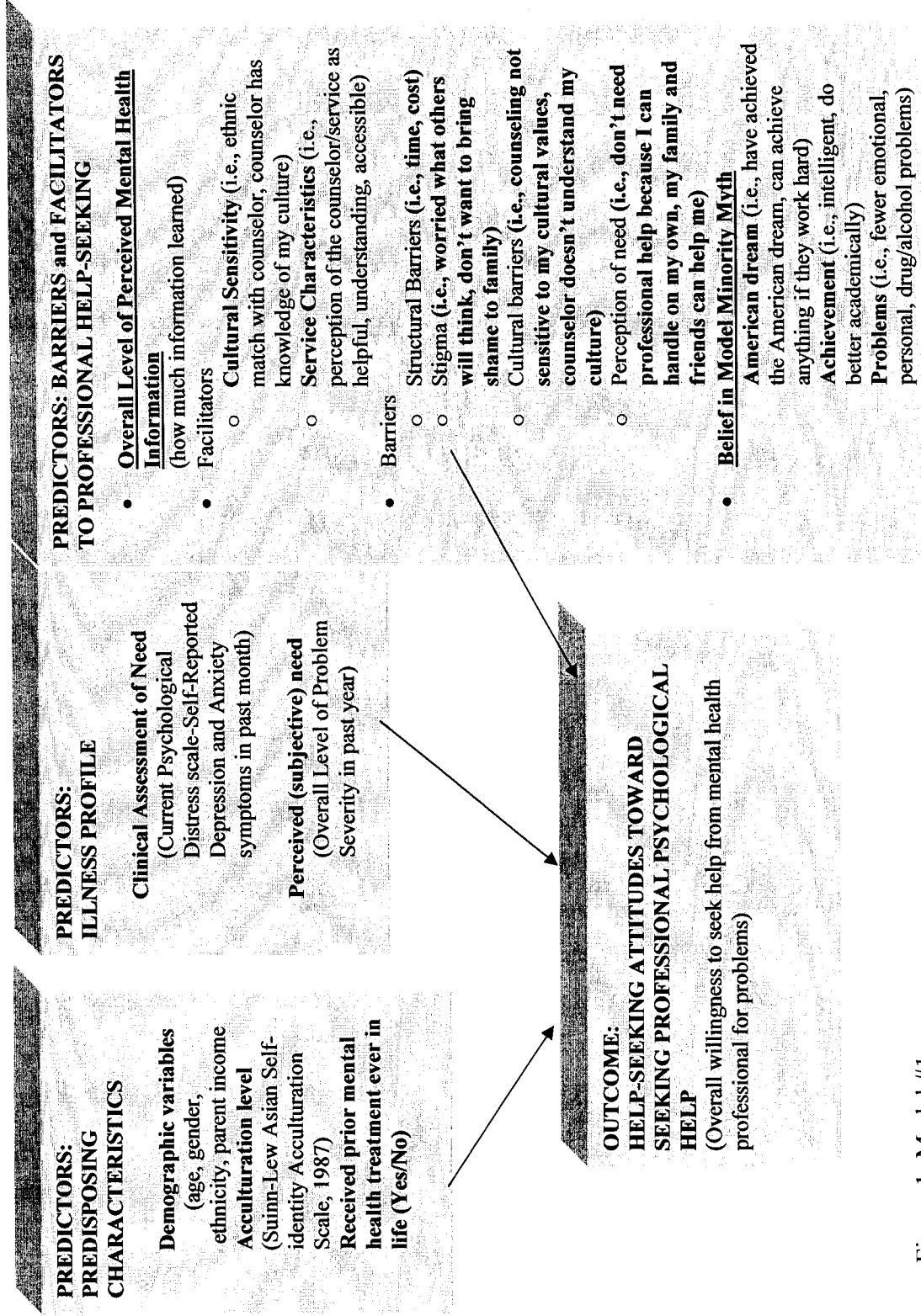


Figure 1: Model #1

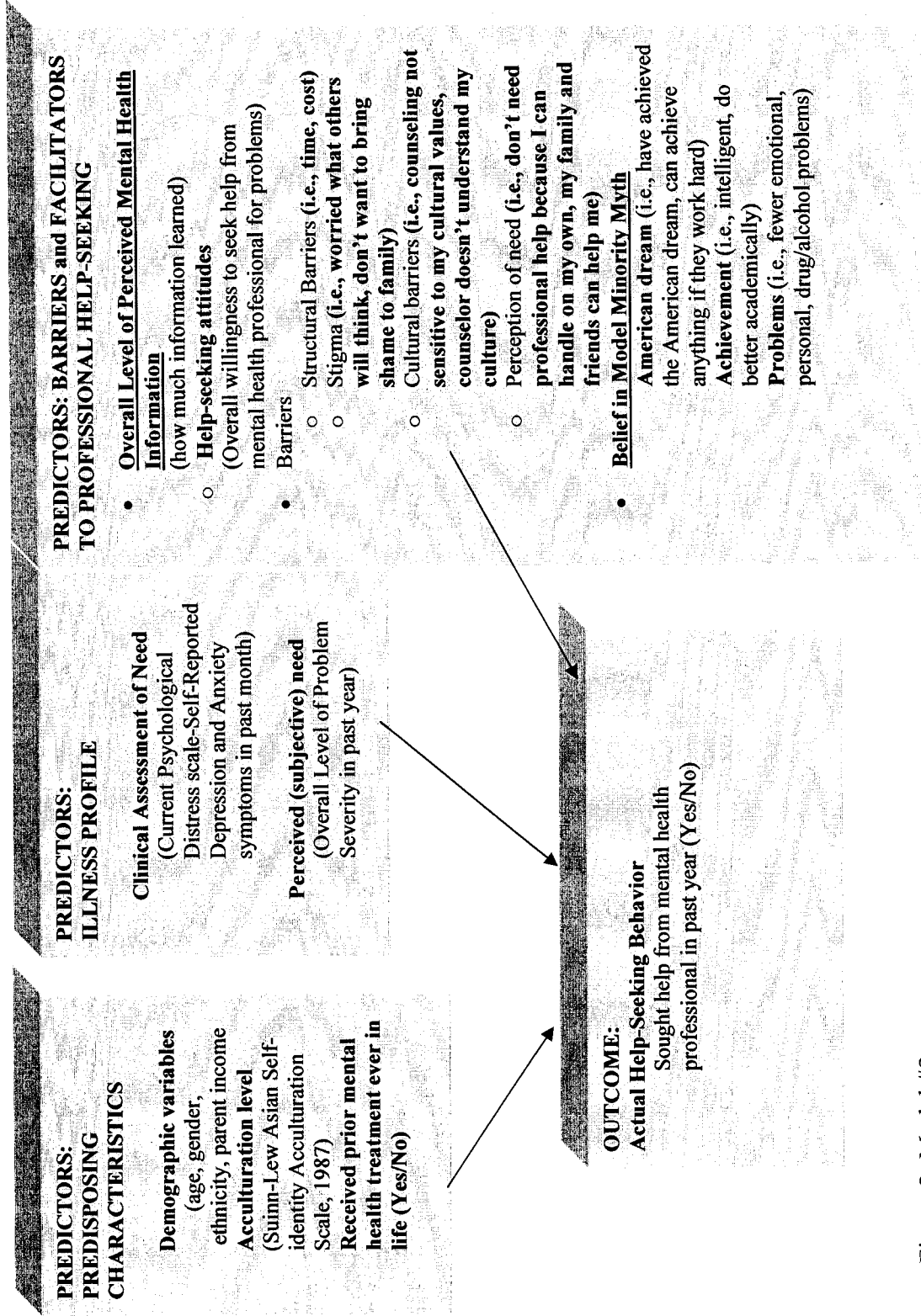


Figure 2: Model #2

Analytic Strategy

Given that the present study developed and adapted most of the measures used and thus, the measures have unproven psychometric properties, the analytic plan started with a reliability analysis of all measures used to evaluate the internal consistency of each measure. Furthermore, factor analyses were performed to identify potential subscales within larger scales. Regression analysis was used to investigate the main hypotheses. The aforementioned analytic plan applied to the young adult sample. Given the small sample size of adolescent participants, the proposed analytic plan was not performed for that sample. However, descriptive statistics and significant relationships are outlined.

Chapter 3

Results

Measurement Development

New measures were developed in consultation with professionals who have expertise with Asian American populations. Furthermore, questionnaire items were revised based upon feedback from a small group of Asian American youth piloting the study questionnaire. Although analyses were not performed on the pilot sample, face validity of the questionnaire items appeared to be adequate based upon feedback from the pilot sample of adolescents and consulting mental health professionals.

Belief in the Model Minority Myth

A key factor in the comprehensive help-seeking model examined in this study was belief in the model minority myth. Currently, there is no standardized measure in the field assessing belief in the model minority myth. Thus, a scale was developed by the primary investigator for this study to assess one's belief in the model minority myth as it pertains to Asian Americans. The major facets of the model minority myth involve the academic achievement of Asian Americans, the belief in the American dream such that Asian Americans can achieve success through hard work, and the perception that Asian Americans have relatively less problems than other Americans. The 18 items of this scale pertained to common aspects of the model minority myth as discussed in Ronald Takaki's book A Different Mirror: A History of Multicultural America (1993).

The responses for the 18 items were factor analyzed in order to consolidate them into a smaller set of factors. A principal-components factor analysis with a varimax rotation was conducted for this purpose resulting in a three-factor solution. The results of

the factor analysis for participants' ratings of the belief in the model minority myth are reported in Table 1. With a loading of .50 or above as a criterion for including an item in a factor, the three factors were identified as Achievement Myth ($\alpha = 0.89$), Problems Myth ($\alpha = 0.83$), and American Dream Myth ($\alpha = 0.72$). To generate the subscales, items that loaded on a given factor were summed and a mean was generated for each subscale.

Table 1: Factor Loadings for Belief in the Model Minority Myth Items

| | Component | | |
|--|-----------|-------|------|
| | 1 | 2 | 3 |
| better at math/science | .751 | .173 | .084 |
| more hard working | .741 | .104 | .144 |
| more intelligent | .732 | .203 | .178 |
| do academically better | .727 | .114 | .213 |
| have more discipline | .697 | .097 | .126 |
| put work before pleasure | .672 | .028 | .162 |
| less trouble w/ law | .593 | .358 | .206 |
| less trouble w/ school rules | .589 | .344 | .174 |
| highly educated | .570 | -.024 | .537 |
| fewer emotional problems | .135 | .824 | .011 |
| fewer drug/alcohol problems | .223 | .778 | .021 |
| fewer personal problems | .106 | .769 | .158 |
| fewer medical problems | .182 | .720 | .050 |
| need less outside/government help | .063 | .556 | .393 |
| achieved American dream | .308 | .034 | .748 |
| treated fairly in U.S. | -.046 | .312 | .663 |
| can achieve anything if work their hardest | .250 | .019 | .658 |
| financially successful | .415 | .139 | .620 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Facilitators to Professional Help-seeking

This scale was developed for the present study based upon the available literature on potential facilitators to help-seeking for youth and Asian Americans in general. The

responses for the items were factor analyzed in order to consolidate them into a smaller set of factors. A principal-components factor analysis with a varimax rotation was conducted for this purpose resulting in a two-factor solution. The results of the factor analysis for participants' ratings of facilitators to help-seeking are reported in Table 2. With a loading of .50 or above as a criterion for including an item in a factor, the two factors were identified as Service Facilitators and Cultural Facilitators. To generate the subscales, items that loaded on a given factor were summed and a mean was generated for each subscale.

Table 2: Factor Loadings for Facilitators to Professional Help-seeking

| | Component | |
|---|-----------|------|
| | 1 | 2 |
| counselor keeps my business private | .914 | .116 |
| counselor is understanding | .891 | .207 |
| counselor is comfortable to speak with | .887 | .168 |
| meet individually | .840 | .236 |
| free counseling | .753 | .160 |
| something in common w/counselor | .711 | .240 |
| someone I trust recommends a specific counselor | .709 | .242 |
| family or friend found counseling helpful | .596 | .293 |
| my choice to seek help | .584 | .308 |
| counselor is more like a mentor/role model | .553 | .453 |
| no appt necessary | .532 | .477 |
| counselor speak same native language | .053 | .837 |
| counselor is same ethnic bkgd | .131 | .789 |
| agency has bilingual/bicultural staff | .209 | .774 |
| counselor has knowledge of my culture | .414 | .680 |
| counseling is adapted to fit cultural values | .428 | .668 |

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.

Barriers to Professional Help-seeking

This scale was developed for the present study based upon the available literature on barriers to help-seeking for youth and Asian Americans in general. The responses for the items were factor analyzed in order to consolidate them into a smaller set of factors. A principal-components factor analysis with a varimax rotation was conducted for this

purpose resulting in a four-factor solution. The results of the factor analysis for participants' ratings of barriers to help-seeking are reported in Table 3. With a loading of .50 or above as a criterion for including an item in a factor, the four factors were identified as Stigma Barriers, Perception of Need Barriers, Structural Barriers, and Cultural Barriers. To generate the subscales, items that loaded on a given factor were summed and a mean was generated for each subscale.

Table 3: Factor Loadings for Barriers to Professional Help-seeking

| | Component | | | |
|--|-----------|-------|-------|-------|
| | 1 | 2 | 3 | 4 |
| embarrass my family if others know | .798 | .056 | -.016 | .149 |
| hurt job opp | .713 | -.014 | .147 | .124 |
| fear being judged or criticized by therapist | .705 | .070 | .309 | .076 |
| don't want to disappoint parents | .701 | .078 | .186 | .099 |
| worried what friends think if know | .682 | .113 | -.112 | .091 |
| ashamed to admit need help | .661 | .108 | .295 | -.055 |
| put me on meds | .629 | .048 | .145 | .079 |
| sign of weakness and failure | .609 | .256 | .269 | .043 |
| handle prob on my own | .009 | .776 | .071 | .095 |
| can control my own feelings and feel better | .184 | .741 | .188 | .112 |
| problems will go away on own | .275 | .700 | -.012 | .129 |
| problems not serious enough | .052 | .664 | -.064 | -.018 |
| relax and feel better without help | .067 | .640 | .233 | .142 |
| parents, family, and friends can help me | -.008 | .629 | .059 | -.041 |
| transportation problem | .074 | -.047 | .805 | -.035 |
| too much trouble to get appt | .139 | .045 | .604 | .360 |
| health problem so not need help | .092 | -.030 | .584 | .242 |
| heard therapy is not helpful | .184 | .054 | .580 | -.010 |
| cannot afford | .180 | .207 | .567 | .063 |
| no time | .127 | .252 | .558 | .058 |
| not understand my culture | .214 | .195 | .083 | .777 |
| parents not speak english | .001 | .021 | .069 | .761 |
| not sensitive to cultural values | .302 | .117 | .283 | .589 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Descriptive Statistics

Table 4: Means and Standard Deviations of Predictor Variables

| Variable | Mean | SD | Description |
|------------------------------------|-------------|-----------|--|
| Acculturation | 2.73 | .68 | Bicultural, leaning toward Asian identity |
| Problem Severity | 2.20 | .61 | A little bit of a problem |
| Psychological Distress | 2.80 | .86 | Some of the time, out of scale from 1 to 6 with 6 indicating higher psychological distress |
| Level of mental health information | 2.46 | .71 | I learned a little to some information from various sources |
| Cultural facilitators | 3.23 | .72 | I would be neither more likely or less likely to seek help. |
| Service facilitators | 3.74 | .75 | I would be somewhat more likely to seek help. |
| Stigma barriers | 2.03 | .82 | Barrier a little true for me |
| Cultural barriers | 2.20 | .93 | Barrier a little true for me |
| Structural barriers | 1.95 | .71 | Barrier a little true for me |
| Perception of need barriers | 3.04 | .86 | Barrier somewhat true for me |
| American dream myth | 3.06 | .73 | I neither agree or disagree with myth. |
| Achievement myth | 3.30 | .72 | “I neither agree or disagree with myth” to “I mostly agree with myth.” |
| Problems myth | 2.50 | .76 | “I mostly disagree with myth” to “I neither agree or disagree with myth.” |
| Willingness to seek help | 2.41 | .89 | A little willing to somewhat willing |

Note: All scales are from 1 to 5 with 5 indicating higher scores unless otherwise specified.

Acculturation

Overall, participants in the young adult sample described themselves as bicultural, leaning toward Asian self-identity ($M=2.73$, $SD=0.68$), on a scale of 1 to 5 with higher scores indicating higher levels of acculturation. Likewise, the participants in the

adolescent sample identified themselves as bicultural, leaning toward Asian self-identity ($M=2.89$, $SD=0.38$).

Lifetime, Past Year, and Current Experiences with Mental Health Treatment

Table 5: Lifetime, Past Year, and Current Experiences with Mental Health Treatment or Counseling

| | Lifetime | Past Year | Current |
|---------------------------------|-----------------|------------------|----------------|
| Adolescents (N=38) | 29% (N=11) | 29% (N=11) | 11% (N=4) |
| Young adults (N=224) | 17% (N=37) | 13% (N=28) | 1% (N=3) |

Psychological Distress

Participants in the young adult sample reported experiencing depressive and anxiety symptoms “some of the time” in the past month ($M=2.80$, $SD=0.86$), on a scale from 1 to 6 with higher scores indicating a higher level of psychological distress.

Participants in the adolescent sample also reported the same pattern ($M=2.56$, $SD=0.97$).

Problem Severity (Perceived, subjective need)

For the young adult sample, Asian American participants reported “a little bit of a problem” in terms of level of overall problem severity in the past year ($M=2.20$, $SD=.61$) on a scale from 1 to 5, with higher scores indicating that they perceived greater problem severity. Asian American young adults in this study reported that their biggest problem was feeling pressure to be successful ($M=3.30$, $SD=1.14$), which was “somewhat of a problem for them.” Participants in the adolescent sample reported the same pattern. Asian American adolescents reported “a little bit of a problem” in terms of level of overall problem severity ($M=2.16$, $SD=.62$) and feeling pressure to be successful ($M=2.95$, $SD=1.29$) to be their most severe problem. Otherwise, other problems were

rated between “not a problem for me” to “somewhat of a problem” for Asian American young adults and adolescents in the present study.

Table 6: Problem Severity

| Problem Type | Problem Severity Young adult Mean | Young adult SD | Problem Severity Adolescent Mean | Adolescent SD |
|---|--|----------------------|---|------------------|
| Feeling Pressure to be successful | 3.30 | 1.14 | 2.95 | 1.29 |
| Problems with school | 2.85 | 1.14 | 2.62 | 1.23 |
| Feeling anxious or worried | 2.56 | 1.12 | 2.32 | 1.23 |
| Dissatisfaction with my body | 2.56 | 1.10 | 2.46 | 1.28 |
| Feeling depressed | 2.50 | 1.12 | 2.32 | 1.11 |
| Other problems in my family | 2.22 | 1.17 | 2.62 | 1.14 |
| Problems with dating or my romantic relationships | 2.20 | 1.19 | 2.05 | 1.27 |
| Problems with my friends or peers | 1.95 | .97 | 1.89 | .84 |
| Problems with my parents | 1.93 | .99 | 2.70 | .94 |
| Medical problems | 1.76 | .89 | 1.73 | 1.07 |
| Problems related to my racial/ethnic background | 1.41 | .74 | 1.24 | .49 |
| Drug and/or alcohol problems | 1.22 | .57 | 1.12 | .31 |

Sources of Help and Perceived Helpfulness

Participants in the adolescent sample sought help from friends, other family members, parents, and school staff (in descending order) for their problems in the past year. Friends were the most widely sought source of help and perceived to be most helpful ($M=4.46$, $SD=.89$) on a scale from 1 to 5, with higher scores indicating higher perceived helpfulness. 11 of the 38 adolescents reported that they have sought help from a mental health professional in the past year and perceived them to somewhat helpful ($M=3.62$, $SD=1.12$). As a whole, adolescents rated the various help sources that they received in the past year as somewhat helpful ($M=3.91$, $SD=.82$).

Participants in the young adult sample sought help from friends, parents, significant others, and other family members (in descending order) for their problems in the past year. Similar to the adolescent sample, friends were the most widely sought source of help for young adult participants. Interestingly, parents were also a common source of help for these young adults. Both sources were perceived to be somewhat helpful. As a whole, young adult participants rated the various help sources that they received in the past year as somewhat helpful ($M=3.70$, $SD=.81$). Among young adult participants who sought help from a mental health professional, they rated the help that they received as somewhat unhelpful ($M = 2.80$, $SD = 0.77$).

Table 7: Sources of Help and Perceived Helpfulness

| Source of Help | Percentage of Young adult Participants (who sought help from each source) | Perceived Helpfulness (Mean, SD) |
|-----------------------------|---|----------------------------------|
| Friends | 87.5% | 3.53, 1.30 |
| Parents | 64.3% | 3.53, 1.55 |
| Significant others | 48.2% | 3.07, 1.22 |
| Other family members | 46.4% | 3.20, 1.37 |
| Faculty on campus | 23.7% | 3.00, 1.00 |
| Mental health professionals | 12.5% | 2.80, 0.77 |
| Doctors/medical providers | 8.9% | 2.60, 0.99 |
| Religious persons | 7.1% | 2.60, 0.83 |

Willingness to seek professional help

Overall, participants in the young adult sample reported that they are “a little willing to somewhat willing” ($M=2.41$, $SD=0.89$) to seek help from a counselor or other mental health professional for the various problem types, on a scale from 1 to 5 with higher scores indicating more willingness to seek professional help. Among the various problem types, they reported that they are most willing to seek professional mental health help for problems with school ($M=3.13$, $SD=1.25$). Likewise, young adult participants

were somewhat willing to mostly willing to seek help from faculty on campus (\underline{M} =3.59, \underline{SD} =1.22) if they were troubled by an academic problem. Likewise, they were mostly willing to seek help from a doctor or other medical provider (\underline{M} =3.88, \underline{SD} =1.10) if they were troubled by a medical problem. No significant gender differences were found for these two situations.

Overall, participants in the adolescent sample reported that they are somewhat willing (\underline{M} =2.89, \underline{SD} =0.97) to seek help from a counselor or other mental health professional for the various problem types. Similar to the young adult sample, this sample of adolescents also reported that they are most willing to seek help for problems with school (\underline{M} =3.82, \underline{SD} =1.22).

Table 8: Willingness to seek professional mental health help

| Problem Type | Willingness to seek help Young adult Mean | Young adult SD | Willingness to seek help Adolescent Mean | Adolescent SD |
|---|--|---------------------------|---|--------------------------|
| Problems with my parents | 2.08 | 1.10 | 2.76 | 1.26 |
| Other problems in my family | 2.09 | 1.04 | 2.94 | 1.25 |
| Problems with my friends or peers | 2.17 | 1.12 | 3.00 | 1.21 |
| Problems with dating or my romantic relationships | 2.05 | 1.16 | 2.59 | 1.42 |
| Problems with school | 3.13 | 1.25 | 3.82 | 1.22 |
| Feeling Depressed | 2.53 | 1.24 | 2.68 | 1.30 |
| Feeling anxious or worried | 2.42 | 1.19 | 2.65 | 1.20 |
| Feeling Pressure to be successful | 2.56 | 1.25 | 2.94 | 1.25 |
| Dissatisfaction with my body | 1.93 | 1.12 | 2.21 | 1.20 |
| Medical problems | 2.86 | 1.47 | 3.35 | 1.37 |
| Drug and/or alcohol problems | 2.65 | 1.51 | 3.09 | 1.60 |
| Problems related to my racial/ethnic background | 2.26 | 1.23 | 3.09 | 1.46 |

Sources and Perceived Level of Information about Mental Health Problems and Services

In the young adult sample, participants reported that they have learned the most information about mental health problems and services through classes at school, while the other sources contributed less information. Overall, young adult participants indicated that they “learned a little to some information” from various sources ($M=2.46$, $SD=0.71$), on a scale from 1 to 5 with higher scores indicating a higher level of perceived information.

Table 9: Perceived level of mental health information gained from each source

| Source of Information | Mean | SD |
|---|-------------|-----------|
| Classes at school | 3.24 | 1.13 |
| My friends or peers | 2.75 | 1.25 |
| Internet | 2.70 | 1.23 |
| TV shows or movies | 2.63 | 1.11 |
| News programs | 2.59 | 1.08 |
| My parents or family | 2.55 | 1.32 |
| Magazines or newspapers | 2.46 | 1.14 |
| Doctors or other medical providers | 2.42 | 1.15 |
| Commercials | 2.33 | 1.07 |
| TV talk shows | 2.31 | 1.14 |
| My own experiences with mental health professionals or services | 1.84 | 1.08 |
| Self-help books | 1.82 | 1.05 |

Perceived Facilitators to Seeking Professional Mental Health Help

Results of the young adult sample revealed several service characteristics that serve to facilitate seeking professional mental health help or in other words, make it “somewhat more likely” for someone to seek help. Service facilitators such as free services make it more inviting for participants to seek help by making it easier and more palatable for them to access services. For the young adult participants, cultural facilitators such as cultural sensitivity and ethnic match with therapist appeared to matter

less to them and did not serve to either deter or facilitate professional help-seeking.

Participants indicated that cultural facilitators would neither make them more likely or less likely to seek help. The adolescent sample revealed the same pattern of findings in terms of perceived facilitators to professional help-seeking.

Table 10: Perceived Facilitators to Professional Mental Health Help-Seeking

| Type of Facilitator • sample items | Young adult Mean | Young adult SD | Adolescent Mean | Adolescent SD |
|---|------------------|----------------|-----------------|---------------|
| Service facilitator <ul style="list-style-type: none"> • if I could see a counselor without an appointment • if someone I know had found counseling helpful • if I could see the counselor for free • if my counselor is comfortable to speak with | 3.74 | 0.75 | 3.86 | 0.67 |
| Cultural facilitator <ul style="list-style-type: none"> • if my counselor is the same ethnic or cultural group as me • if my counselor has knowledge about my culture • if the counseling provided is adapted to fit my cultural values • if the place where I seek counseling has bilingual or bicultural staff | 3.23 | 0.72 | 3.17 | 0.64 |

Perceived Barriers to Professional Mental Health Help-Seeking

Young adult participants reported that their biggest barrier to professional help-seeking was perception of need ($M=3.04$, $SD=.86$), although perception of need was only rated to be somewhat true for them. The other barrier types including stigma, cultural barriers, and structural barriers were rated to be a little true for them. The adolescent sample revealed the same pattern of findings in terms of perceived barriers to professional help-seeking.

Table 11: Perceived Barriers to Professional Mental Health Help-Seeking

| Type of Barrier • sample items | Young adult Mean | Young adult SD | Adolescent Mean | Adolescent SD |
|--|-------------------------|-----------------------|---------------------------------------|----------------------|
| Perception of need barrier <ul style="list-style-type: none"> do not need to seek help because my problems are not serious enough my problems will go away on their own it is enough to get help from my parents, family, and friends can handle problems on my own if I relax more, I should feel better on my own without seeking help | 3.04 | .86 | 3.03 | .91 |
| Cultural barrier <ul style="list-style-type: none"> counselors will not understand my problems because they do not understand my culture Counseling is not going to work for me because it is not sensitive to my cultural values and beliefs. | 2.20 | .93 | 2.15 | .84 |
| Stigma barrier <ul style="list-style-type: none"> Worried what my friends will think if they know I am seeing a counselor Worried others will know because I don't want to bring shame to my parents or family Sign of weakness or failure to seek help for emotional problems Ashamed to admit that I need help for emotional problems | 2.03 | .82 | 1.86 | .70 |
| Structural barrier <ul style="list-style-type: none"> Cannot afford to see a counselor Too busy and don't have time Don't have transportation or inconvenient to get help Have to wait too long for an appointment | 1.95 | .71 | Items not administered to this sample | N/A |

Belief in the Model Minority Myth

Overall, participants in the young adult sample endorsed “I neither agree or disagree with myth” to “I mostly agree” with the Achievement myth ($\underline{M}=3.30$, $\underline{SD}=0.72$), on a scale from 1 to 5 with higher scores indicating a higher level of belief in the model minority myth as it pertains to Asian Americans. The achievement myth portrays Asian Americans as having a high rate of academic achievement. Participants endorsed “I neither agree or disagree” about the American dream myth ($\underline{M}=3.06$, $\underline{SD}=0.73$), which implies that if Asian Americans work hard, they can achieve anything. They expressed “I mostly disagree” to “I neither agree or disagree” with the myth that Asian Americans have less problems ($\underline{M}=2.50$, $\underline{SD}=0.76$), suggesting that they do not believe that Asian Americans have fewer problems. The adolescent sample revealed a similar pattern of findings in terms of belief in the model minority myth.

Table 12: Belief in the Model Minority Myth

| Subcomponent of Model Minority Myth • sample items | Young adult Mean | Young adult SD | Adolescent Mean | Adolescent SD |
|---|------------------|----------------|-----------------|---------------|
| Achievement myth • Asian Americans are better at math and science compared to others • Are highly educated • Are more intelligent • Do better academically | 3.30 | 0.72 | 3.24 | 0.72 |
| American Dream myth • Asian Americans have achieved the American dream • Are treated fairly in the U.S. • Can achieve anything if they work hard | 3.06 | 0.73 | 3.20 | 0.64 |
| Problems Myth • Asian Americans have fewer emotional problems • Fewer personal problems • Fewer drug or alcohol problems | 2.50 | 0.76 | 2.22 | 0.83 |

Somatic Complaints

In general, participants in the young adult sample reported experiencing somatic complaints “a little to some of the time” in the past month ($M=2.63$, $SD=0.85$), on a scale from 1 to 6 with higher scores indicating a higher level of somatic complaints. Participants in the adolescent sample also reported the same pattern ($M=2.65$, $SD=0.86$).

Confidentiality Concerns

When the adolescent participants were asked whether young people over the age of 13 should have the right to seek treatment or services from a counselor or mental health professional without the permission of their parents, 95% of the sample responded “yes.” In the young adult sample, 73% of participants agreed with the statement. When young adult participants were asked whether the college administration or mental health professionals on campus should notify the parents of the college student if he or she was in critical condition involving an emotional, personal, and/or behavioral problem(s), 54% of them responded “yes.” There were no significant gender differences in the responses to these two questions ($\chi^2(1)=1.26$, $p=.168$) and ($\chi^2(1)=2.06$, $p=.098$), respectively.

Correlations

First, correlational analyses were performed to assess the potential concern for multicollinearity in the main regression analyses. The correlation matrix for the young adult (Table 13 and Table 14) sample revealed low to moderate correlations among the predictor variables. None of the predictor variables were highly correlated. The highest correlation between two predictor variables was $r = .59$. These results reduced the possibility of having to deal with the problem of multicollinearity in the primary analyses. Thus, all of the predictor variables were used to predict the outcome variable in

the regression analyses. Decisions regarding which predictor variables to test in the conceptual models were determined a priori.

Among the many significant relationships found between the study variables in the young adult sample, willingness to seek professional help (the outcome variable) was positively correlated to problem severity, psychological distress, perception of cultural facilitators, perception of service facilitators, perception of stigma barriers, and level of perceived information about mental health services/problems. However, willingness to seek professional help was negatively correlated with parent income and endorsement of perception of need barriers. Willingness to seek professional help was not significantly correlated with age, acculturation, perception of structural barriers, perception of cultural barriers, and belief in the three subcomponents of the model minority myth as it pertains to Asian Americans. Significant correlations were also found between the various predictor variables. The correlation matrix (Table 13 and 14) for the young adult sample has been provided to view the various significant correlations; however they will not be outlined here. The following variables were used to predict willingness to seek professional mental health help in the primary analyses: age, parent income, acculturation, problem severity, psychological distress, perception of cultural facilitators, perception of service facilitators, perception of stigma barriers, perception of structural barriers, perception of need barriers, perception of cultural barriers, level of perceived mental health information, belief in the achievement myth, belief in the problem myth, and belief in the American dream myth.

The correlation matrix for the adolescent sample revealed low to moderate correlations among the predictor variables, although there were fewer significant

relationships found among the predictor variables. Willingness to seek professional help (the outcome variable) was positively correlated to overall problem severity and perception of service facilitators. Age was positively correlated with acculturation level, but negatively correlated with the perception of cultural barriers. Acculturation level was also found to be negatively correlated with belief in the achievement myth. As expected, psychological distress was positively correlated with problem severity. Cultural facilitators were positively correlated with perception barriers suggesting that those who perceive that they do not need professional help may be more likely to seek help if cultural facilitators are put into place. Perception of need barriers were also positively correlated with belief in the achievement myth suggesting that the more one believes that Asian Americans excel academically, the more one believes that they do not need professional help because they can take care of problems on their own. Perception of cultural barriers to help-seeking is positively correlated with perception of stigma. Belief in the problem myth was negatively correlated with parent income. The different components of the model minority myth were positively correlated with each other.

Due to the significant relationship ($r = .40, p < .01$) between overall willingness to seek professional help and overall problem severity in the adolescent sample, this relationship was examined more closely to explore any significant relationships between severity of the different problem types and willingness to seek professional mental health help for the problem types. Notably, willingness to seek professional help for problems related to racial/ethnic background was positively related to severity of problems with parents ($r = .32, p < .05$), family problems ($r = .29, p < .05$), problems with romantic relationships ($r = .40, p < .01$), feeling depressed ($r = .35, p < .05$), feeling anxious ($r =$

.44, $p < .01$), and feeling pressure to be successful ($r = .32$, $p < .05$). In other words, those who reported higher severity of interpersonal and mood problems reported more willingness to seek professional help for problems related to racial/ethnic background. In addition, severity of family problems ($r = .46$, $p < .01$) and severity of feeling anxious ($r = .40$, $p < .01$) were positively correlated with willingness to seek professional help for problems with school. Moreover, severity of feeling depressed ($r = .28$, $p < .05$) and anxious ($r = .46$, $p < .01$) was positively correlated with willingness to seek professional help for medical problems.

Table 13: Intercorrelations of Study Variables for the Adult Sample

| | | Correlations | | | | | | | | | |
|-------------------------------|---------------------|-------------------------------|---------|---------------|---------------|------------------|------------------------|----------------------|---------------------|--|--|
| | | Willingness to seek prof help | Age | Parent income | Acculturation | Problem Severity | Psychological Distress | Cultural facilitator | Service facilitator | | |
| Willingness to seek prof help | Pearson Correlation | 1 | .011 | -.113* | -.007 | .221** | .143* | .158** | .291** | | |
| | Sig. (1-tailed) | | .437 | .046 | .461 | .000 | .016 | .009 | .000 | | |
| | N | 224 | 224 | 224 | 224 | 224 | 224 | 224 | 224 | | |
| Age | Pearson Correlation | .011 | 1 | -.131* | -.250** | -.033 | .026 | .041 | .025 | | |
| | Sig. (1-tailed) | .437 | | .025 | .000 | .309 | .348 | .272 | .354 | | |
| | N | 224 | 224 | 224 | 224 | 224 | 224 | 224 | 224 | | |
| Parent income | Pearson Correlation | -.113* | -.131* | 1 | .268** | -.045 | -.188** | -.002 | .127* | | |
| | Sig. (1-tailed) | .046 | .025 | | .000 | .252 | .003 | .488 | .029 | | |
| | N | 222 | 222 | 222 | 222 | 222 | 222 | 222 | 222 | | |
| Acculturation | Pearson Correlation | -.007 | -.250** | .268** | 1 | -.050 | -.242** | -.133* | .104 | | |
| | Sig. (1-tailed) | .461 | .000 | .000 | | .230 | .000 | .023 | .060 | | |
| | N | 224 | 224 | 222 | 224 | 224 | 224 | 224 | 224 | | |
| Problem Severity | Pearson Correlation | .221** | -.033 | -.045 | -.050 | 1 | .483** | .064 | .125* | | |
| | Sig. (1-tailed) | .000 | .309 | .252 | .230 | | .000 | .169 | .031 | | |
| | N | 224 | 224 | 222 | 224 | 224 | 224 | 224 | 224 | | |
| Psychological Distress | Pearson Correlation | .143* | .026 | -.188** | -.242** | .483** | 1 | .064 | -.006 | | |
| | Sig. (1-tailed) | .016 | .348 | .003 | .000 | .000 | | .170 | .466 | | |
| | N | 224 | 224 | 222 | 224 | 224 | 224 | 224 | 224 | | |
| Cultural facilitator | Pearson Correlation | .158** | .041 | -.002 | -.133* | .064 | .064 | 1 | .585** | | |
| | Sig. (1-tailed) | .009 | .272 | .488 | .023 | .169 | .170 | | .000 | | |
| | N | 224 | 224 | 222 | 224 | 224 | 224 | 224 | 224 | | |
| Service facilitator | Pearson Correlation | .291** | .025 | .127* | .104 | .125* | -.006 | .585** | 1 | | |
| | Sig. (1-tailed) | .000 | .354 | .029 | .060 | .031 | .466 | .000 | .000 | | |
| | N | 224 | 224 | 222 | 224 | 224 | 224 | 224 | 224 | | |

*. Correlation is significant at the 0.05 level (1-tailed).

**. Correlation is significant at the 0.01 level (1-tailed).

Table 14: Intercorrelations of Study Variables for the Adult Sample Continued

| | Willingness to seek prof help | Structural barrier | Perception barrier | Cultural barrier | Stigma barrier | Level of knowledge | Achievement myth | Problem myth | American dream myth |
|-------------------------------|-------------------------------|--------------------|--------------------|------------------|----------------|--------------------|------------------|--------------|---------------------|
| Willingness to seek prof help | 1 | .108 | -.148* | .079 | .134* | .192** | .030 | -.024 | .058 |
| Pearson Correlation | | .054 | .014 | .119 | .023 | .002 | .328 | .359 | .196 |
| Sig. (1-tailed) | | .224 | .224 | .223 | .224 | .224 | .222 | .222 | .222 |
| N | | 224 | 224 | 223 | 224 | 224 | 222 | 222 | 222 |
| Structural barrier | .108 | 1 | .284** | .369** | .417** | .088 | .087 | .197** | .083 |
| Pearson Correlation | | .054 | .000 | .000 | .000 | .095 | .099 | .002 | .109 |
| Sig. (1-tailed) | | .224 | .224 | .224 | .224 | .224 | .222 | .222 | .222 |
| N | | 224 | 224 | 223 | 224 | 224 | 222 | 222 | 222 |
| Perception barrier | -.148* | .284** | 1 | .266** | .278** | .105 | .264** | .206** | .240** |
| Pearson Correlation | | .014 | .224 | .000 | .000 | .058 | .000 | .001 | .000 |
| Sig. (1-tailed) | | .224 | .224 | .223 | .224 | .224 | .222 | .222 | .222 |
| N | | 224 | 224 | 223 | 224 | 224 | 222 | 222 | 222 |
| Cultural barrier | .079 | .369** | .266** | 1 | .353** | .120* | .229** | .099 | .028 |
| Pearson Correlation | | .119 | .000 | .353** | .000 | .037 | .000 | .072 | .338 |
| Sig. (1-tailed) | | .223 | .223 | .223 | .223 | .223 | .221 | .221 | .221 |
| N | | 223 | 223 | 223 | 223 | 223 | 221 | 221 | 221 |
| Stigma barrier | .134* | .417** | .278** | .353** | 1 | .091 | .056 | .079 | .100 |
| Pearson Correlation | | .023 | .000 | .000 | .000 | .087 | .201 | .121 | .068 |
| Sig. (1-tailed) | | .224 | .224 | .224 | .224 | .224 | .222 | .222 | .222 |
| N | | 224 | 224 | 223 | 224 | 224 | 222 | 222 | 222 |
| Level of knowledge | .192** | .088 | .105 | .120* | .091 | 1 | .102 | .042 | .176** |
| Pearson Correlation | | .002 | .058 | .037 | .087 | .064 | .064 | .266 | .004 |
| Sig. (1-tailed) | | .222 | .224 | .224 | .224 | .224 | .222 | .222 | .222 |
| N | | 222 | 224 | 223 | 224 | 224 | 222 | 222 | 222 |
| Achievement myth | .030 | .087 | .264** | .229** | .056 | .102 | 1 | .419** | .556** |
| Pearson Correlation | | .328 | .000 | .000 | .000 | .064 | .064 | .000 | .000 |
| Sig. (1-tailed) | | .222 | .222 | .221 | .222 | .222 | .222 | .222 | .222 |
| N | | 222 | 222 | 221 | 222 | 222 | 222 | 222 | 222 |
| Problem myth | -.024 | .197** | .206** | .099 | .079 | .042 | .419** | 1 | .353** |
| Pearson Correlation | | .359 | .001 | .072 | .121 | .266 | .000 | .000 | .000 |
| Sig. (1-tailed) | | .222 | .222 | .221 | .222 | .222 | .222 | .222 | .222 |
| N | | 222 | 222 | 221 | 222 | 222 | 222 | 222 | 222 |
| American dream myth | .058 | .083 | .240** | .028 | .100 | .176** | .556** | .353** | 1 |
| Pearson Correlation | | .196 | .000 | .338 | .068 | .004 | .000 | .000 | .000 |
| Sig. (1-tailed) | | .222 | .222 | .221 | .222 | .222 | .222 | .222 | .222 |
| N | | 222 | 222 | 221 | 222 | 222 | 222 | 222 | 222 |

* . Correlation is significant at the 0.05 level (1-tailed).

** . Correlation is significant at the 0.01 level (1-tailed).

Main Effects of Gender, Ethnicity, and Treatment Experience in the Past Year

Next, multivariate analysis of variance (MANOVA) was performed to determine whether gender, ethnicity, and treatment experience (sought professional mental health help in the past year – Yes/No) produced any main or interaction effects across the main study variables (age, parent income, acculturation, problem severity, psychological distress, perception of cultural facilitators, perception of service facilitators, perception of stigma barriers, perception of structural barriers, perception of need barriers, perception of cultural barriers, level of perceived mental health information, belief in the achievement myth, belief in the problem myth, and belief in the American dream myth) in the young adult sample. For the MANOVA, the number of ethnicity comparisons was reduced to four groups (Chinese, Korean, Southeast Asian, and other Asian). Results of the MANOVA indicated significant multivariate main effects only for ethnicity [Wilks' lambda = .68, $F(48, 218) = 1.62, p < .01$]. Specifically, the ethnicity effect was significantly related to acculturation [$F(3, 218) = 10.46, p < .001$] and parent income [$F(3, 218) = 5.81, p < .001$] for the young adult sample. Results of the MANOVA indicated that gender, treatment experience in the past year, and the various interactions did not have any significant main effects on the main study variables.

Follow-up analyses of variance indicated no significant difference in acculturation between Chinese ($M=2.51, SD=0.63$) and Korean American ($M=2.48, SD=0.62$) participants. Analyses revealed significant differences between Chinese ($M=2.51, SD=0.63$) and Southeast Asian ($M=2.77, SD=0.61$) participants as well as between Korean ($M=2.48, SD=0.62$) and Southeast Asian ($M=2.77, SD=0.61$) participants in terms of acculturation, with Southeast Asian participants reporting higher acculturation

than Chinese and Korean participants. Chinese, Korean, and Southeast Asian participants were all significantly different from other Asian ($M=3.30$, $SD=0.56$) participants (composed of participants of mixed racial heritage) in terms of acculturation. In terms of parent income, there were significant differences between other Asians ($M=3.83$, $SD=1.27$) and all three other ethnic groups. There were no significant differences in parent income between Chinese ($M=2.76$, $SD=1.36$) and Southeast Asian ($M=2.57$, $SD=1.34$) participants. However, Chinese ($M=2.76$, $SD=1.36$) and Southeast Asian ($M=2.57$, $SD=1.34$) participants were significantly different from Korean ($M=3.29$, $SD=1.34$) participants in terms of parent income, with Korean participants reporting higher parent income.

MANOVA was not performed to determine whether gender, ethnicity, and counseling experience (sought professional mental health help in the past year – Yes/No) produced any main or interaction effects in the adolescent sample because of the small sample size. There were only 3 males in the adolescent sample. In addition, there were only a few subjects belonging to each ethnic group. Due to the small sample size of adolescent participants, regression analyses were not performed to assess the degree of impact that each of the predictor variables had on the outcome variable of willingness to seek professional mental health help.

In the adolescent sample, T-test analyses indicated no significant differences between those who sought professional mental health help in the past year and those who did not in terms of the various study variables except for acculturation ($t(35)= 2.12$, $p = .041$). Participants who sought help in the past year ($M=3.10$, $SD=0.30$) identified

themselves as significantly more acculturated than those who did not seek help ($M=2.82$, $SD=0.38$).

Tests of the conceptual models

Tests of the proposed models were conducted using multiple regression analyses. Two hierarchical regression analyses were performed for the young adult sample, first using “willingness to seek professional mental health help” as the outcome variable and then using “sought professional mental health help in the past year” as the dependent variable. Decisions regarding which predictor variables to test in the conceptual models were determined a priori.

For the first model, hierarchical regression analyses were used to assess the predictive effects of the following variables: age, gender, ethnicity, parent income, acculturation, prior mental health treatment (lifetime), psychological distress (current anxiety and depressive symptoms), problem severity, level of perceived mental health information, cultural facilitators, service facilitators, stigma, cultural barriers, structural barriers, perception of need barriers, belief in the American dream myth, belief in the achievement myth, and belief in the problems myth on the outcome variable, overall willingness to seek professional mental health help.

Age, gender, ethnicity, and parent income are placed in the first block because they are main demographic variables. Dummy codes were used to test if there were any significant predictive effects of ethnicity on willingness to seek professional help. Acculturation was entered in the second block before the other predictor variables because previous research had been conducted on the impact of acculturation on attitudes toward seeking help. The effect of acculturation was also controlled by entering it on this

block. The variable of prior mental health treatment (lifetime) was entered in the third block to examine if previous help-seeking behaviors predicted help-seeking attitudes. Moreover, the effect of previous treatment was controlled by entering it on this block. The variables of psychological distress and problem severity were entered in the fourth block because help-seeking starts with identification of a mental health need and thus psychological symptoms and perceived problem severity were hypothesized to predict willingness to seek help. Level of perceived mental health information was entered in the fifth block because it was hypothesized that having information about mental health problems and services would serve to facilitate seeking professional help and make one more willing to seek help. The variables of cultural and service facilitators were entered into the sixth block because it was hypothesized that perception of factors as facilitators would make one more willing to seek professional help. The barrier variables of stigma, cultural barriers, structural barriers, perception of need barriers were entered into the seventh block because barriers have been found to impact willingness to seek help. Finally, the variables associated with the three components of the model minority myth belief in the American dream myth, belief in the achievement myth, and belief in the problems myth are entered into the last block because these variables have not been researched before in the context of help-seeking but may impact help-seeking attitudes.

The overall regression model was found to be significant for the outcome variable of willingness to seeking professional mental health help, [$F(20, 219) = 3.215, p < .001$], as noted in Table 15 and altogether accounted for 24% of the variance in scores for willingness to seek professional help. The results of the multiple regression analysis showed that parent income, level of perceived mental health information, perception of

service facilitators, and perception of need barriers were significant, unique predictors of willingness to seek professional help. The variables of problem severity and stigma barriers were found to be approaching significance as predictors of willingness to seek professional help. The variables of age, gender, ethnicity, acculturation, prior mental health treatment (lifetime), psychological distress, cultural facilitators, cultural and structural barriers, and belief in the model minority myth had no unique effects on willingness to seek professional help.

Specifically, demographic variables altogether accounted for 2% of the variance in willingness to seek help, but only parent income was a significant predictor. Negative beta weights on parent income indicated an inverse relationship between willingness to seek help and parent income. The illness profile (problem severity and psychological distress) together accounted for 5% of the variance in willingness to seek help, but only problem severity had predictive effects, indicating that as perceived problem severity increases, willingness to seek help also increases. Level of perceived mental health information accounted for 4% of the variance in willingness to seek help, indicating that as a participants' information about mental health increases, willingness to seek help also increases. The two facilitators together accounted for 6% of the variance, but only perception of service facilitators made a significant contribution to the prediction of the criterion variable. Thus, the positive beta weights on service facilitators indicated a positive relationship with willingness to seek help suggesting that enacting certain service characteristics help facilitate willingness to seek help. Barriers together accounted for 6% of the variance, but only perception of need barriers had predictive effects on

willingness to seek help. The negative beta weights on perception of need indicated that as perception of need barriers (perceives that one does not need professional help because one can take care of problems on one's own) increases, willingness to seek help decreases.

Table 15: Model #1 - Hierarchical Multiple Regression Analysis Predicting Willingness to Seek Professional Mental Health Help

| Variable | R ² | R ² change | F change | β | t |
|---|----------------|--------------------------|-------------|-------|-------------------|
| Block 1: | .02 | .02 | .78 | | |
| Age | | | | -.002 | -.03 |
| Gender | | | | -.03 | -.50 |
| Chinese vs other | | | | .05 | .61 |
| Korean vs other | | | | .04 | .40 |
| Southeast Asian vs other | | | | -.03 | -.29 |
| Parent income | | | | -.20 | -2.62** |
| Block 2: | .02 | .002 | .49 | | |
| Acculturation | | | | .05 | .62 |
| Block 3: | .02 | .00 | .02 | | |
| Prior mental health treatment- lifetime (Y/N) | | | | -.06 | -.84 |
| Block 4: | .07 | .05 | 5.67** | | |
| Problem Severity | | | | .13 | 1.63 ^t |
| Psychological Distress | | | | -.01 | -.07 |
| Block 5: | .11 | .04 | 9.46** | | |
| Level of Perceived Mental Health Information | | | | .17 | 2.64** |
| Block 6: | .18 | .06 | 7.88*** | | |
| Cultural Facilitators | | | | -.02 | -.19 |
| Service Facilitators | | | | .33 | 3.78*** |
| Block 7: | .24 | .06 | 4.22** | | |
| Stigma | | | | .14 | 1.85 ^t |
| Cultural Barriers | | | | .01 | .11 |
| Structural Barriers | | | | .04 | .48 |
| Perception of Need Barriers | | | | -.28 | -3.92*** |
| Block 8: | .24 | .003 | .31 | | |
| American dream myth | | | | -.05 | -.54 |
| Achievement myth | | | | .05 | .65 |
| Problems myth | | | | .05 | .58 |

^tp≤.10, *p≤.05, **p≤.01, ***p≤.001

[F (20, 219) = 3.215, p < .001]

For the second model, logistical regression analysis was employed to predict the probability that a participant sought professional mental health help in the past year. The predictor variables were similar to those in the first regression model and entered into blocks in a similar order for the same rationales as described previously. The predictor variables were age, gender, ethnicity, parent income, acculturation, prior mental health treatment (lifetime), psychological distress (current anxiety and depressive symptoms), problem severity, level of perceived mental health information, willingness to seek professional help, stigma, cultural barriers, structural barriers, perception of need barriers, belief in the American dream myth, belief in the achievement myth, and belief in the problems myth. Willingness to seek help was entered as the sixth block to examine how help-seeking attitudes predict actual help-seeking behavior. Facilitators were dropped as predictors from the logistical model because they were intended to be examined as potential facilitators to seeking help and thus hypothetical constructs that do not predict past help-seeking behaviors.

A test of the full model versus a model with intercept only was statistically significant, ($\chi^2(19)=37.87, p < .01$), as shown in Table 16, which shows the logistical regression coefficient, Wald test, odds ratio, and 95% confidence interval for each of the predictors. Results of the logistical regression indicated that when controlling for the other predictors in the model, prior mental health treatment (lifetime), level of perceived mental health information, and belief in the American dream myth significantly predicted seeking professional mental health help in the past year. Age, gender, ethnicity, parent income, psychological distress (current anxiety and depressive symptoms), problem severity, stigma, cultural barriers, structural barriers, perception of need barriers, belief in

the achievement myth, and belief in the problems myth did not predict professional help-seeking in the present study. Acculturation approached significance as a predictor.

Specifically, the odds ratio for prior mental health treatment (lifetime) indicates that when holding all other variables constant, the odds of seeking professional help in the past year is 3.33 times greater for participants who sought treatment in one's lifetime than those who did not. Similarly, when controlling for the other predictors in the model, the odds ratio for perceived level of mental health information estimated that the odds of having sought professional help in the past year would increase by a factor of 3.02 for each one-unit increase in perceived level of mental health information. Univariate analysis indicated that participants who sought help in the past year ($M=2.85$, $SD=.061$) reported significantly higher level of mental health information than those who did not ($M=2.75$, $SD=0.68$). Similarly, when the other predictors were adjusted for, the estimated odds of seeking professional help were 2.65 times greater for participants who believe in the American dream myth. Univariate analysis indicated that those who sought professional help ($M=3.21$, $SD=.76$) reported significantly greater belief in the American dream myth than those who did not seek help ($M=3.03$, $SD=0.72$). Acculturation approached significance as a predictor with those who sought professional help ($M=2.55$, $SD=.67$) in the past year being less acculturated than those who did not seek help ($M=2.75$, $SD=.68$).

Table 16: Model #2 - Logistical Regression Predicting Actual Professional Mental Health Help-seeking in Past Year

| Variable | B | Wald χ^2 | Odds ratio (e ^b) | 95% Confidence Interval (odds) |
|--|------|------------------|------------------------------------|--------------------------------------|
| Block 1: | | | | |
| Age | .13 | .58 | 1.14 | .81-1.60 |
| Gender | -.40 | .57 | .67 | .23-1.91 |
| Chinese vs other | 1.31 | 2.10 | 3.69 | .63-21.54 |
| Korean vs other | 1.00 | 1.59 | 2.71 | .58-12.72 |
| Southeast Asian vs other | .27 | .11 | 1.30 | .27-6.38 |
| Parent income | -.11 | .25 | .90 | .59-1.36 |
| Block 2: | | | | |
| Acculturation | -.88 | 3.25 | .42 [†] | .16-1.08 |
| Block 3: | | | | |
| Prior mental health treatment-lifetime (Y/N) | 1.20 | 4.37 | 3.33* | 1.08-10.30 |
| Block 4: | | | | |
| Psychological Distress | -.43 | 1.92 | .65 | .35-1.20 |
| Problem Severity | -.32 | .40 | .72 | |
| Block 5: | | | | |
| Level of Perceived Mental Health Information | 1.11 | 8.14 | 3.02** | 1.41-6.45 |
| Block 6: | | | | |
| Willingness to seek professional help | .29 | 1.07 | 1.33 | .77-2.30 |
| Block 7: | | | | |
| Stigma | -.51 | 1.68 | .60 | .28-1.30 |
| Structural Barriers | .23 | .25 | 1.25 | .51-3.05 |
| Perception of Need Barriers | -.22 | .43 | .80 | .42-1.55 |
| Cultural Barriers | .45 | 1.85 | 1.56 | .82-2.98 |
| Block 8: | | | | |
| Achievement myth | -.75 | 2.46 | .47 | .19-1.20 |
| Problems myth | -.60 | 2.51 | .55 | .26-1.15 |
| American dream myth | .98 | 3.98 | 2.65* | 1.02-6.90 |

[†] p≤.10, *p≤.05, **p≤.01
 $(\chi^2(19)=37.87, p < .01)$

Chapter 4

Discussion

Summary of Study Purpose and Results

The purpose of the present study was to gain a more comprehensive understanding of help-seeking in Asian American youth. The models tested by the present study were guided by a comprehensive model that considers various factors influencing help-seeking in children and adolescents proposed by Srebnik, Cauce, and Baydar (1996), which was adapted from the research of Anderson and Newman (1973), Goldsmith, Jackson, and Hough (1988), and Pescosolido (1992) on young adult help-seeking models. Consistent with this previous model, the current study examined three major types of categories that impact whether an Asian American youth seeks help for his or her problems, namely, illness profile, predisposing characteristics, and barriers/facilitators. The present study aimed to examine how these various factors together predicted help-seeking attitudes (willingness to seek professional mental health help) and actual help-seeking behaviors (mental health treatment in the past year). Past research on Asian American young adults has mainly examined help-seeking predictors in isolation, but has not assessed the unique relationship to help-seeking attitudes and behaviors, after accounting for the correlations among the predicting factors.

The results of the present study indicated that the comprehensive model of help-seeking factors accounted for 24% of the variance in scores for willingness to seek professional help among the sample of Asian American young adults. Specifically, the study found that parent income, level of perceived mental health information, perception of service facilitators, and perception of need barriers were significant predictors of

willingness to seek professional help. Likewise, the comprehensive model of help-seeking factors also served to significantly predict actual professional help-seeking in the past year. Namely, prior mental health treatment (lifetime), level of perceived mental health information, and belief in the American dream myth significantly predicted seeking professional mental health help in the past year. These results lend support to using a comprehensive model to examine help-seeking among Asian American youth given the complexities involved in forming help-seeking attitudes and carrying out actual behaviors.

Interestingly, parent income showed an inverse relationship with willingness to seek help. In other words, as participants' parent income increases, willingness to seek professional help decreases. However, the relationship between socioeconomic status and formal mental health service utilization may not be so straightforward. In fact, some research has shown that there is a curvilinear relationship between socioeconomic status and formal mental health service utilization (Cohen & Hesselbart, 1993; Koot & Verhulst, 1992) such that children at the extreme ends of the socioeconomic spectrum, such as those from very low or very high socioeconomic backgrounds are more likely than working class children to utilize professional mental health services.

The results of the main analyses found that gender and ethnicity did not significantly predict willingness to seek help from a mental health professional help nor actual professional help-seeking in the past year. Acculturation approached significance as a predictor of actual help-seeking for Asian American young adults in this study. Previous research has documented mixed findings about the relationship among acculturation, gender, and willingness to seek help for personal problems. For example,

Atkinson and his colleagues (1995) found that neither acculturation nor gender significant related to Asian American undergraduates' willingness to see a counselor for either a personal or academic problem. However, other studies have established that Asian American female college students reported greater willingness to see a counselor than males (Gim, Atkinson, & Whiteley, 1990). Yet, some prior research has suggested that more highly acculturated Asian Americans show more positive attitudes toward seeking professional mental health services (Atkinson & Gim, 1989; Tata & Leong, 1994; Ying & Miller, 1992) and demonstrate higher levels of actual help-seeking behaviors (Ying & Miller, 1992). Clearly, further replication is necessary to determine whether the differences in the results of the studies are an artifact due to differences in design, measurement, and analyses. The finding that ethnicity did not predict professional help-seeking nor willingness to seek help was consistent with previous research (Solberg et al., 1994; Atkinson & Gim, 1989). However, the effect of ethnicity remains uncertain, especially considering that many Asian ethnic groups are underrepresented in the research.

Given that this sample of Asian American young adult participants is a fairly normative, high-functioning college sample and not a high-risk sample, the rates of mental health service utilization appeared to be slightly higher than expected, especially in light of their report of a moderately low level of problem severity and low level of psychological distress. In fact, the present study found that illness profile, namely problem severity and psychological distress did not significantly predict actual professional help-seeking. Thus, need does not necessarily equate getting professional help. However, illness profile as a whole predicted 5% of the variance in willingness to

seek help, although only problem severity made a significant contribution, which confirmed part of the study's hypothesis that both aspects of the illness are significant predictors. Thus, it appears that perceived need is more influential than actual clinical need in willingness to seek help for both adolescents and young adults, as it was also found that problem severity significantly correlated with willingness to seek help for the sample of adolescents. Yet, the relationship between illness profile and help-seeking remains elusive given that help attitudes did not significantly predict actual professional help-seeking behaviors. As a result, the relationship between help-seeking attitudes and actual help-seeking behaviors remains as a topic of future investigation. Clearly, other factors also play an important role in actual help-seeking behaviors.

Although both Asian American adolescent and young adult participants reported an overall moderately low level of problem severity, both identified feeling pressure to be successful as their most severe problem. Researchers have commented on the strong cultural emphasis on achievement orientation in Asian American families (Ho, 1986; Stevenson & Lee, 1990). The importance that Asian American families place upon academic success may embody the belief that education is tied to upward mobility in young adulthood (Sue & Okazaki, 1990). Some researchers have noted that there is "a tacit understanding between the parents and the child about the value of education, putting forth one's great effort, and bringing the family honor through successful academic performance" (Schneider, Hieshima, Lee & Plank, 1992). Thus, Asian American students may benefit from interventions that teach effective coping skills to deal with pressure to be successful.

Nevertheless, the rate of mental health utilization among the Asian American young adult participants in the present study appeared to be an accurate representation of help-seeking at this college setting. Findings of a previous study conducted by the present investigator with two co-investigators (Cochran, B., Stewart, A., & Wong, C., 2003) using the same Department of Psychology human subject pool with a similar sample of participants (in terms of demographics) revealed similar rates of mental health service utilization for Asian American young adult participants. Asian Americans in the previous study (N = 295) reported a 14% rate of mental health treatment (lifetime) compared to 17% in the present sample. As a reference of comparison, the mental health treatment (lifetime) was significantly higher for Caucasian participants (N = 368) in the previous study at 40%.

Moreover, the present study found that Asian American young adults reported that they learned the most information about mental health services and problems through classes at school. Thus, schools play an important role in disseminating knowledge and information about mental health concerns and services. In addition, the results of both regression analyses for the sample of Asian American young adults clearly found that greater level of mental health information was significantly predictive of more willingness to seek professional mental health help and actual help-seeking behaviors, which fully confirmed the study hypotheses. Hence, increasing information about mental health problems and services may be effective in improving help-seeking attitudes and actual rates of help-seeking among Asian American youth. Thus, if schools provide adolescents with mental health knowledge and information, adolescents may be more likely to be more receptive to seeking professional help for their problems, especially

during early young adulthood, when they have to assume more independence and responsibility for their own well-being and seeking help for themselves.

The present study attempted to explore the role of potential facilitators to professional help-seeking in an attempt to help inform intervention efforts to improve services for Asian Americans. It was found in the present study that cultural and service facilitators together accounted for 6% of the variance in willingness to seek help and thus lent support to the study's hypotheses. The results of the present study showed that both Asian American adolescents and young adults reported that implementing service facilitators would make them significantly more willing to seek help. Examples of service facilitators that were endorsed by participants as being related to increased willingness to seek help include having free services, not needing an appointment, and having a favorable impression of their counselor as being understanding and helpful. Employing such service characteristics may make it more inviting for participants to seek help by making it easier and more palatable for them to access services. For the young adult participants, cultural facilitators such as cultural sensitivity and ethnic match with therapist did not uniquely predict willingness to seek help and appeared to matter less to them and neither served to either deter or facilitate professional help-seeking. A possibility for this finding may be that these cultural factors are less salient in terms of forming attitudes and making the decision to seek professional help, but perhaps may become more influential in terms of the decision to stay in treatment.

It was found that barriers to professional help-seeking predicted 6% of the variance in willingness to seek help. Participant's perception of need was the only barrier that was found to significantly predict willingness to seek help. In other words,

the more that the participant does not perceive that he or she needs help, then the less willing he or she is to seek help. This finding helped to confirm the study's hypotheses that barriers serve to decrease willingness to seek help. Other researchers have speculated that Asian Americans wait until symptoms are disruptive or dangerous to others to get professional help because they do not view everyday personal problems or distress as symptoms of mental illness (Moon & Tashima, 1982; Tracey, Leong, & Glidden, 1985). Thus, perception of need serves as an important predictor of help-seeking attitudes. Nevertheless, perception of need did not significantly predict actual help-seeking behaviors.

Although participants reported that seeking informal help sources has been generally helpful to resolve their problems, family and friends may not be completely enough to cope with more serious, underlying problems. Moreover, they may not be aware of the mental health services that are available to them and what can be gained from them. Mental health information can also be disseminated to change preconceived notions that one only needs to go help when it is the last resort. Other corrective information may be provided to help alleviate the barrier of perception of need. For example, youth may be reminded that professionals do not replace the support of family and friends, but supplement the support and offer a different perspective. In addition, the benefits and disadvantages of trying to wait and work things out on one's own may be discussed.

Contrary to findings that stigma and cultural barriers play a large role in the low rate of help-seeking among Asian American young adults (Root, 1985; Uba, 1994; Tabora & Flaskerud, 1997; Zane, 2002), the current study found that stigma and cultural

barriers do not play a significant role in deterring help-seeking for Asian American young adults. It is possible that cultural barriers and stigma may not be so central for Asian American college students who are younger and more acculturated than study participants in community samples who are less acculturated and older as was the case with several prior studies.

Participants in the young adult sample endorsed a somewhat neutral stance toward the model minority myth as it pertains to Asian Americans. Belief in the various components of the model minority myth did not significantly predict willingness to seek help, which contradicted the study's hypotheses. However, greater belief in the American dream significantly predicted actual professional help-seeking, but it also contradicted the study's hypothesis. These findings may be due to limitations in measurement since new measures were used. It is possible that Asian American youth do not internalize to a considerable extent, a myth that is largely created by the majority culture. Since the model minority myth is regarding Asian Americans, Asian American participants may have more opportunities to find corrective information to challenge the myth.

The present study found that both Asian American young adults and adolescents in the respective samples were only somewhat willing to seek help from a counselor or other mental health professional for their problems. However, both reported that they were most willing to seek professional help for school-related problems consistent with previous findings that found Asian American college students were more likely to seek help for educational and vocational issues than for emotional concerns (Tracey, Leong, & Glidden, 1986; Atkinson, Lowe, & Matthews, 1995). It appears that it is more acceptable

for Asian American youth to utilize various sources of help in order to do better in school.

Findings of this study have likely implications for informing service providers about how best to reach out to Asian American adolescents and college students by minimizing the barriers and implementing the facilitators to seeking professional mental health help. In accordance with the finding of this study that Asian American youth are more amenable to obtaining help for school problems, it may be more effective to facilitate the help-seeking of Asian American youth by implementing interventions or preventive programs that link academic success with psychological adjustment. Asian American youth are more likely to participate in such academic-related interventions than those that directly market themselves as mental health interventions. Moreover, Asian American parents may be more inclined to allow their children to participate in such programs if the advertised goal is to increase the academic success of their children.

Thus, school-based interventions are likely to be more effective in framing mental health interventions as academic interventions. Mood management and coping skills can be taught in the context of serving to increase academic achievement. It may also be more palatable to both Asian American youth and their parents if such interventions are available to all students at school during regular school hours. Thus, the school-based programs are less stigmatizing since they do not target a specific group of youth, yet they reach a larger audience. This is especially important in light of findings that Asian American youth may not overtly exhibit signs of psychological distress (Huang, 1997) and thus, their psychological problems may be overlooked by school authorities. Accordingly, Asian American youth may be excluded from intervention programs that

have more restrictive admission criteria. Furthermore, if this pattern reflects the emphasis on education and upward mobility in many Asian American families, it may be helpful for counseling centers to frame the help-seeking process for psychological problems in terms of their costs on academic and vocational success in order to familiarize them to the help-seeking and treatment process.

Among the adolescent sample, the present study found that those who reported higher severity of interpersonal and mood problems reported more willingness to seek professional help for problems related to racial/ethnic background. These results suggest that it may be more effective for Asian American youth to obtain professional help for personal and emotional problems through less stigmatizing and invasive interventions that emphasize cultural identity development. It appears that it would be more successful to provide Asian American youth with mood management skills through enrollment in programs that target cultural development since they are less stigmatizing than mental health interventions. Yet, if Asian American youth can talk about less invasive topics such as what it means to be Asian American, they may be more inclined to gradually discuss more personal and emotional problems. Moreover, such culture-specific interventions can also serve to disseminate information about help-seeking resources.

Moreover, given the finding in the current study that the severity of feeling depressed and anxious was positively correlated with willingness to seek professional help for medical problems in the adolescent sample, it is suggested that doctors and medical providers be more alert to somatic complaints as they were found to be significantly correlated with psychological distress (anxiety and depressive symptoms) and problem severity in both samples. If a person perceives a problem to have a physical

nature, then he or she will be more likely obtain services from a medical provider than a mental health provider. Thus, family doctors may be the gateway through which youth are referred to seek mental health help. For some Asian American adolescents, the first signs of anxiety may be somatic complaints (Huang, 1997) and thus, doctors can play an important role in the help-seeking process.

Consistent with previous literature (Mau & Jepsen, 1990; Ying, 1990; Narikiyo & Kameoka, 1992) that has documented that Asian Americans are more likely to turn to family and friends than professional mental health providers for help, friends were found to be the most widely sought source of help for both young adult and adolescent participants in the present study. Interestingly, parents were also a common source of help for Asian American young adults. Parents do not cease to be an important source of help and support at the threshold of young adulthood, just because a child has left home for college. The present study also found that over half of the young adult participants agreed that the college administration or mental health professionals on campus should notify the parents of the college student if he or she was in critical condition involving an emotional, personal, and/or behavioral problem(s). Hence, counseling centers on college campuses may consider developing mental health interventions that involve parents in some capacity. For example, parents may be instructed on how to provide help and support to their young adult children during the transition to college.

Clinicians working with Asian American adolescents need to be aware that they may not seek mental health services from professional sources even if they are in need of them. Mental health providers must be sensitive in reframing the client's presenting problem to be consistent with the client's conceptualization of the problem, which is

likely to be shaped by cultural context. For example, parents of an Asian American adolescent may not be convinced that their child has psychological problems. However, by inviting the parents to assist in improving their child's academic performance, which is an important cultural value, reframing the problem in culturally familiar terms will help to normalize the problem, thus lessening the shame associated with seeking help.

Study Limitations and Future Directions

It is acknowledged that there are essentially three distinct samples investigated in the present study. Aside from the three males in the adolescent sample, the three samples were Asian American adolescent females, Asian American young adult females, and Asian American young adult males. Hence, the generalizability of this study's results is restricted to examine gender differences. Larger sample sizes of adolescent males are necessary for replication of this study in order to test the comprehensive models used in this study.

Furthermore, given the narrow age range represented in this study, it was not possible to fully examine age and developmental differences in help-seeking. Future studies may consider examining developmental differences through longitudinal research. For instance, participants may be first approached for a help-seeking study during high school, subsequently followed as they transition to college, and then during periodic time points during their college education and perhaps beyond as they progress through adulthood. Cohort effects may also be worthy of examination, especially given the societal changes in mental health education and service availability.

All findings of this study must be interpreted in the context that the adolescents recruited for this study are Asian American participants in social service programs

provided by an organization targeting Asian Americans. Thus, these adolescents may have more positive attitudes toward help-seeking and may be more inclined to seek professional help given that they volunteered to participate in such prevention programs. Thus, these adolescents are a very selective group and the findings of this study regarding the adolescents cannot be generalized to other Asian American adolescents. Larger sample sizes are necessary for replication of this study in order to test the comprehensive models used in this study.

Likewise, it is recognized that that the young adult participants in this study are a selective sample and thus, the generalizability of results to other young adults are restricted. The young adult participants in this study were Asian American college undergraduates taking introductory psychology classes. Although a significant portion of all college students take introductory psychology classes during their undergraduate education, it is acknowledged that this particular sample of Asian American college students do not reflect Asian American college students at large. It is conceivable that taking introductory psychology classes may have an impact on help-seeking attitudes and behaviors. Future research would aim to recruit samples of college students through departments other than psychology, community college samples, and other community samples to obtain a more representative sample of Asian American young adults including higher-risk samples.

Given that there are few well-established, standardized measures to examine the various aspects of help-seeking among youth, it was necessary for the present study to develop and adapt measures with unproven psychometric properties. Thus, caution must

be taken in data interpretation in light of these limitations. Moreover, replication using such measures may help to refine them.

Given that only 24% of the variance in willingness to seek help was explained by the tested model, other variables also play a substantial role in the determination of willingness to seek professional help. Future research should include other variables in the help-seeking model. The comprehensive model used in this study only took into account individual characteristics and beliefs. Future studies may contemplate examining the influence of contextual factors such as the influence of parents, family, friends, school, and the community on help-seeking attitudes and behaviors. In addition, investigating the interactions between certain predictor variables may generate valuable findings regarding help-seeking. For example, it may be conducive to explore the relationship between Grade Point Average (index of academic performance) and belief in the model minority myth.

Future studies may also consider examining help-seeking via research with the actual help providers such as those at mental health clinics including ethnic or cultural-specific ones to determine which active ingredients of their services help to predict help-seeking behaviors. More studies are necessary to examine the relationship between willingness to seek help and actual help-seeking behaviors since there appears to be an indirect relationship. Although level of perceived mental health information significantly predicted both help-seeking attitudes and behaviors, it is unclear how much of the information they know is accurate. Future studies may attempt to assess the relationship between objective amount of mental health information and help-seeking.

It is clearly evident that there remains numerous areas of research regarding help-seeking among Asian American youth that are largely untapped. Nevertheless, given the dearth of research on help-seeking among Asian American adolescents, the present study attempted to serve exploratory means to prompt more research in the future about a valuable topic.

References

- Akutsu, P. D., Snowden, L. R., & Organista, K. (1996). Referral patterns in ethnic-specific and mainstream programs for ethnic minorities and whites. Journal of Counseling Psychology, 43, 56-64.
- American Psychiatric Association. (2000). Diagnostic and Statistical Manual on Mental Disorders, Fourth Edition, Text Revision. Washington, DC: American Psychiatric Association.
- Anderson, R., & Newman, J. (1973). Societal and individual determinants of medical care utilization in the United States. Milbank Memorial Fund Quarterly, 51, 95-124.
- Atkinson, D. R., & Gim, R. H. (1989). Asian-American cultural identity and attitudes toward mental health services. Journal of Counseling Psychology, 36, 209-212.
- Barkan, S., Pfohman, R., & Bolan, M. (2004). Evaluation of School-based Health Center Clinic and School Nurse Services in Seattle, Washington: September 2000 - December 2003. Seattle: Epidemiology, Planning, and Evaluation Unit; Youth Health Services of Public Health - Seattle & King County; Organizational Research Services; Seattle Public Schools Health Services.
- Barnett, M., Sinisi, C., Jaet, B., Bealer, R., Rodell, P., & Saunders, L. (1990). Perceived gender differences in children's help-seeking. Journal of Genetic Psychology, 151, 451-460.
- Berger, L. (January 13, 2002). The Therapy Generation. New York Times, pp. 4A.31.
- Bhandari, S., & Gifford, E. (2003). Children with Health Insurance 2001. U. S. Census: Current Population Reports.
- Brindis, C., Klein, J., Schlitt, J., Santelli, J., Juszczak, L., & Nystrom, R. (2003). School-based health centers: Accessibility and accountability. Journal of Adolescent Health, 32(16), 98-107.
- Brown, B. B. (1990). Peer groups and peer culture. In S. S. Feldman & G. R. Elliot (Eds.), At the Threshold: The Developing Adolescent (pp. 171-196). Cambridge, MA: Harvard University Press.
- Bui, K. V. T., & Takeuchi, D. T. (1992). Ethnic minority adolescents and the use of community mental health care services. Journal of Community Psychology, 20(4), 403-417.

Burns, B. J., Costello, E. J., Angold, A., Tweed, D., Stangl, D., Farmer, E. M., & Erkanli, A. (1995). Children's mental health service use across service sectors. Health Affairs (Millwood), 14, 147-159.

Cabassa, L. J. (2003). Measuring acculturation: Where we are and where we need to go. Hispanic Journal of Behavioral Sciences, 25(2), 127-146.

Canino, I. A., & Spurlock, J. (2000). Culturally Diverse Children and Adolescents. New York: Guilford Press.

Cauce, A. M., Felner, R. D., & Primavera, J. (1982). Social support in high-risk adolescents: Structural components and adaptive impact. American Journal of Community Psychology, 10, 417-428.

Cheung, F. K., & Snowden, L. R. (1990). Community mental health and ethnic minority populations. Community Mental Health Journal, 26, 277-291.

Cohen, P., & Hesselbart, C. (1993). Demographic factors in the use of children's mental health services. American Journal of Public Health, 83, 49-52.

Costello, E., Burns, B., Angold, A., & Leaf, P. (1993). How can epidemiology improve mental health services for children and adolescents? Journal of the American Academy of Child and Adolescent Psychiatry, 28, 836-841.

Dinges, N. G., & Cherry, D. (1995). Symptom expression and the use of mental health services among American ethnic minorities. In J. F. Aponte, R. Y. Rivers, & J. Wohl (Eds.), Psychological interventions and cultural diversity (pp. 40-56). Boston: Allyn & Bacon.

Dubow, E. F., Lovko, K. R. J., & Kausch, D. F. (1990). Demographic differences in adolescents' health concerns and perceptions of helping agents. Journal of Clinical Child Psychology, 19(1), 44-54.

Durvasula, R., & Sue, S. (1996). Severity of disturbance among Asian American outpatients. Cultural Diversity and Mental Health, 2, 43-52.

Feehan, M., McGee, R., & Stanton, W. R. (1993). Helping agency contact for emotional problems in childhood and early adolescence and the risk of later disorder. Australian & New Zealand Journal of Psychiatry, 27, 270-274.

Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. Journal of College Student Development, 36(4), 368-372.

Fischer, E. H., Grisso, J. T., Beck, G. D., & Winer, D. (1972). Factor-analytic study of student attitudes toward seeking professional help. Proceedings of the 80th Annual American Psychological Convention.

Fischer, E. H., & Turner, J. L. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. Journal of Consulting and Clinical Psychology, 35, 79-90.

Freeman, D., Alegria, M., Vera, M., Munoz, C., Robles, R., Jiminez, A., Calderon, J., & Pena, M. (1992). A receiver operating characteristics (ROC) curve analysis of a model of mental health services use by Puerto Rican poor. Medical Care, 30, 1142-1153.

Fulgini, A. J., & Eccles, J. S. (1993). Perceived parent-child relationships and early adolescents' orientation toward peers. Developmental Psychology, 29, 622-632.

Garland, A. F., & Zigler, E. F. (1994). Psychological correlates of help-seeking attitudes among children and adolescents. American Journal of Orthopsychiatry, 64, 586-593.

Gim, R. H., Atkinson, D. R., & Whiteley, S. (1990). Asian-American acculturation, severity of concerns, and willingness to see a counselor. Journal of Counseling Psychology, 37(3), 281-285.

Goldsmith, H., Jackson, D., & Hough, R. (Eds.). (1988). Process model of seeking mental health services: Proposed framework for organizing the research literature on help-seeking. Washington, DC: U.S. Government Printing Office.

Gould, A. W., & Mazzeo, J. (1982). Age and sex differences in early adolescent's information sources. Journal of Early Adolescence, 2, 283-292.

Gould, M. S., Munfakh, J. L. H., Lubell, K., Kleinman, M., & Parker, S. (2002). Seeking help from the Internet during Adolescence. Journal of American Academy of Child and Adolescent Psychiatry, 41(10), 1182-1189.

Greenberger, E., & Chen, C. (1996). Perceived family relationships and depressed mood in early and late adolescence: A comparison of European and Asian Americans. Journal of Counseling and Clinical Psychology, 68(2), 209-219.

Hansell, S., & Mechanic, D. (1985). Introspectiveness and adolescent symptom reporting. Journal of Human Stress, 11, 165-176.

Hoagwood, K., & Erwin, H. D. (1997). Effectiveness of school-based mental health services for children: A 10-year research review. Journal of Child and Family Studies, 6, 435-454.

- Hoberman, H. M. (1992). Ethnic minority status and adolescent mental health services utilization. Journal of Mental Health Administration, 19, 246-267.
- Horwath, E., Johnson, J., Klerman, G. L., & Weissman, M. M. (1992). Depressive symptoms as relative and attributable risk factors for first-onset major depression. Archives of General Psychiatry, 49, 817-823.
- Huang, L. N. (1997). Asian American adolescents. In E. Lee (Ed.), Working with Asian Americans (pp. 175-195). New York: Guilford Press.
- Kinzie, J. D., Manson, S. M., Vinh, D. T., Nguyen, T. T., Anh, B., & Pho, T. N. (1982). Development and validation of a Vietnamese-language depression rating scale. American Journal of Psychiatry, 139, 1276-1281.
- Koot, H., & Verhulst, F. (1992). Prediction of children's referral to mental health and special education services from earlier adjustment. Journal of Child Psychology and Psychiatry and Allied Disciplines, 33, 717-729.
- Leaf, P. J., Alegria, M., Cohen, P., & et al. (1996). Mental health service use in the community and schools: Results from the four-community MECA study. Journal of the American Academy of Child and Adolescent Psychiatry, 35, 889-897.
- Lee, E. (Ed.). (1997). Working with Asian Americans: a guide for clinicians. New York: Guilford Press.
- Lee, S. J. (1996). Unraveling the "model minority" stereotype" Listening to Asian American youth. New York: Teachers College, Columbia University.
- Leong, F. T. L., Wagner, N. S., & Kim, H. H. (1995). Group counseling expectations among Asian American students: The role of culture-specific factors. Journal of Counseling Psychology, 42(2), 217-222.
- Leong, F. T. L., Wagner, N. S., & Tata, S. P. (1995). Racial and ethnic variations in help-seeking attitudes. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), Handbook of Multicultural Counseling. Thousand Oaks: Sage.
- Lin, K. M., Inui, T. S., Kleinman, A. M., & Womack, W. M. (1982). Sociocultural determinants of help-seeking behavior of patients with mental illness. Journal of Nervous and Mental Disease, 170(2), 78-85.
- Loo, C., Tong, B., & True, R. H. (1989). A bitter bean: Mental health status and attitudes in Chinatown. Journal of Community Psychology, 17, 283-296.

Lorenzo, M. K., Frost, A. K., & Reinherz, H. Z. (2000). Social and emotional functioning of older Asian American adolescents. Children and Adolescent Social Work Journal, 17(4), 289-304.

Lorenzo, M. K., Pakiz, B., Reinherz, H. Z., & Frost, A. (1995). Emotional and behavioral problems of Asian American adolescents: a comparative study. Child and Adolescent Social Work Journal, 12(3), 197-212.

Makini, G. K. J., Andrade, N. N., Nahulu, L. B., Yuen, N., Yates, A., McDermott, J. F. J., Danko, G. P., Nordquist, C. R., Johnson, R., & Waldron, J. A. (1996). Psychiatric symptoms of Hawaiian adolescents. Cultural Diversity and Mental Health, 2, 183-191.

Miniño, A. M., Arias, E., Kochanek, K. D., Murphy, S. L., & Smith, B. L. (2002). Deaths: final data for 2000. Hyattsville, MD: National Center for Health Statistics.

Moon, A., & Tashima, N. (1982). Help-seeking behavior and attitudes of Southeast Asian refugees. San Francisco: Pacific Asian Mental Health Research Project.

Murstein, B. L., & Fontaine, P. A. (1993). The public's knowledge about psychologists and other mental health professionals. American Psychologist, 48, 839-845.

Paniagua, F. A. (2000). Culture-bound syndromes, cultural variations, and psychopathology. In I. Cuellar & F. A. Paniagua (Eds.), Handbook of multicultural mental health: Assessment and treatment of diverse populations (pp. 139-169). San Diego: Academic.

Papini, D. R., Farmer, F. F., Clark, S. M., Micka, J. C., & Barnett, J. K. (1990). Early adolescent age and gender differences in patterns of emotional disclosure to parents and friends. Adolescence, 15, 959-1001.

Pescosolido, B. (1992). Beyond rational choice: The social dynamics of how people seek help. American Journal of Sociology, 97, 1096-1138.

Phinney, J. S., Ong, A., & Madden, T. (2000). Cultural values and international value discrepancies in immigrant and non-immigrant families. Child Development, 71(2), 528-539.

Portes, A. (1997). Immigration theory for a new century: Some problems and opportunities. International Migration Review, 31, 799-825.

President's Advisory Commission on Asian Americans and Pacific Islanders. (2001). A people looking forward: Action for access and partnerships in the 21st century. An interim report to the President. Washington, DC: Government Printing Office.

Price, B. K., & McNeill, B. W. (1992). Cultural commitment and attitudes toward seeking counseling services in American Indian college students. Professional Psychology: Research and Practice, *23*, 376-381.

Root, M. (1985). Guidelines for facilitating therapy with Asian American clients. Psychotherapy, *22*, 349-356.

Sanchez, A. R., & Atkinson, D. R. (1983). Mexican-American cultural commitment, preference for counselor ethnicity, and willingness to use counseling. Journal of Counseling Psychology, *30*, 215-220.

Schonert-Reichl, K. A., & Muller, J. R. (1996). Correlates of Help-seeking in adolescence. Journal of Youth and Adolescence, *25*(6), 705-731.

Shaffer, D., Fisher, P., Dulcan, M. K., Davies, M., Piacentini, J., Schwab-Stone, M. E., Lahey, B. B., Bourdon, K., Jensen, P. S., Bird, H. R., Canino, G., & Regier, D. A. (1996). The NIMH Diagnostic Interview Schedule for Children Version 2.3 (DISC-2.3): Description, acceptability, prevalence rates, and performance in the MECA study. Journal of the American Academy of Child and Adolescent Psychiatry, *35*(7), 865-877.

Sontag, D. (April 28, 2002). Who Was Responsible for Elizabeth Shin? The New York Times Magazine, 56-61, 94, 139.

Srebnik, D., Cauce, A. M., & Baydar, N. (1996). Help-seeking pathways for children and adolescents. Journal of Emotional and Behavioral Disorders, *4*(4), 210-220.

Sue, S., Fujino, D. D., Hu, L. T., Takeuchi, D. T., & Zane, N. W. S. (1991). Community mental health services for ethnic minority groups: A test of the cultural responsiveness hypothesis. Journal of Consulting and Clinical Psychology, *59*, 533-540.

Sue, S., & Morishima, J. (1982). The mental health of Asian Americans. San Francisco: Jossey-Bass.

Sue, S., Wagner, N., Davis, J. A., Marguillis, C., & Lew, L. (1976). Conceptions of mental illness among Asian and Caucasian-American students. Psychological Reports, *38*, 703-708.

Suinn, R. M., Ahuna, C., & Khoo, G. (1987). The Suinn-Lew Asian Self-Identity Acculturation Scale: Concurrent and factorial validation. Educational and Psychological Measurement, *52*, 1041-1046.

Szapocznik, J., & Kurtines, W. M. (1993). Family psychology and cultural diversity: Opportunities for theory, research, and application. American Psychologist, *48*, 400-407.

Tabora, B. L., & Flaskerud, J. H. (1997). Mental health beliefs, practices, and knowledge of Chinese-American immigrant women. Residential Group Care and Treatment, 18(3), 173-189.

Takaki, R. (1993). A Different Mirror. Boston, New York, Toronto, and London: Little, Brown, and Company.

Takeuchi, D. T., Bui, K. V. T., & Kim, L. (1993). The referral of minority adolescents to community mental health centers. Journal of Health and Social Behavior, 34, 153-164.

Takeuchi, D. T., Leaf, P. J., & Kuo, H. (1988). Ethnic differences in the perception of barriers to help-seeking. Social Psychiatry and Psychiatric Epidemiology, 23(4), 273-280.

Takeuchi, D. T., Mokuau, N., & Chun, C. A. (1992). Mental health services for Asian Americans and Pacific Islanders. Journal of Mental Health Administration, 19(3), 237-245.

Takeuchi, D. T., Sue, S., & Yeh, M. (1995). Return rates and outcomes from ethnicity-specific mental health programs in Los Angeles. American Journal of Public Health, 85, 638-643.

Tata, S. P., & Leong, F. T. L. (1994). Individualism-collectivism, social-network orientation, and acculturation as predictors of attitudes toward seeking professional psychological help among Chinese-Americans. Journal of Counseling Psychology, 41(3), 280-287.

Tracey, T. J., Leong, F. T. L., & Glidden, C. (1986). Help seeking and problem perception among Asian Americans. Journal of Counseling Psychology, 33(3), 331-336.

Uba, L. (1994). Asian Americans: Personality patterns, identity, and mental health. New York: Guilford Press.

Uehara, E. S., Takeuchi, D. T., & Smukler, M. (1994). Effects of combining disparate groups in the analysis of ethnic differences: Variations among Asian American mental health service consumers in level of community functioning. American Journal of Community Psychology, 22, 83-99.

U. S. Census Bureau (2000). The Asian Population: 2000. Retrieved November 16, 2004 from <http://www.census.gov/prod/2002pubs/c2kbr01-16.pdf>.

U.S. Department of Commerce. (1998). Statistical abstract of the United States, 1998: The national data book (118th Ed). Springfield, VA: National Technical Information Services.

U.S. Department of Health and Human Services. (1999). Mental Health: A report of the Surgeon General. Rockville, MD.

U.S. Department of Health and Human Services. (2001). Mental Health: Culture, Race, and Ethnicity- A Supplement to Mental Health: A Report of the Surgeon General - Executive Summary . Rockville, MD: Public Health Service, Office of the Surgeon General.

Veit, C., & United States Public Health Service. (2000). Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda. Washington, DC: Department of Health and Human Services.

Ware, J. (1983). The structure of psychological distress and well-being in general populations. Journal of Consulting and Clinical Psychology, 51, 730-742.

Weisz, J. R., McCarty, C. A., Eastman, K. L., Chaivasit, W., & al, e. (1997). Developmental psychopathology and culture: Ten lessons from Thailand. In S. S. Luthar & J. A. Burack (Eds.), Developmental Psychopathology: Perspectives on adjustment, risk, and disorder . New York: Cambridge University Press.

West, J. S., Kayser, L., Overton, P., & Saltmarsh, R. (1991). Student perceptions that inhibit the initiation of counseling. The School Counselor, 39, 77-83.

Windle, M., Miller-Tutzauer, C., Barnes, G. M., & Welte, J. (1991). Adolescent perceptions of help-seeking resources for substance abuse. Child Development, 62, 179-189.

Wolf, D. L. (1997). Family secrets: Transnational struggles among children of Filipino immigrants. Sociological Perspectives, 40, 457-482.

Yeh, M., Eastman, K., & Cheung, M. K. (1994). Asian-American children treated in the mental health system: a comparison of parallel and mainstream outpatient service centers. Journal of Community Psychology, 22, 153-163.

Yeh, M., McCabe, K., Hough, R. L., Dupuis, D., & Hazen, A. (2003). Racial/ethnic differences in parental endorsement of barriers to mental health services for youth. Mental Health Services Research, 5, 65-77.

Yeh, M., Takeuchi, D. T., & Sue, S. (1994). Asian American children treated in the mental health system: A comparison of parallel and mainstream outpatient service centers. Journal of Clinical Child Psychology, 23, 5-12.

Ying, Y. W., & Hu, L. T. (1994). Public outpatient mental health services: Use and outcome among Asian Americans. American Journal of Orthopsychiatry, 64(3), 448-455.

Ying, Y. W., & Miller, L. S. (1992). Help-seeking behavior and attitude of Chinese Americans regarding psychological problems. American Journal of Community Psychology, 20(4), 549-556.

Zane, N., Hatanaka, H., Park, S. S., & Akutsu, P. (1994). Ethnic-specific mental health services: Evaluation of the parallel approach for Asian-American clients. Journal of Community Psychology, 22, 68-81.

Zane, N., & Yeh, M. (2002). The use of culturally-based variables in assessment: Studies on loss of face. In K. S. Kurasaki & S. Okazaki (Eds.), Asian American mental health: Assessment theories and methods (pp. 123-138). New York: Kluwer Academic/Plenum Publishers.

VITA

Carol Wong was born and raised in San Francisco, CA. In 1999, she earned a Bachelor of Arts degree in Psychology at the University of California at Berkeley. She then earned a Master of Science degree in Psychology at the University of Washington in 2003. She returned to California to complete an internship at the Stanford University Child and Adolescent Psychiatry Department/Children's Health Council. In 2006, she earned a Doctor of Philosophy in Child Clinical Psychology at the University of Washington.