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School of Social Work
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December 5, 2008

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EXPLORING RELATIONSHIPS AMONG FACTORS INFLUENCING CAREER
CHOICES

A Dissertation submitted in partial fulfillment of the requirements for the degree of
Doctor of Philosophy at Virginia Commonwealth University.

by

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Richmond, Virginia

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Abstract

ASIAN AMERICAN SOCIAL WORKERS: EXPLORING RELATIONSHIPS AMONG FACTORS INFLUENCING CAREER CHOICES

By Soon Min Lee, Ph D

A Dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

Virginia Commonwealth University, 2008

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Asian Americans are one of the fastest growing minority groups in the United States. One of the stereotypes associated with Asians is that they are more likely to choose careers in science, medicine, and engineering rather than social science, inclusive of social work, mass communication, or humanities (Leong & Serafica, 1995; Tang et al., 1999). This occupational stereotyping of Asians is not just a myth in that descriptive studies have shown that only a few Asians choose social work as a career (Lennon, 2005; NASW, 2006).

Few studies exist on Asian Americans who do not choose Asian stereotypical career choices, such as social work. Acknowledging this lack of research, the present study was developed to explore the relationships between factors that may influence Asian Americans who choose social work as their career. Based on social cognitive career theory (Lent, Brown, & Hackett, 1994), it was hypothesized that acculturation and family immigration status influenced parental involvement, perceived career barriers, and career outcome expectations of Asian American social workers.

A cross-sectional survey design utilizing mixed methods was used in this study. The sample was derived from the members' database of the National Association of Social Workers (NASW). Among 1,802 of Asian American social workers in the NASW database, those aged 65 or older were excluded and 900 Asian social workers were randomly chosen for this study. A total of 370 Asian American social workers participated in this study with 41 percent of a return rate. Quantitative data were collected through standardized measurements: the Social Work Career Influence Questionnaire (Biggerstaff, 2000); Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn, Rickard-Figueroa, Lew, & Vigil, 1987); Career Barriers Inventory Revised (Swanson, et al., 1996); and eight items from Tang et al.'s (1999) Asian American Career Development Questionnaire. Also, qualitative data were obtained through two open-ended short questions. The data were collected through a combined method of an online survey with option of a paper mail-return questionnaire.

Results of the study found significant group differences among family immigration status groups on perceived likelihood and perceived hindrance of career barriers. The 1st

generation group perceived the greatest career barriers and the 3rd or higher generation group perceived the least career barriers among the family immigration status groups. However, there was no significant multivariate effect of acculturation on perceived likelihood and hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession. Qualitative data included participants' diverse perspectives on what factors influenced Asian Americans' selecting or not selecting social work as a career.

Implications and limitations of this study, as well as suggestions for future research, are discussed.

CHAPTER 1 Introduction

Asian Americans are one of the fastest growing minority groups in the United States. According to the 2002 U.S. Census, a total of 12.5 million Asians and Pacific Islanders live in the U.S., representing 4.4 percent of the population. One of the stereotypes associated with Asians is that they are successful in science, engineering, or medical areas, and that they are more likely to choose occupations related to these areas. The assumption is that Asians are less likely to choose careers in social science or other careers requiring communication or social skills. This occupational stereotyping of Asians is not just a myth. A variety of data suggest that only a few Asians choose social work as a career (Lennon, 2005; NASW, 2006), which is one type of social science careers.

According to the 2003 report of the Council on Social Work Education (Lennon, 2005), the proportion of Asian social work students in 2002-2003, (1.8% of Bachelor's and 3.1 % of Master's students), is much lower than the percentage of Asian Americans (4.4 %) in the total U.S. population. A national study of National Association of Social Workers (NASW, 2006) also reported that Asians constituted only 1% of total licensed social workers, underrepresenting the proportion of the Asian population in the U.S.

Culturally, Asians tend not to utilize mental health services. However, a lack of Asian social workers may also contribute to Asian Americans' underutilization of mental health services. According to the study of NASW (2006), a few Asian Americans receive

services by licensed social workers. Only 49% of licensed social workers see any Asian clients, compared to non-Hispanic White (99%), African American (85%), and Hispanic/Latino (77%) clients. Less than one percent of social workers have caseloads with a high percentage (50% or more) of Asian/Pacific Islander clients (NASW, 2006).

A lack of studies exists on Asian American's career development. A few studies have focused on whether the culturally-relevant factors predict Asian Americans' stereotypical career choices (Tang et al., 1999; Leong & Chou, 1994). However, there is a lack of studies that investigate the relationships between culturally-relevant factors and other career-related factors among Asian Americans. Also, most of the studies have limited their samples to college students (Hardin et al., 2001; Leong & Tata, 1990; Tang et al., 1999). It is even harder to find studies which explore Asian Americans who do not choose Asian stereotypical career choices, such as social work or social science careers. A few studies have been conducted on factors that influence social workers to choose their professions (Biggerstaff, 2000; Csikai & Rozensky, 1997; Rompf & Royse, 1994). However, these studies have not focused on the small populations of Asians in the social work profession. More studies are needed on the role of culturally-relevant factors in other career-related factors among Asian American social workers.

The present study is developed to explore the relationships among factors that may influence Asians who choose social work as their career. In particular, this study is designed to contribute to a better understanding of the effects of culturally-relevant factors on other career-related factors among Asian American social workers. Social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994) provides a theoretical framework for

exploring the relationships between culturally-relevant variables, such as acculturation and family immigration status, and career-related variables, such as parental involvement, perceived career barriers, and career outcome expectations. This study uses a cross-sectional design. Data were collected by way of a self-administrated mail survey with an option of web-based survey. The target population was Asian American social workers, and the sample was derived from the database of NASW members.

Research Objectives

The present study has two main objectives: (1) to examine the influence of family immigration status and acculturation differences on perceived career barriers, parental involvement, and career outcome expectations; and (2) to provide a better understanding about the relationships between factors that may influence Asian social workers' career choices.

The findings of this study will add to the literature on Asian Americans' career choice behaviors and, in particular, to those individuals who choose social work as a career. A further understanding of the Asian social workers' career decision making process can contribute to the recruitment and retention of Asians in social work education and professional practice, as well as developing effective career counseling for Asian Americans, considering culturally-relevant factors.

Research Questions

Three research questions have been developed in order to explore Asian American social workers' acculturation, family immigration status, perceived career barriers, parental

involvement, and career outcome expectations. Based on research questions, the following research and null hypotheses are proposed:

(1) Q1: Do perceived career barriers, parental involvement, and career outcome expectations differ by levels of acculturation among Asian social workers?

H₁: Perceived career barriers, parental involvement, and career outcome expectations will differ by levels of acculturation among Asian social workers.

H₀: Perceived career barriers, parental involvement, and career outcome expectations will not differ by levels of acculturation among Asian social workers.

(2) Q2: Do perceived career barriers, parental involvement, and career outcome expectations differ by family immigration status among Asian social workers?

H₁: Perceived career barriers, parental involvement, and career outcome expectations will differ by family immigration status among Asian social workers.

H₀: Perceived career barriers, parental involvement, and career outcome expectations will not differ by family immigration status among Asian social workers.

(3) Q3: Do levels of acculturation and family immigration status result in differences among perceived career barriers, parental involvement, and career outcome expectations?

H₁: Levels of acculturation and family immigration status will result in differences among perceived career barriers, parental involvement, and career outcome expectations.

H₀: Levels of acculturation and family immigration status will not result in differences among perceived career barriers, parental involvement, and career outcome expectations.

Concepts: Definitions and Operationalization

In this study, *Asian Americans* refer to individuals with heritages from the Far East, Southeast Asia, or the Indian subcontinent, including Korean, Japanese, Chinese, Filipino, Vietnamese, Thai, Laotian, Cambodian, Asian Indian, Pakistani, Sri Lanka, and so on. Although there are differences among Asian subgroups, this study used one categorization for the Asian American population. As noted previously, the population of Asian American social workers is small. In addition, there are 11 or more identified and distinct Asian subgroups (U.S. Census, 2004). It is not possible to obtain a sample of Asian American social workers that is sufficient to conduct analyses by subgroup.

“*Traditional careers*” of Asian Americans (Leong & Chou, 1994) refers to occupations which fit into occupational stereotypes of Asians. For example, Asians are considered to be good at physical, biological, and medical sciences, and to be more likely to choose careers related to those areas (Leong & Serafica, 1995; Tang et al., 1999). These science, engineering, or medical-related careers are considered to be traditional careers of Asian Americans. Non-traditional careers, in contrast, refer to social careers requiring verbal, persuasive, or social skills (Leong & Chou, 1994). Related to traditional/non-

traditional careers, *occupational segregation* refers to the disproportional distribution of Asians across occupations (Leong & Chou, 1994). For example, Asians are overrepresented in some occupations, while they are underrepresented in others.

Family immigration status refers to whether the individuals were born in the United States or in foreign countries. Family immigration status can be categorized as the first generation of immigrant (foreign-born immigrant), the second generation (U.S.-born of foreign-born immigrant parents), and the third or higher generation (U.S.-born of second or higher generation parents).

Acculturation is defined as the changes in cultural attitudes, values, and behaviors due to contacts between two cultures (Berry, Trimble, & Olmedo, 1986). In the present study, acculturation was assessed by the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Rickard-Figueroa, Lew, & Vigil, 1987). A higher score of SL-ASIA indicates a higher level of acculturation, while a lower score indicates a lower level of acculturation.

Parental involvement refers to parents' involvement in the career choice of their adolescent or adult children. Asian American parents place a high emphasis on children's education or career, so they often play an influential role in making a career or educational decision of their children. Parental involvement can range from giving career-related information to forcing their children to choose a certain career. Family involvement was measured with eight items, which are from Tang et al.'s (1999) Asian American Career Development Questionnaire. The higher score of the Parental involvement scale (Tang et

al., 1999) indicates a high parental involvement in making a career decision of a participant.

Perceived career barriers are defined in this study as perceived “events or conditions, either within the person or in his or her environment, that make career progress difficult” (Swanson & Woitke, 1997, p.434). Career Barriers Inventory Revised (CBI-R; Swanson, et al., 1996) was utilized to assess perceived career barriers. Subscales of Racial Discrimination, Disapproval by Significant Others, Discouraged from Choosing Nontraditional Careers, and Difficulties with Networking/Socialization were chosen to assess environmental barriers. One of the subscales, Discouraged from Choosing Nontraditional Careers, was modified to assess perceived career barriers among Asian Americans.

The concept of *Perceived career barriers* includes a likelihood and hindrance of career barriers. For example, an individual may report that incidents of racial discrimination are more likely to occur in certain occupations, but these incidents may not be considered a hindrance to one’s career choice. Thus, participants were asked to rate both likelihood and hindrance for the given career barriers. A likelihood rating for each career barrier indicates participants’ perception of frequency of the career barriers’ occurrence, while a hindrance rating indicates their perceived coping efficacy for the perceived career barriers. A high likelihood score indicates that a participant perceives a higher likelihood of experiencing the given barrier, and a high hindrance score indicates that one perceives a greater hindrance caused by the career barrier.

Career outcome expectation refers to personal beliefs about the imagined consequences or outcomes of performing particular behaviors related to a career (Lent et al, 2000, 2002; Lent & Brown, 2006). *Career outcome expectation* was assessed by three subscales of the Social Work Career Influence Questionnaire (SWCIQ; Biggerstaff, 2000): desire to be a therapist; prestige of the profession; and the social change mission of the profession.

Qualitative data also were collected by asking the following open-ended questions: “What advice would you give to an Asian American regarding a career choice?”; “What advice would you give to an Asian American who is considering social work as a career?”; “Why do you think that Asian Americans are not selecting social work as a career?”; and “Why do you think Asian Americans are selecting social work as a career?” These qualitative data enriched an understanding of Asian Americans’ diverse perspectives on their career choice and career development.

A questionnaire was developed to collect demographic information on the following: age, gender, ethnic group, family immigration status in this country (e.g., the 1st, 2nd, and 3rd or higher generation of immigration) with a contingency question on the length of staying in the U.S., the highest educational level achieved (e.g., BSW, MSW, or DSW/ PhD), the number of years of paid social work experiences, a geographic area of the employment, the primary method of current practice, the primary setting/area of current practice, and satisfaction with their career choice. The primary method of current practice included five response categories: direct practice/clinical social work; supervision; policy or planning; administration/management; and other. The response categories of the primary setting/area of practice were: aging/gerontological social work; alcohol, drug, or

substance abuse; child welfare; community planning; corrections/criminal justice; developmental disabilities; family services; group services; health; immigration; international social work; occupational/industrial social work; mental health or community mental health; public assistance/public welfare (not child welfare); rehabilitation; school social work; and other.

Structure of the Chapters

In this first chapter, the introduction of the research problems and overview of the proposed study were addressed. This chapter also presented the design of the proposed study.

Chapter two reviews the research literature in the theoretical framework of social cognitive career theory (SCCT), and culturally-relevant factors, such as Asian cultural values, acculturation, parental involvement, and so on. The aim of literature review is to understand variables based on SCCT, identify the needs of research on the career choice behaviors among Asian American social workers, and argue the significance of the present study.

Chapter three describes the research methodology. This chapter provides the research design with a detailed description of sampling, measurement, and data collection processes. Research objectives, questions, and hypotheses are discussed here. Also, the data analysis plan is proposed.

Chapter four presents the results of the data analysis. It provides the demographic description of sample, the results of conducted analyses, and an overview of quantitative

and qualitative findings. The results of analyses examining the relationships among variables and testing the hypotheses are discussed.

Chapter five discusses the significant findings from the present study. This chapter suggests the implication of the findings for social work practice, social work education. Also, this chapter discusses the contribution of this study to social work research and knowledge building, especially to the literature of career development of Asian Americans. Limitations of the study and suggestions for future research are followed.

CHAPTER 2 Literature Review

This chapter provides a literature review to better understand the relationships of factors that may influence Asian American social workers' career choices. Social Cognitive Career Theory (SCCT) is selected as the framework for the proposed study of culturally-relevant factors and their relation to parental involvement, perceived barriers, and career outcome expectations. The aim of literature review is to understand variables based on SCCT, identify research gaps about the career choice behaviors among Asian American social workers, and argue the significance of the present study.

The following topics will be addressed in this chapter: (1) background and significance; (2) assessment of Asian Americans' career development; (3) the social cognitive career theory; and (4) analysis and summary.

Background and Significance

According to the 2000 U.S. Census Bureau (2004), Asians accounted for 4.2 percent (11.9 million) of the American population. The Asian American population is not homogeneous, consisting of many subgroups with different languages and cultures. Asians include people with origins of the Far East, Southeast Asia, or the Indian subcontinent, such as Korean, Japanese, Chinese, Filipino, Vietnamese, Thai, Laotian, Cambodian, Asian Indian, Pakistani, and so on (U.S. Census, 2004).

Occupational Stereotyping

One of the most pervasive stereotypes associated with Asian Americans is that they are typically successful in, or predominately interested in, math-, science-, technology-, and medical-related careers rather than in verbal, persuasive, or social careers (Leong & Serafica, 1995; Tang et al., 1999). Leong and Serafica (1995) argued that Asian Americans' career interests and aspirations disproportionately focus on certain occupations, and as a result Asian Americans' career choices become stereotyped and segregated.

According to the National Science Foundation (2002), in 1998 Asians earned 9 percent of the bachelor's degrees in Science and Engineering (S&E) awarded to U.S. citizens and permanent residents, but only 5 percent in non-Science and Engineering (non-S&E) bachelor's degrees. In 1998, Asians accounted for 9 percent of all S&E master's degrees awarded, but only 4 percent in non-S&E fields. Among Asian S&E master's graduates, approximately 64 percent earned a degree in computer science and engineering, compared to 36 percent of the all S&E master's graduates. Only 20 percent of Asian S&E graduate students were in psychology or the social sciences, compared to 39 percent of White students (National Science Foundation, 2002). The disproportion between Asian S&E and non-S&E graduates increases in higher education levels. Asians constituted 11 percent of the S&E doctorates awarded to U.S. citizens and permanent residents in 1999, compared to only 5 percent of the doctorates awarded in non-S&E fields. Approximately 77 percent of all Asian doctorates represent S&E, which is much higher compared to other ethnic groups (53-50 %). In particular, Asian doctorate recipients accounted for 18 percent

of all doctorate recipients in both engineering and computer science and 15 percent in biological science. In contrast, Asians only constituted 4 percent of the doctorates awarded in psychology and 7 percent in the social sciences (National Science Foundation, 2002).

Based on a review of the literature, it is suggested that there is an occupational stereotyping as well as occupational segregation for Asian Americans. Occupational segregation refers to “the distribution of members of an ethnic group across occupations, such that they are overrepresented in some and underrepresented in others” (Leong & Chou, 1994, p. 162). Leong and Hayes (1990) argued that stereotypes of occupational distribution can be an external barrier to vocational exploration as well as an internal barrier. Stereotypes of Asian American career development can potentially discourage individuals who have interests in non-stereotypical occupations and want to pursue their career interests (Tang, 2001).

The social work profession is not an interesting or promising career choice for Asians, according to occupational stereotyping. It is unfortunately true that Asians are underrepresented in the social work profession. According to the 2003 report of the Council on Social Work Education (Lennon, 2005), in 2002-03, only 1.8 percent of total students who were awarded Baccalaureate degrees in Social Work reported as Asian Americans, compared to 65.7 percent reported as Whites, 20.1 percent as African Americans, and 8 percent as Latinos. Only 3.1 percent of total MSW (Masters Degree’s of Social Work) graduates in 2002-03 were Asian Americans, while 65.8 percent were Whites. Total 15.7 percent of MSW graduates were African Americans, and 7.8 percent were Latinos. The proportion of Asians at the doctoral level increases to 5.9 percent of

total doctoral graduates. However, the representation of Asian students in the social work profession is still very low, considering their representation (4.21 %) of the total U.S. population (U.S. Census 2004).

The Need for Asian American Social Workers

A study of the National Association of Social Work (NASW, 2006) on licensed social workers reported that licensed social workers are predominantly non-Hispanic White (86%), overrepresenting the 68% of non-Hispanic White population in the U.S. Asians make up only 1% of total licensed social workers, underrepresenting their proportion (4 %) of the U.S. population. Among Asian licensed social workers, 15 percent are male, compared to 26 percent of Hispanic/Latino and 17 percent of non-Hispanic White. Asian/Pacific Islander social workers are more likely to work in health social work (26%) rather than child welfare/family or school social work where African American and Hispanic social workers proportionately are more likely to work (NASW, 2006).

Not only is the number of Asian American social workers small, but also many studies highlight that Asian Americans underutilize mental health services. According to a study of NASW (2006), only 49% of social workers see any Asian clients, compared to 99 % of social workers who see any non-Hispanic White clients. Also, 85% of social workers have at least some African American clients, and 77 % of them provide services to Hispanic/Latinos clients. Less than one percent of social workers have caseloads that are composed of more than 50 % of Asian/Pacific Islander clients. On the other hand, ten percent of social workers have caseloads that are predominately African Americans, and five percent have caseloads that are predominately Hispanics (NASW, 2006). Kim, Lee,

Chu, and Cho (1989) found in their study that Korean Americans severely underutilized mental health services in San Francisco in spite of active outreach efforts. Only nine percent of the referrals were self-made in this study (Kim et al., 1989). Korean patients sought professional help only when they were severely disturbed or in an acute crisis, and when other methods, such as herbal medicine, acupuncture, Christian religious counseling, and medical help, were not effective (Kim, 1997). Barreto and Segal (2005) conducted a study exploring the use of mental health services among 104,773 service recipients with diverse ethnic backgrounds in California. Their data revealed that Asians utilized mental health services when they were in very severe circumstances, and that there was a diverse range of utilization patterns among Asian subgroups.

Low utilization of social services, however, does not mean that the Asian population has a low need for the social work services. Although the Asian population is considered a “model minority” with a high education level and a high income level, there is a broad range of diversity among Asian subgroups. Certain Asian subgroups’ excellence in education and earning higher income support the myth of a model minority, and many difficulties or issues may be hidden to propel this myth. However, a high percentage of Asians suffer unemployment and poverty (U.S. Census, 2003), and there is a great need for social services, including mental health services. Asian Americans who immigrated to North America report as many serious mental health problems as do their Caucasian counterparts (Li & Browne, 2000).

Despite their needs, there are cultural barriers that prevent Asian Americans from receiving mental health services. Among many identified factors, a lack of bilingual and

bicultural social workers who can understand Asian cultures and languages is one of the major barriers to accessing mental health or social services (Speller, 2005). Helms and Cook (1999) emphasized that the language or socio-racial match between therapists and clients can foster uncensored communication by speaking to the client in the therapist's and client's common dialect. Even the use of an interpreter who only is fluent in the client's primary language has many limitations, including the distortion of the client's communication (Helms & Cook, 1999).

Takeuchi, Sue, and Yeh (1995) found in their study that an ethnic match of clients and therapists is beneficial in working with ethnic minorities, especially Asian Americans, due to the issues of language preferences or the ability of a therapist to communicate with a client. Takeuchi et al. (1995) conducted a study of a large sample of 1,516 African Americans, 1,888 Asian Americans, and 1,306 Mexican Americans in Los Angeles County, California, in order to compare the return rate, length of treatment, and treatment outcome of ethnicity-specific mental health services and those of mainstream Caucasian mental health services. The ethnicity-specific program was operationally defined as a program where a majority of clients were from a specific minority group, while the mainstream program was defined as a program where a majority of clients were Caucasians. Takeuchi et al. (1995) indicated that ethnic clients who attended ethnicity-specific programs had a higher return rate and stayed in treatment longer than those using mainstream services. Ethnicity-specific programs were associated with higher return rates for all three minority groups, whether or not clients were ethnically matched with their therapists. In terms of Asian American clients, the likelihood of an ethnic match between

clients and therapists occurred 6.6 times more often in Asian American programs than in mainstream programs. Asian Americans who were matched with an Asian therapist returned more often than their counterparts in mainstream programs who were not matched. Ethnicity-specific programs alone, match alone, or a combination of both were significantly associated with a higher number of treatment sessions for Asian Americans. In short, ethnicity-specific programs were effective in increasing the continued use of mental health services among ethnic minority groups (Takeuchi et al., 1995).

Despite increasing needs of the Asian population and benefits of ethnic-match between clients and mental health professionals, there are not enough Asian social workers to meet both current and potential Asian American clients' needs. Manderscheid and Henderson (1998) found that approximately 70 Asian American mental health professionals were available per 100,000 Asian Americans in the U.S., a statistic that was more than twice of the rate for Whites (Speller, 2005). More Asian social workers are needed to address Asian Americans' issues and understand their cultures and values that are essential for culture-sensitive practice. Also, it seems logical to believe that the recruitment of more bilingual and bicultural Asian social workers may help to increase the utilization of mental health services and decrease early drop-out rates in the mental health services among Asian Americans (Takeuchi et al., 1995; Helms & Cook, 1999).

The Need for Research

There are studies that explore factors influencing the choice of social work as a career. Many factors, such as family dysfunction, stressful life events (Rompf & Royse, 1994), available social work role models, and values of altruism (Biggerstaff, 2000; Csikai

& Rozensky, 1997), are identified as influencing factors in choosing social work as a career. However, most of the previous studies were conducted among Caucasian college students (Rompf & Royse, 1994; Biggerstaff, 2000; Csikai & Rozensky, 1997). More studies are needed to explore the relationships of factors that may influence career choices among minority social workers who already made a career choice.

There are several studies exploring the relationships between culturally-relevant factors, such as acculturation, and other predicting variables, such as interests, parental involvement, self-efficacy, and career outcome expectations among Asian Americans (Tang et al., 1999; Leong & Chou, 1994). However, these studies have focused on whether these variables predict Asian Americans' stereotypical career choices. Few studies have been conducted among Asian Americans who already chose their career, especially non-stereotypical career options, such as social work. More research is needed on culturally-relevant factors and their impacts on other career-related factors that may influence Asian American social workers' career choices.

The present study aims to explore how culturally-relevant factors, such as acculturation and family immigration status, influence career-related factors, such as outcome expectations, perceived barriers, and parental involvement among Asian American social workers. This study targets Asian American social workers who already made non-stereotypical career choices and who have worked in the social work field; so, it will provide a historical or retrospective perspective of several career-related factors and their relationships with culturally-relevant factors (Whiston & Keller, 2004). Knowing the relationships of culturally-relevant factors and other career-related factors is essential to

recruit more Asian Americans to the social work education and profession and to understand their career development within a cultural context. The findings of the study can be further applied to counsel Asian students in career choices and improve the recruitment and retention of Asian Americans in the social work profession.

Culturally-Relevant Factors in Asian Americans' Career Development

Although some studies have been conducted on the relationship between contextual factors and career choices, little research has been done on cultural factors and their influences on Asian Americans' career development (Leong & Serafica, 1995; Leong & Hayes, 1990). The assessment of Asian Americans' career choices should reflect culturally-relevant factors, such as Asian Americans' collectivism and filial piety, acculturation issues, and family immigration status. These culturally-relevant factors can influence other career-related factors, such as outcome expectations, perceived barriers, and family involvement.

The following section will review culturally-relevant factors, including Asian cultural values, family involvement, and acculturation in order to understand contextual influences on Asian Americans' career development.

Asian Cultural Values and Parental Involvement

Many cultural values are shared among Asian subgroups (Kim, Atkinson, & Yang, 1999), and these cultural values ultimately influence Asian Americans' career development. Asian Americans may feel job-related stress, for example, due to values of saving or losing face, value conflicts between oriental values, such as saving face, and western values, such as rationality and individualism, whether a job enables an Asian

American to meet obligations to the extended family, and a culturally valued responsibility, such as filial piety (Leong & Serafica, 1995). Asian emphasis on education, collectivism and filial piety is especially important to understand high parental involvement in Asian Americans' career development.

Asian values: high emphasis on education, collectivism, and filial piety. Asian American parents often have high expectations of academic success for their children and put a lot of educational pressure on them, since children's education is related to their future success (Min, 1998; Kim, 1996; Kim & Hoppe-Graff, 2001). Education has been historically viewed in Asia as a tool for social mobility (Min, 1998), future success, well-paid employment, social prestige, and a better socioeconomic status (Kim & Hoppe-Graff, 2001). A high emphasis on children's education propels some Asian families to emigrate to the U.S. for better educational opportunities (Yoon, 1997).

The priority of education and strong motivation for achievement are related to maintaining family reputation and the prosperity of the family (Kim & Hoppe-Graff, 2001). Asian culture is considered an interdependent, collective culture, compared to the independent, individualistic American culture. A collectivist culture emphasizes the group and gives priority to the group's goals over those of the individual's, but an individualist culture emphasizes the individual and values the individual's goals over the group's (DeVito, 2007). In Asian culture, academic or career achievement is not considered an individual child's decision, but the obligation of a family to decide.

Another important Asian cultural value is filial piety, which is defined as "respect, obedience, and devotion for one's elders" (Henderson & Chan, 2005). Many Asians feel

committed and obligated to take care of their elder parents, and parents also have expectations of their children. As many Asian parents still expect to be cared for by their elder son in their old age, the socioeconomic status of their son attains prominence for the parents. A son's educational success assures the parents' comfort in later life and the grandchildren's or next generation's prestige (Sorensen, 1994). Since children's educational or career achievement is related to a family's reputation, high expectations of Asian parents lead to high involvement in choosing the academic major or career of their adolescent and adult children (Sorensen, 1994; Kim & Hoppe-Graff, 2001; Leong & Gim, 1995; Sue & Okazaki, 1990).

Parental involvement. The high emphasis on education, collectivism, and filial piety results in high parental involvement, an important factor influencing Asian Americans' career development processes (Leong & Serafica, 1995; Tang et al., 1999; Tang, 2001; Leong & Tang, 2002). However, there have been few empirical studies conducted on the relationship between family influence and career development behaviors of Asian Americans (Leong & Tang, 2002).

In one empirical studies, Gim (1992) found that there was a significant correlation between real and ideal choices for Euro-, but not for Asian-American students, and that Asian American adolescents perceived parental pressure as a significant factor influencing their career choice, unlike their Caucasian counterparts. The findings suggested that Asian American adolescents' career interests did not match with their career choices; instead, their parents' involvement played a larger role in their career choices than their interests (Gim, 1992).

Tang, Fouad, and Smith (1999) also examined family involvement in career choices of 187 Asian American college students. In their study, Tang et al. (1999) found that family involvement is a major factor influencing Asian Americans' career choices, whereas career interests are not related to their career choices. These findings confirmed the literature that Asian Americans make career choices influenced by family involvement, rather than their own career interests.

In terms of parental involvement in career development, Hardin, Leong, and Osipow (2001) examined career-maturity and self-construal among European and Asian American students. Self-construal refers to self-perception in relation to others, and self-concept can be interdependent/collectivist or independent/individualist (Hardin et al., 2001). Hardin et al. (2001) found that Asian American participants have less mature career choice attitudes than their European American counterparts. However, highly acculturated Asian Americans showed similar levels of both independence and interdependence to European Americans. In other words, Asians with lower levels of acculturation are more willing to have interdependent self-construal and high parental involvement, while those with higher levels of acculturation are more likely to have independent self-construal and low parental involvement.

Based on Asian values, high parental involvement plays an important role in Asian Americans' career development. However, the transmission process of Asian values changes when a person is exposed to a different culture. Acculturation and immigrant experiences are important factors influencing parental involvement and other career-related factors of Asian Americans' career development (Leong & Tata, 1990; Leong & Chou,

1994; Leong & Brown, 1995). The following section will discuss the change of Asian values in the process of acculturation to the U.S.

Immigration Experiences and Acculturation

Among the 11.9 million Asian Americans, more than half (69%) are foreign-born, and the majority (76%) of the foreign-born Asian population have entered the U.S. within the 20 past years. In 2000 only 31 percent of Asians were natives, and 34 percent of Asians were naturalized citizens or non-citizens (U.S. Census, 2000). The demographic information infers that the majority of Asians is the first- or second-generation immigrants and is in a certain stage of adjustment or acculturation.

Immigration is a lifelong, complicated, multi-dimensional experience (Berger, 2004). Experiences of immigration require facing the challenge of assimilation into a new culture, reconstructing social networks, adjusting to changes in socioeconomic status, and reconnecting with various social systems (Berger, 2004; Hernandez & McGoldrick, 1999). Berger (2004) characterizes the process of immigration as departure, transition, and resettlement. In the departure phase, people prepare for immigration to the new country; in the transition phase, the actual relocation to the new country occurs; and in the resettlement phase, the two processes of adjustment to the new culture and adherence to the culture of origin occur. Immigrants have contact with the new culture in the resettlement phase, and they go through psychological changes as part of the process of acculturation (Berry, 1980).

Immigration experiences in the resettlement phase may influence Asians' career development. Tang (2001) argued that a secure and stable job is important for the 1st

generation immigrants as many of them struggled to meet their basic needs when they first migrated to the U.S. Asian immigrants' educational degrees or professional credentials often do not transfer from their native countries to the U.S. Thus, many Asians are underemployed and cannot maintain their previous socioeconomic status in the U.S. (Leong & Tang, 2002). A secure and financially stable job is considered as important for the 1st or 2nd generation immigrants. In addition to underemployment issues, Asian immigrants may face barriers preventing them from choosing a broad range of occupational choices: lack of exposure to certain occupations in their own culture; lack of available role models; low self-confidence; a sense of powerlessness; and limited work experiences (Leong & Gim, 1995; Walsh & Osipow, 1983). Perceived minority status may play an important role that discourages Asian Americans from pursuing career interests or as motivation to overcome discrimination (Leong & Chou, 1994).

Along with immigration experiences, acculturation plays an important role in Asian Americans' career development. Acculturation is defined as the changes in cultural attitudes, values, and behaviors due to contacts between two cultures (Berry, Trimble, & Olmedo, 1986). There are many researchers who have studied the process of acculturation, but Berry's model of acculturation (1990) is widely used to assess relationships between ethnic identity and acculturation. Berry (1990, 2001) suggests four categories of acculturation attitudes:

1. Assimilation: When individuals do not wish to maintain their cultural heritage and seek daily interaction with other cultures.
2. Separation: When immigrants place a value on holding on to their original culture and at the same time wish to avoid interaction with others.

3. Integration: Some degree of cultural integrity is maintained, while at the same time immigrants seek, as a member of an ethno-cultural group, to participate as an integral part of the larger society.
4. Marginalization: There is little possibility or interest in cultural maintenance and little interest in having relations with others. (p. 619)

The degree of acculturation can be different for each family member. The children can be easily acculturated to the American culture and values through school life and peer groups, while their parents still maintain traditional Asian values at home (Hernandez & McGoldrick, 1999). The different degrees of acculturation among family members may cause difficulties between Asian parents who want to get involved in their children's career decision making processes and children who may want to make their own career choices. Hardin et al. (2001) found in their study among European and Asian American students that Asians with lower levels of acculturation are more willing to have high parental involvement in making a career decision, while those with higher levels of acculturation are more likely to have low parental involvement.

Acculturation is an important concept to understand Asian Americans' career development, because of its impact on other career-related factors. Tang, Fouad, and Smith (1999) examined acculturation and career choice decisions of 187 Asian American college students. Tang et al. (1999) found that Asian Americans with higher acculturation levels are more likely to have higher self-efficacy. Also, Asian Americans with lower acculturation are more likely to choose more typical occupations in the Investigative and Realistic occupations (i.e., science and engineering areas) to the exclusion of personal interests (Tang et al., 1999). Asian Americans with a low acculturation level may suffer language barriers and unfamiliarity with social systems and the American customs. Due to

these barriers, Asian Americans with a low acculturation level may choose their career in science or engineering areas, which may require low levels of English fluency or communication skills.

Asian Americans' ideas of occupations or work values may be changed in the process of acculturation. Henderson and Chan (2005) argued that Asian Americans may view an occupation as a means to attain things other than personal fulfillment, in contrast to Caucasian Americans. Researchers pointed out that Asian Americans emphasize the prestige of careers (Leong, 1993) and monetary rewards (Leong & Tata, 1990) as occupational values. Asians may consider their occupations as a means to financially support their family or keep up the family reputation. In terms of work values, Leong and Tata (1990) explored the acculturation levels and work values among Chinese American 5th and 6th graders. In their study, Leong and Tata (1990) found that Chinese American children who have more traditional values consider an occupation in terms of family obligation and contribution, while those who are more acculturated view it in terms of self-expression or self-realization.

Based on the background knowledge of culturally-relevant factors, career-related factors will be discussed using the theoretical framework of social cognitive career theory in the following section.

Social Cognitive Career Theory

Social cognitive career theory (SCCT) is frequently used to explain and predict career development processes and choices. SCCT highlights the interaction between the person and his or her environment, and predicts the causal relationships among persons,

environments, and behaviors (Lent, Brown, & Hackett, 2002). The social cognitive career theory framework provides a means to identify and assess factors in career development, such as self-efficacy beliefs, outcome expectations, and career choices.

Based on Bandura's social cognitive theory (1986), SCCT is developed by Lent, Brown, and Hackett (1994, 2000, 2002). The major theoretical concepts of social cognitive career theory are self-efficacy, outcome expectation, and personal goals (Lent, Brown, & Hackett, 2002). According to Lent et al. (1994), SCCT can be divided into two levels of theoretical analysis: cognitive-person variables, such as self-efficacy, outcome expectations, and personal goals; and environmental variables, such as gender, race, and contextual supports and barriers. More studies have been conducted on the cognitive-person variables than the contextual variables of supports and barriers (Lent et al, 1994). However, researchers recently spotlighted contextual supports and barriers as research topics in SCCT's choice model (Lent et al., 2000; Lent et al., 2001; Lent et al, 2002; Lent et al., 2005; Lent & Brown, 2006).

The following sections review definitions of important concepts of SCCT and address existing studies on environmental effects on career development processes. Self-efficacy, outcome expectation, and interests and personal goals will be addressed, followed by contextual influences.

Self-Efficacy

Self-efficacy refers to peoples' beliefs about their capabilities of performing particular behaviors required to attain certain types of careers (Bandura, 1986; Lent et al, 2002; Lent & Brown, 2006). Individuals' beliefs that they are competent in performing

tasks related to a certain career influence them to pursue that career interest. If individuals perceive that they lack the ability to manage tasks or cope with obstacles in the process of their career development, then they are less likely to choose that specific career. For example, if Asians are the first generation of immigration and have a low level of acculturation, they may have lack of confidence in their communication or social skills. These self-efficacy beliefs may hinder them from choosing a career which requires communication and social skills. Instead, their beliefs that they have the capability to do well in engineering- or math-related tasks may encourage them to choose related careers.

According to SCCT, self-efficacy is an essential concept, directly influencing other career-related factors, such as outcome expectations, interests, and goals. The present study, however, targeted Asian social workers who already chose their careers. It was assumed that they had self-efficacy on social work-related tasks, and they already had interests in the social work profession. Thus, self-efficacy was not considered in the present study.

Outcome Expectation

Outcome expectation refers to personal beliefs about the imagined consequences or outcomes of performing particular behaviors related to a career (Lent et al, 2000, 2002; Lent & Brown, 2006). For example, if an individual enacts certain behaviors related to a career, the individual will expect that a specific outcome will be derived from the behavior. This creates outcome expectations, which are an important motivating factor. According to Bandura (1986), outcome expectations can be categorized as three different types: anticipated social outcomes, such as benefits to one's family or approval of significant

others; material outcomes, such as financial or monetary gain; and self-evaluative outcomes, such as self-approval or self-satisfaction (Lent et al., 2000; Lent & Brown, 2006). Anticipated social outcomes, for example, may be important for Asian Americans. In Asian culture, the approval of parents may be an influencing factor of one's career choice (Leong & Chou, 1994). If Asian youths anticipate that their parents would not approve their career interests, this social outcome expectation would discourage them from pursuing their career interests.

Individuals may choose a certain career if its outcome expectation is preferred over those of other careers. In the process of making a career choice, an individual is influenced by the subjective perception of what outcome will be derived from the choice and the value placed on the outcome (Lent, Brown, & Hackett, 1994). Values placed on the outcome are an important factor to understand how an individual subjectively decides which outcomes are preferred or prioritized for the individuals. Asian Americans may develop different value systems, based on their various acculturation levels. Their different levels of acculturation influence their own perspectives on the career-related tasks or events, and develop different career outcome expectations.

Leong and Chou (1994) proposed hypotheses for the relationship between acculturation levels and career outcomes among Asian Americans. According to Leong and Chou's framework (1994), different degrees of acculturation would predict what perceptions or reactions Asians would have on occupational stereotypes or segregations. Leong and Chou (1994) proposed that low acculturated Asians would perceive or experience more occupational stereotyping and discrimination than highly acculturated

Asians. Asians with a lower acculturation level are more likely to believe occupational stereotypes and be influenced by the stereotypes in their career development than their counterparts with a higher acculturation level. Also, lower acculturated Asians would be more likely to experience higher levels of occupational stress and lower levels of job satisfaction than their higher acculturated counterparts. Asians with higher acculturation levels are more likely to consider lack of success of Asians as a result of individual lack of ability or other internal attributes. Leong and Chou (1994) proposed that highly acculturated Asians might choose untraditional occupations to show that they do not fit in Asian stereotypes. Based on Leong and Chou (1994)'s framework, Asians majoring in social work should be highly acculturated as they choose a rather untraditional occupation, which does not fit in Asian occupational stereotyping.

The outcome expectations of social workers have not been explored enough in the existing literature review. Instead, a few studies have been conducted on the relationships between values and social work students' career choices (Golden, Pins, & Jones, 1972; Csikai & Rozensky, 1997; Biggerstaff, 2000). Csikai and Rozensky (1997) measured "social work idealism" and factors that influence career choice among beginning Bachelors and Masters level social work students. All students have a high level of idealism, and altruism is considered important in their career choice. Also, students with high social work idealism are more likely to put more emphasis on altruistic reasons.

Biggerstaff (2000) developed a measurement to assess career outcome expectation and values among 589 students from six different social work master's programs. The Social Work Career Influence Questionnaire (SWCIQ; Biggerstaff, 2000) consists of four

identified areas of career influence: Personal and Family Experiences; Desire to be a Therapist; Prestige of the Profession; and the Social Change Mission of the Profession. Three subscales of Desire to be a Therapist, Prestige of The Profession, and the Social Change Mission of The Profession assess whether personal and social work values match among participants and which outcome expectations of the social work profession are important among them. The findings suggested that students with higher scores on the Personal and Family Experiences, Desire to be a Therapist, and Prestige of the Profession are more likely to have high aspirations for private practice. Also, aspirations for private practice are positively associated with higher scores on the Personal and Family Experiences, Desire to be a Therapist, and Prestige of the Profession subscales. Based on the literature review indicating that Asian Americans value prestige and financial stability (Leong, 1993; Leong & Tata, 1990), it was assumed that Asian American social workers with a low acculturation level might have higher aspiration for private practice and a stronger desire to be a therapist and place more emphasis on prestige of the profession.

Interests and Goals

Another important concept of SCCT is interests, referring to “people’s pattern of likes, dislikes, and indifferences regarding different activities” (Lent & Brown, 2006, p.17). According to SCCT, interests are a major factor influencing career goals and choice. Interests, however, may not be directly linked to Asian Americans’ career choices. As indicated earlier in the literature review, parental involvement is an important factor in choosing a career among Asian Americans. Even though an Asian American may be interested in a social work career, he or she may choose other careers in engineering or

science, due to his or her parental involvement and duty for a family. Asian collective culture may also contribute to the interdependence of making a career choice (Hardin, et al., 2001).

In their study among 187 Asian American college students, Tang et al. (1999) found that occupational interests do not play an important role in making career choices, unlike what the Lent et al. (1994) model of career choice suggests. Tang et al. (1999), however, concluded that Lent et al.'s model (1994) may not fully explain Asian Americans' career development, but it is still useful to explain the mediating role of self-efficacy between background variables and criteria variables, such as family involvement, family socioeconomic background, and levels of acculturation. Therefore, the findings of the study suggest that Lent et al.'s model (1994) can provide a theoretical framework to examine the career choices of Asian Americans (Tang et al., 1999).

According to SCCT, individuals' goals are influenced by their self-efficacy, interests, and outcome expectations. Bandura (1986) defined goals as "the determination to engage in a particular activity or to effect a particular future outcome" (Lent et al. 2002, p.263). Personal goals play an important role in organizing, guiding, motivating, and maintaining people's behaviors (Lent et al. 2002). For example, Asian Americans who are interested in the social work profession would develop certain goals in order to attain a career in the social work domain. The present study, however, targeted Asian social workers who had already developed their interests and chosen their career goals. Therefore, interests and goals were not considered in this study.

The four concepts of self-efficacy, outcome expectations, personal goals, and interests interact with each other in the process of career development and career choice. Besides the basic core conceptual variables of self-efficacy, outcome expectation, and interests and goals, contextual variables of supports and barriers also play important roles in SCCT (Lent et al., 1994).

Contextual Influences

According to SCCT, contextual environmental factors influence the individuals' learning experiences and opportunities to be exposed to a certain career. Contextual factors further influence the process of socialization and cognition, which shapes the individuals' career interests and development (Lent et al., 2002). For example, an Asian youth may not have an opportunity to see social workers in their ethnic community. Unavailable role models in the Asian community and lack of information about the social work profession may influence the development of Asian Americans' career interests. If Asian Americans have only information of certain careers, their learning experiences of careers will be limited and their interests will be developed based on these limited experiences. Also, occupational stereotyping may influence Asian Americans' career choice. Minority individuals may choose a particular occupation which they believe that they will not be disadvantaged by their ethnicity. Asian Americans may choose an occupational area where they are more likely to have positive ethnic role models. Asian Americans' contextual factors, such as acculturation and immigration status, may influence their career-related experiences, such as outcome expectations, and their perspectives on career-related events or tasks (Lent et al., 2002).

Family involvement, especially, is an important contextual factor influencing an Asian's own career choice preference. Family involvement can be a source of providing opportunity or information to learn about or experience a certain occupation. Also, Asian Americans may believe in occupational stereotypes that Asians are not successful at social science careers. This stereotype may discourage Asian Americans from pursuing certain occupations. If Asian Americans do not have role models in the ethnic community who can break these occupational stereotypes, they may not have opportunities to develop self-efficacy and interests in a certain occupation. Also, experiences of discrimination in job interviews or the process of hiring will influence the person's career choice decision as an external barrier (Lent et al., 2000).

Some research has been done on contextual factors influencing the social work career choice. Rompf and Royse (1994) assessed whether family dysfunction or stressful life events influence social work students to choose social work as a major, compared to non-social work majoring students. The family dysfunction and stressful life events include death of a family member, divorce, family violence, and mental or health problems. Findings of the study suggested that social work students are more likely to report problems such as alcoholism and emotional illness within their families of origin and to attribute these experiences to their choice of career. Individuals may be exposed to social work related experiences and have more opportunities to learn the social work profession through their contextual factors, such as family dysfunction and stressful life. These experiences, further, influence to develop his or her interests in the social work career.

Contextual barriers and supports. Perceived barriers and supports are one of important contextual influences. Contextual supports and barriers are defined as “the conditions that one encounters or expects to encounter along the path toward (i.e., while in pursuit of) a given choice option (e.g., receiving social support for one’s choice goal)” (Lent & Brown, 2006, p.19). According to Lent et al. (2002), contextual supports and barriers influence the career choice process in two ways. First, the beneficial environment will help individuals follow their career choices. Individuals with high supports and low barriers will be more likely to pursue their career goals than those with low supports and high barriers. Second, certain conditions of environments can directly influence the personal goals or actions. Environmental conditions, such as discrimination, fixed gender-role practices, or occupation segregations and stereotypes, can influence individuals’ career goals and actions toward career implementation (Lent et al., 2002). When people perceive enormous barriers and limited supports, they are more likely to compromise their career interests or goals for a manageable career choice.

As indicated earlier, parental involvement is an important contextual factor in Asian Americans’ career development. Parents’ approval and supports may be one of important contextual supports for Asian Americans to choose a certain occupation, whereas parents’ disapproval may be a major contextual barrier for them. When facing parental disapproval of their career interests, Asian Americans may seek to compromise with their parents over a career choice.

There are a few researchers who have recognized the importance of career barriers and supports in research (Lent et al., 2000; Lent et al., 2001; Lent et al., 2002; Lent et al.,

2005). In their study, Lent and his colleagues (2001) assessed the role of contextual supports and barriers for students pursuing math and science majors. Lent et al. (2001) found that barriers were categorized as social or family influences, financial constraints, instructional barriers, and gender and race discrimination, while supports were conceptually categorized as social support and encouragement, instrumental assistance, access to role models or mentors, and financial resources. The findings suggested that there are indirect relationships between barriers/supports and career choices. Lent et al. suggested that future research is needed to explore the relationship between contextual variables and choice outcomes among students and workers.

Lent et al. (2002) conducted a qualitative study, asking what barriers and supports participants perceived to have influenced their career choice behaviors. In their study, Lent et al. (2002) identified six categories that influenced participants' expected career choices: interests, direct exposure to work-relevant activities, vicarious exposure to work-relevant activities, work conditions or reinforcers, ability considerations, and leisure experiences. The findings suggested that participants perceived that the following environmental variables influenced students' pursuing career goals: financial status, family influences, social support, role models, and mentors (Lent et al., 2002).

Another study conducted by Lent and his colleagues (2005) tested SCCT's interest and choice models among engineering students at three universities of predominately white and historically black universities. The study found that social supports and barriers significantly related to self-efficacy as well as gender and university type, which fits in the SCCT-based model of interest and choice goals. Lent et al. (2005) suggested that social

supports provided by the historically Black university environment are more helpful to counteract social barriers than those by the predominantly white university.

Analysis and Summary

Based on a literature review, the following factors are identified as important in Asian Americans' career development: acculturation, family immigration status, parental involvement, perceived barriers, and career outcome expectations. The majority of Asian Americans are the first or second generation of immigrants, who have experienced some levels of acculturation. The different acculturation levels and family immigration status may influence many factors that are related to Asian Americans' career choices. Asian Americans with a low level of acculturation would be more likely to have Asian values, such as collectivism and interdependence, and consider their career choice as a family matter rather than an individual one. Asian Americans may have developed different ideas about careers, due to their different values, acculturation levels, and immigrant experiences.

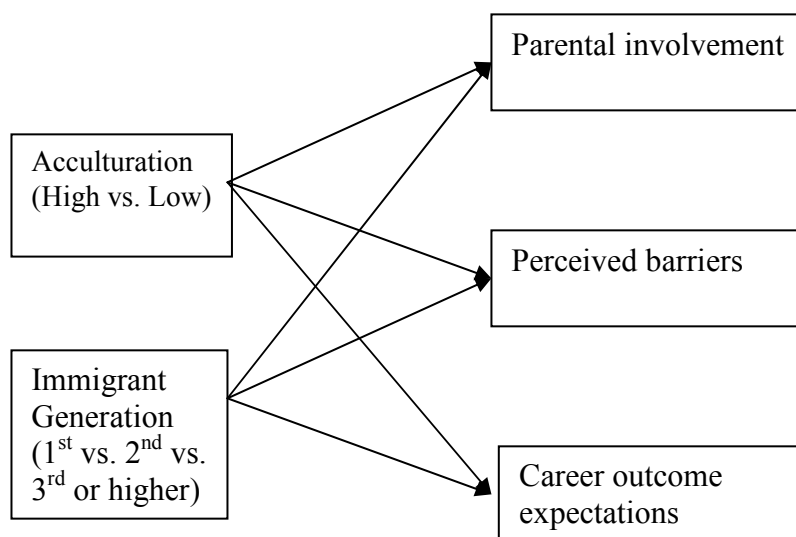
Acculturation and family immigration status may influence parental involvement by changing Asian Americans' values of collectivism, filial piety, and high emphasis on education. Parental approval or disapproval of their career choices would be very important for Asian Americans, especially those with a low acculturation level. Parental approval may be a major source of support, while parental disapproval may prevent Asian Americans from pursuing their career interests. The significance of parental involvement in Asian Americans' career choice would be different based on different acculturation levels or family immigration status.

Perceived barriers of Asian Americans may be influenced by acculturation and family immigration status. Asian Americans with a low acculturation level may be more likely to perceive occupational discrimination and parental disapproval as barriers. Even when choosing the same career, such as social work, Asian Americans may perceive the hindrance of career-related barriers differently, due to their different acculturation levels and family immigration status.

Asian Americans may develop different career outcome expectations, depending on their acculturation levels and their family immigration status. Asian Americans have developed their outcome expectations based on their experiences. Asian Americans may have different learning experiences and values, influenced by their different levels of acculturation and family immigration status. Thus, Asian Americans may choose the same career, such as social work, but they may have different career outcome expectations depending on their levels of acculturation and family immigration status.

Based on the literature review, it was assumed that acculturation and family immigration status would influence parental involvement, perceived barriers, and career outcome expectations. The following figure represents the relationships among these factors.

Figure 1. Research conceptual framework of the present study.



CHAPTER 3 Methodology

This chapter presents the following: (1) Research objectives, questions, and null hypotheses; (2) study population; (3) research design; (4) sampling and sampling size projections; (5) the mixed-method of paper and online survey; (6) description of the data collection procedures; (7) human subject protection and ethical issues; (8) description of the instruments; (9) data analysis plan; and (10) potential difficulties and limitations.

Research Objectives, Questions, and Null Hypotheses

Based on the social cognitive career theory (Lent et al., 2000), this study proposes to examine relationships between culturally-relevant factors, such as acculturation and family immigration status, and other career-related factors, such as parental involvement, perceived barriers, and career outcome expectations that may influence Asian Americans' career choices.

The present study has two main objectives: (1) to examine the influence of family immigration status and acculturation differences on perceived career barriers, parental involvement, and career outcome expectations; and (2) to provide a better understanding about the relationships among factors that may influence Asian social workers' career choices.

The research questions, research hypotheses and null hypotheses of this study are:

(1) Q1: Do perceived career barriers, parental involvement, and career outcome expectations differ by levels of acculturation among Asian social workers?

H₁: Perceived career barriers, parental involvement, and career outcome expectations will differ by levels of acculturation among Asian social workers.

H₀: Perceived career barriers, parental involvement, and career outcome expectations will not differ by levels of acculturation among Asian social workers.

(2) Q2: Do perceived career barriers, parental involvement, and career outcome expectations differ by family immigration status among Asian social workers?

H₁: Perceived career barriers, parental involvement, and career outcome expectations will differ by family immigration status among Asian social workers.

H₀: Perceived career barriers, parental involvement, and career outcome expectations will not differ by family immigration status among Asian social workers.

(3) Q3: Do levels of acculturation and family immigration status result in differences among perceived career barriers, parental involvement, and career outcome expectations?

H₁: Levels of acculturation and family immigration status will result in differences among perceived career barriers, parental involvement, and career outcome expectations.

H₀: Levels of acculturation and family immigration status will not result in differences among perceived career barriers, parental involvement, and career outcome expectations.

Study Population

The National Association of Social Workers (NASW), founded in 1955, is the largest organization of social workers in the world. NASW conducts many functions for the social work profession. For example, NASW promotes the professional development of its members by sponsoring professional conferences and continuing education programs, and publishes journals to inform the profession. NASW also establishes and maintains professional ethics and standards of practice with their *NASW Code of Ethics* and generalized and specialized practice standards. In addition, NASW advocates social policy, as well as provides services to protect its members and enhance their professional status (NASW, 2007).

NASW members are trained professionals who have bachelor's, master's, and/or doctoral degrees in social work. Members work in a wide variety of practice areas, including substance abuse, mental health, health, poverty, and interpersonal violence. Also, members' work settings are diverse, including public and private agencies, schools, private practice, and health and mental health centers.

The study sample was drawn from the NASW member database. The NASW member list can be selected by geography, function, practice work setting, work focus, membership type, ethnicity, gender, age, income, and years experience in social work. Among these choices, ethnicity and age were chosen to decide eligibility for the presented

study. According to the NASW member list, Asian American members make up approximately 1.9 percent of total members, which is 1,802 out of 95,962. Using the NASW database, 1,802 of Asian/Pacific Islanders were chosen as the target population. Among 1,802 of Asian social workers, those aged 65 or older were excluded from the study, as they were assumed to be retired and separated from practice. Mailing addresses of potential participants who met the eligibility criteria of ethnicity and age were gained from the database.

Research Design

A cross-sectional design utilizing mixed methods was proposed in this study. The cross-sectional survey design has advantages in that this design can collect data quickly and study a larger sample. Also, a cross-sectional design has strong external validity, as it can achieve representativeness of the population. A cross-sectional design, however, usually has weak internal validity, meaning that the results of a study may be due to alternative explanations other than the proposed relationship between predictor and dependent variables for this sample.

The present study utilizes a mixed method design. Quantitative data were collected through standardized measurements, and qualitative data were obtained through four open-ended short questions. Leahey (2007) summarized advantages of a mixed method design that other researchers identified: more exact understanding, enhanced validity and reliability (Denzin, 1988, as cited in Leahey, 2007), greater confidence in results, assistance in uncovering deviant or surprising dimensions of a phenomenon, enriched explanation, and theory integration or synthesis (Newman and Benz, 1998, as cited in

Leahey, 2007). In the present study, the qualitative data gave more subjective and potentially diverse perspectives of Asian Americans about additional factors that influenced their career choices in the social work profession. Although qualitative data in this study were not generalized to the entire sampling frame, it enhanced the richness of the data. Due to time feasibility, only two of four open-ended questions were analyzed, utilizing content analysis. The findings of the content analysis are further addressed in the data analysis section.

Despite many benefits, mixed method design may raise concerns for ethical issues, such as data confidentiality and the protection of human research subjects. According to Leahery (2007), only researchers who are involved in the original collection of survey data or have access to identifying information to collect additional qualitative data from original research participants, should use the mixed method design. When researchers use secondary data and have limited access to identifying information, they may try to retrack the participants with limited identifying information, which can breach participants' confidentiality (Leahery, 2007). Concerns for confidentiality were considered minimal in the present study, as the researcher was involved in the original collection of survey data.

Sampling and Sample Size Projections

Using *Power and Precision* (Borestein, Cohen, Rothstein, 1997) software, a minimum sample size was calculated. In this study, there are six groups to be compared, as the predictor variable of acculturation has two different levels (high and low) and family immigration status has three different levels (the 1st generation, 2nd generation, and 3rd or higher generation of immigration). In this 2 × 3 factorial design, alpha is set to .05 and

power is expected to be about .80. Given that the effective size is set as medium ($f = .25$), the recommended sample size is no less than 162 yielding 27 participants for each group. Although the number of dependent variable may change in the proposed study after conducting a factor analysis, an increase of the number of dependent variables would not largely affect the sample size (P. Dattalo, personal communication, November 2, 2007).

Random sampling was utilized in the presented study, in order to have representativeness of its population. A probability sampling allows all members of the population to have an equal chance of being selected in the sample, thus, the sample is more representative than other types of samples (Rubin & Babbie, 2005). A table of random numbers was drawn out using a random number generator from a website of <http://www.random.org/premium/>. This random numbers were used to select 900 individuals representing about 50% of the population. Anticipating a minimum return rate of 20 % or higher, the sample size of 900 Asian social workers was projected to yield a minimum of 162 participants that are needed for data analysis. In total 370 Asian American social workers participated in this study, which outnumbered the minimum sample size.

The Mixed-Method of Paper and Online Survey

The data were collected through a combined method of an online survey with option of a paper mail-return questionnaire. The mixed-mode survey method may address weaknesses of mail-only and online-only surveys. It was hoped that the combined method collected information primarily by online survey, with fewer responses using the paper questionnaire (Schaefer & Dillman, 1998). However, it turned out that majority of

participants returned their responses by paper mail questionnaire, rather than by the online survey. The detailed procedure of the combined method and response rates in the presented study will be discussed in chapter 4.

A mail survey has been widely used to collect data, and its advantages and disadvantages have been identified. A mail survey can ensure greater confidentiality and privacy. The participant's personal identification is not revealed to anyone, except for the researcher. However, the mail survey has the negative effects in that potential respondents can see the questions before deciding whether to respond, and the nonresponse error can be significant (Dillman, 2000).

The web-based survey has many advantages, such as low cost, speed, and a high return rate, saving time in terms of distribution and immediate data entry (Ilieva, Baron, & Healey, 2002). Kaplowitz, Hadlock, and Levine (2004) compared web and mail survey response rates, and found that a web survey has a similar response rate to a mail survey when a pre-survey postcard was sent. However, the expense of the web survey was much lower than that of the mail survey (Kaplowitz et al., 2004). McCabe, Boyd, Couper, Crawford, and D'arcy (2002) also compared a web-based survey mode and a U.S. mail-based survey mode. McCabe et al. (2002) found that the web survey mode had a higher response rate, a more representative sample, and a faster response time than the U.S. mail mode did.

Web-based survey, however, has disadvantages, such as a lack of anonymity and poor presentation alternatives (Ilieva, Baron, & Healey, 2002), concerns about privacy and confidentiality (Couper, 2000), and a limited sample, due to requiring internet access

(Burke & James, 2006). Technical difficulties, such as slow modem speeds, a long downloading time, and unstable internet connection, can decrease participation rates (Couper, 2000). The web survey also can be considered a spam email, so participants may not even open or read it (Porter & Whitcomb, 2003). To deal with these problems, in this present study a hard copy of the survey was sent to participants who did not respond to the first notice that provided the link to the on-line survey.

While the combined-mode survey reduces cost and nonresponse, there is a potential danger of measurement differences. The danger is that participants may not answer questions in the same way for each mode (Dillman, 2000). In this study, mail invitations to the online survey were sent to the participants in order to deal with measurement differences. In this way, the potential measurement differences were avoided, while coverage and response rates were improved (Dillman, 2000).

Description of the Data Collection Procedures

The data collection period was approximately one and half month long from March 26th, 2008 to May 10th, 2008. The initial invitation letter was sent to ask people to participate in the survey by informing them of the purpose of the survey. On the initial invitation they were given a link to a website where the questionnaire was posted. After the invitation letter, the participants were given an option to complete a hard copy of a questionnaire.

The website was developed, using *Inquisite*, an online survey software system. The location of website was <https://survey.vcu.edu/cgi-bin/qwebcorporate.dll?N67M9J>, and the website was closed after the period of data collection. The website opened with a cover

letter, including information about the study, an informed consent letter, and contact information for the researcher. At the end of the front page, participants could choose whether they wanted to stop or continue the survey. It was stated that if the participants chose to continue, it would indicate that they gave consent to the study and voluntarily participate in the study.

According to Dillman (2000), a question that is interesting and easy to answer should be placed in the beginning of the online survey in order to confirm the value of participating in the survey to the participants. Thus, the study measurement tools were in the following order: the Suinn-Lew Asian Self-Identity Acculturation Scale; the Career Barriers Inventory-Revised (CBI-R: Swanson et al., 1996); the Family Involvement scale (Tang et al., 1999); the Social Work Career Influence Questionnaire (SWCIQ; Biggerstaff, 2000); open ended questions; and demographic information.

After 7 to 10 days from anticipated receipt of the letter with the web link, a second cover letter, another questionnaire, and a postage paid return envelope were mailed to each listed person who did not respond online. After the second mailing, follow-up postcard was sent one week later noting the deadline date to return the questionnaire, in order to increase the participant rates.

Each mail and paper questionnaire included an identification number linked to participants' names. The participants needed the identification number to access the website homepage. When participants returned their responses through the online survey or paper questionnaire, their identification number was crossed off the list. Thus, those who

already participated in the study were deleted from the sample and they did not receive another postcard or paper questionnaire.

Human Subject Protection and Ethical Issues

Related to collecting data from participants, ethical issues can come up, such as any possible risk of participation, informed consent, and confidentiality. In terms of ethical issues, the researcher sought and gained approval from the Institutional Review Board (IRB) at Virginia Commonwealth University (VCU). This study was considered to have a minimal risk for the participants. However, possible discomfort with answering personal questions could be anticipated.

Participation of this study was voluntary and confidential. In order to attain a participant's informed consent, the cover letter included detailed information about the study. The cover letter also specified the contact information of the researcher, confidentiality issues, how the respondent was selected, the purpose of the research, who could benefit from the research, an appeal for the person's cooperation, how long it would take the respondent to complete the survey, and the deadline date for returning the questionnaire. The cover letter stated that participation and return of the questionnaire would constitute informed consent. A waiver for written informed consent was requested to the VCU IRB.

In order to deal with privacy and confidentiality issues, each participant was given an identified number to access the web-site homepage where an online survey was posted. Also, the same identification number was on the first page of a mail questionnaire, which was sent after an invitation postcard. However, the links between identified numbers and

personal information was kept separately from any data and will be destroyed after the study is completed.

Payment or other incentives was not given to the participants. However, the summary of the study findings will be sent to respondent who wants after the study is completed.

Description of the Instruments

Demographic Questionnaire

A questionnaire was developed to collect information on the following: age, gender, ethnic group, family immigration status in this country (e.g., the 1st, 2nd, and 3rd or higher generation of immigration) with a contingency question on the length of staying in the U.S., the highest educational level achieved (e.g., BSW, MSW, or DSW/ PhD), the number of years of paid social work experiences, a geographic area of the employment, the primary method of current practice, the primary setting/area of current practice, and satisfaction with their career choice. The primary method of current practice included five response categories: direct practice/clinical social work; supervision; policy or planning; administration/management; and other. The response categories of the primary setting/area of current practice were: aging/gerontological social work; alcohol, drug, or substance abuse; child welfare; community planning; corrections/criminal justice; developmental disabilities; family services; group services; health; immigration; international social work; occupational/industrial social work; mental health or community mental health; public assistance/public welfare (not child welfare); rehabilitation; school social work; and other.

Acculturation

The Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Rickard-Figueroa, Lew, & Vigil, 1987) was utilized to measure acculturation. The development of the SL-ASIA was based on the Acculturation Rating Scale for Mexican Americans (Cuellar, Harris, and Jasso, 1980). The SL-ASIA includes 21 items, representing six areas: language, identity, friendship choice, behaviors, generation/geographic history, and attitudes. This scale assesses actual behaviors as well as ideals or preferences. This scale targets Asians, such as Chinese, Japanese, Korean, and other Asian groups. A score ranges from a low level of acculturation (1) to a high level of acculturation (5). The acculturation score is the mean of the sum of the 21 items. Ponterotto, Baluch, & Carielli (1998) reviewed 16 studies using the SL-ASIA and reported that SL-ASIA has a satisfactory level of internal consistency ($\alpha = .80$) for college-age groups of Japanese, Chinese and Korean Americans. The SL-ASIA also has a strong convergent validity that indicates strong correlation in predicted directions with related measure (Ponterotto et al., 1998).

Perceived Career Barriers

Perceived career barriers were operationally defined by asking participants to rate how much certain conditions would likely occur and hinder their career progress (Lent, Brown, & Hackett, 2000), using the Career Barriers Inventory-Revised (CBI-R: Swanson et al., 1996).

The psychometric evidence for the Career Barriers Inventory-Revised (CBI-R: Swanson et al., 1996) was based on a sample of 313 female and 245 male college students to measure perceived environmental impediments to career development. The CBI-R

includes 70 items representing 13 scales. Based on the literature review of factors that impact the career choices by Asian Americans, only the following four subscales were utilized in this study: Racial Discrimination (six items: e.g., “Experiencing racial harassment on the job.”); Disapproval by Significant Others (three items: e.g., “My parents/family don’t approve of my choice of job/career.”); Discouraged from Choosing Nontraditional Careers (five items: e.g., “Being discouraged from pursuing fields which are nontraditional for my sex”); and Difficulties with Networking/Socialization (five items: e.g., “Unsure of how to advance in my career.”). The selected 19 items were measured on a 7-point scale ranging from “not at all likely to occur” (1) to “very likely” (7), or from “would completely hinder” (1) to “would not hinder at all” (7).

One of the CBI-R subscales, Discouraged from Choosing Nontraditional Careers, was modified from a gendered perspective to assess being discouraged from choosing nontraditional careers by racial/ethnic group (i.e., Asians). The original scale was developed to measure whether participants feel discouraged to choose a certain career, which for this study did not fit in the traditional occupational stereotypes by sex. Therefore, the selected subscale of the CBI-R was modified. Table 1 compares the original items to the modified ones. Two Asian American social workers reviewed the modified items for face validity. As the subscale reliability of the modified CBI-R was not the same as the original version, which had adequate internal consistency reliability coefficients alpha levels, ranging from .64 to .86 (Swanson et al., 1996). Item analysis was conducted to validate the reliability of modified CBI-R, and the results will be discussed in chapter 4.

Table 1

Modification of CBI-R subscale for use with Asian Americans

Discouraged from Choosing Nontraditional Careers	
Original Items	Modified Items
<ul style="list-style-type: none"> • Being discouraged from pursuing fields which are nontraditional for my sex (e.g., engineering for women, nursing for men) • Other people’s beliefs that certain careers are not appropriate for people of my sex • My belief that certain careers are not appropriate for me because of my sex • Fear that people will consider me “unfeminine”/ “unmasculine” because my job/career is nontraditional for my sex • Lack of opportunities for people of my sex in nontraditional fields 	<ul style="list-style-type: none"> • Being discouraged from pursuing fields which are nontraditional for my racial/ethnic group (e.g., There are not many Asians in the social work profession, but many in engineering and medical areas) • Other people’s beliefs that certain careers are not appropriate for people of my racial/ethnic group • My belief that certain careers are not appropriate for me because of my racial/ethnic group • Fear that people will consider me “un-Asian like” because my job/career is nontraditional for my racial/ethnic group • Lack of opportunities for people of my racial/ethnic group in nontraditional fields

Swanson et al. (1996) suggested that perceived barriers should be assessed by asking both perceived likelihood and hindrance of the barriers. A perceived likelihood rating for each career barrier indicates participants’ perceptions of how likely it is that the barrier would occur, while a hindrance rating indicates their perceptions of how much the barrier have hindered the participants. Asking only for ratings of perceived hindrance may cause confusion among participants and researchers. For example, participants’ low rating of perceived barriers may indicate both that the barriers are not likely to occur, or that the barriers will occur but they would not hinder the participant. Thus, assessing both

likelihood and hindrance of the barriers should prevent this confusion. In the present study, participants were asked to provide both a likelihood and a hindrance rating for each career barrier item. A seven-point Likert-type scale was utilized to rate likelihood from “not at all likely” (1) to “very likely” (7), and to rate hindrance from “will not hinder at all” (1) to “would completely hinder” (7). Higher scores indicate greater perceived likelihood of experiencing a career barrier, while higher scores of hindrance indicate greater perceived hindrance of the given career barriers. The possible range of total likelihood and total hindrance scores was from 19 to 133. Possible likelihood and hindrance scores of the Racial Discrimination subscale ranged from 6 to 42, while those of the Disapproval by Significant Others subscale ranged from 3 to 21. Possible scores of the Discouraged from Choosing Nontraditional Careers and the Difficulties with Networking/Socialization subscales ranged from 5 to 35.

Parental Involvement

Family involvement was measured with eight items, selected from Tang et al.’s (1999) Asian American Career Development Questionnaire. The items are scored on a Likert-type scale, ranging from “never” (1) to “always” (5), include the following: “How often have (did) your parents or any family members discuss(ed) your career plans with you?”; “Have (did) your parents ask(ed) you to carry on the family tradition?”; How much do(did) they listen to your opinion about career plans?”; “Have (did) your parents pressure(d) you to take a job that is financially secure?”; “Have (did) your parents force(d) you to follow their choice of occupations for you?”; “Have (did) your parents provide(d) you only the information of the job that they want you to pursue?”; and “Have (did) they

compare(d) you with others who are successful in certain occupations?” The items were developed to assess Asian Americans’ parental involvement and had a moderate reliability of .59 (Tang et al., 1999). Item responses are added together to yield a total score ranging from 8 to 40.

Career Outcome Expectations

Career outcome expectations are defined as personal beliefs about the imagined consequences or outcomes of performing particular given behaviors related to a career (Lent et al., 2000, 2002; Lent & Brown, 2006). The SWCIQ was developed to assess career influence variables among social work students. There are four identified areas of career influences, including personal and family experiences, desire to be a therapist, prestige of the profession, and the social change mission of the profession (Biggerstaff, 2000). In this study, career outcome expectations were operationally assessed by three subscales of the Social Work Career Influence Questionnaire (SWCIQ; Biggerstaff, 2000): Desire to Be a Therapist (8 items); Prestige of The Profession (8 items); and the Social Change Mission of The Profession (8 items). These subscales were selected based on the literature review of career choice by Asian Americans. Coefficient alpha for each dimension ranges from .76 to .81, which exceeds a recommended level of .70 (Biggerstaff, 2000). Each item asked participants to indicate “To what degree do you feel (a certain item) influenced your career choice?” Participants chose responses ranging from “not at all” (1) to “strongly” (5). The possible range of SWCIQ scores is from 24 to 120.

Open Ended Questions

The participants were asked the following four questions: “What advice would you give to an Asian American regarding a career choice?”; “What advice would you give to an Asian American who is considering social work as a career?”; “Why do you think that Asian Americans are not selecting social work as a career?”; and “Why do you think Asian Americans are selecting social work as a career?” These following questions were selected to have a better understanding about Asian social workers’ subjective perspectives on their career choices and career development process.

Item analysis of the measurements in the presented study was tested after data collection. The CBI-R (Swanson et al., 1996) was modified, and the SWCIQ (Biggerstaff, 2000) and the CBI-R had not been developed among the Asian population. Although the SL-ASIA (Suinn, et al., 1987) and family involvement items (Tang et al, 1999) were developed for the Asian population, the reliability of measurements can be different by that of the study population. Using SPSS analysis, Chronbach’s alpha was used to examine these instruments’ reliability, and the results will be discussed in the following chapter 4.

Table 2

The Questionnaire Components

	<i>Demographic questionnaire</i>	<i>SL-ASIA (Suinn, et al., 1987)</i>	<i>CBI-R (Swanson et al., 1996)</i>	<i>Asian American Career Development Questionnaire (Tang et al., 1999)</i>	<i>SWCIQ (Biggerstaff, 2000)</i>	<i>Open ended questions</i>
<i>What it measures</i>	Demographic information	Acculturation	Perceived career barriers	Family involvement	Outcome expectation	Subjective opinions on making a career choice
<i>Selected Subscales</i>	n/a	Full instrument	Racial discrimination; Disapproval by significant others; Discouraged from choosing nontraditional careers; Difficulties with networking/socialization	Family involvement scale	Desire to be a therapist; Prestige of the profession; The social change mission of the profession	n/a
<i>Total number of Items</i>	8	21	19	8	24	4
<i>Coefficient alpha</i>	n/a	.80 (Suinn, et al., 1987)	.64 to .86 for the original version (Swanson et al., 1996)	.59 (Tang et al., 1999)	.76 to .81 (Biggerstaff, 2000)	n/a

Data Analysis Plan

Using SPSS 13, the following six analyses were conducted to test the hypotheses of the study: (1) Descriptive statistics on demographic information; (2) dichotomization of the predictor variable, Acculturation; (3) correlation analysis of the demographic information and dependent variables, such as parental involvement, perceived barriers, and career outcome expectations; (4) a factor analysis to determine the number of dependent

variables; and (5) multivariate analysis of variables (MANOVA); and (6) content analysis of the qualitative data.

Descriptive analysis was conducted to understand characteristics of the sample. The descriptive statistics included frequencies, percentages, means, standard deviations, and ranges. The findings are presented in chapter 4.

Acculturation, one of the predictor variables in the present study, is an ordinal variable, ranging from 1 (low acculturation) to 5 (high acculturation). This variable was dichotomized into two groups of low and high acculturation. There are two ways of dichotomization: median splits, yielding two groups by median (MacCallum, Zhang, Preacher, & Rucker, 2002); and the extreme group splits, selecting individuals on the basis of extreme scores of upper and lower tertiles or quartiles of a variable's sample distribution (Preacher, Rucker, MacCallum, & Nicewander, 2005). In the present study, preliminary analysis of the distribution of dependent variables was conducted, in order to determine the best strategy of dichotomization. The results of the preliminary analysis as well as potential risks and benefits of dichotomization are presented in chapter 4.

A correlation matrix between demographic data and dependent variables examined whether or not there were any strong relationships between demographic data and dependent variables, including career outcome expectations, perceived barriers, and parental involvement. A *p*-value of .05 was set as a standard to decide a statistically significant correlation between demographic information and dependent variables, and Pearson's *r* values greater than .60 were determined as strong correlations (Healey, 2005). Demographic data, which had a strong correlation with dependent variables, were selected

to further examine the effects of covariates. The correlates of the dependent variables controlling for the selected demographic differences were examined by multivariate statistics, such as MANOVA and MANCOVA (Multivariate Analysis of Covariance).

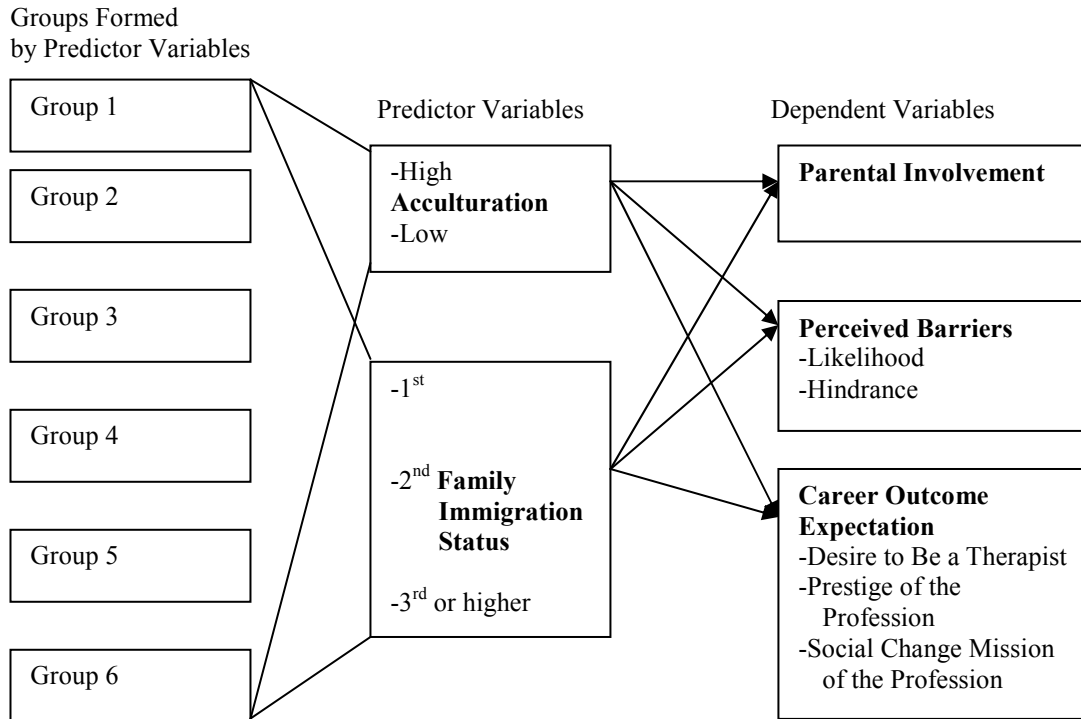
A factor analysis was conducted to determine the number of dependent variables and subscales that were meaningful for a sample of the proposed study. Factor analysis helped to determine whether or not likelihood and hindrance of CBI-R shared a common construct and they should be treated as separate dependent variables. Principal components analysis, especially, was used to reduce the number of dependent variables before conducting a multivariate analysis of variance (Mertler & Vannatta, 2005). Four criteria were used in determining the appropriate number of components to retain: eigenvalue, variance, scree plot, and residuals. According to "Kaiser's rule," only components whose eigenvalues were greater than 1 were retained. Also, factors that account for at least 70% of the total variability were retained (Mertler & Vannatta, 2005). Based on findings of factor analysis, it was determined that the subscales should be treated separately and these subscales should be added as dependent variables. In other words, likelihood and hindrance of CBI-R and subscales of SWCIQ should be treated as dependent variables and analyzed simultaneously in MANOVA. The final number of dependent variables was determined after data collection and factor analysis. Again, the findings of factor analysis are discussed in chapter 4.

Instead of conducting many analyses of variances (ANOVA), MANOVA was utilized in this study. MANOVA has several advantages over ANOVA (Grimm & Yarnold, 1995; Mertler & Vannatta, 2005): MANOVA can discover which factor is the

most important by measuring several dependent variables simultaneously; MANOVA can reduce the overall possibility of making Type I errors, which are beliefs that “something” is there, when actually it is not; and MANOVA can reveal the intercorrelations among dependent variables, which may not be discovered by ANOVA tests.

This study is a 2×3 factorial design. The predictor variable of acculturation has two levels: high levels of acculturation and low levels of acculturation. Another predictor variable, family immigration status, has three levels: the 1st generation, 2nd generation, and 3rd or higher generation of immigration. MANOVA was used to compare six groups formed by two categorical predictor variables on a set of interval-ratio dependent variables.

Figure 2. Conceptual framework of the present study.



In order to use MANOVA, the following assumptions should be met: normal distribution; linearity; homogeneity of variance; and homogeneity of variances and covariances (Grimm & Yarnold, 1995; Mertler & Vannatta, 2005). These assumptions were tested by examining bivariate scatterplots for multivariate normality and linearity, conducting Levene's test for homogeneity of variances, and examining Box's M for homogeneity of variance and covariance. Once again, the results are presented in chapter 4.

With large sample sizes or small samples with approximately equal sizes, MANOVA is not largely influenced by violations of normal distribution and homogeneity of variance assumptions (Grimm & Yarnold, 1995). However, the significant non-normality combined with the unequal group sample sizes may lead to violation of homogeneity of variance-covariance (Grimm & Yarnold, 1995; Mertler & Vannatta, 2005). If homogeneity of variance-covariance is violated, Pillai's Trace, which is a more robust multivariate test statistic than Wilks' Lambda (Λ), should be utilized when interpreting the multivariate results (Grimm & Yarnold, 1995). This study utilized a random sampling method and had a fairly large sample, so it was considered that the violations of these assumptions would not reduce the statistical power of MANOVA.

MANOVA includes the following analysis procedures: examining the overall multivariate test of significance; conducting the univariate tests of individual dependent variables; and examining the post hoc tests (Mertler & Vannatta, 2005). A smaller value of Wilks' Λ indicates larger differences between the six formed groups of the present study on the combination of dependent variables (Mertler & Vannatta, 2005). When the results of the overall multivariate tests were significant, the univariate tests were conducted as a

next step. Prior to examining the univariate ANOVA results, the alpha level was adjusted to $\alpha = .008$. This adjustment was due to avoid an inflated Type I error rate by conducting a series of univariate ANOVA on the individual dependent variables (Mertler & Vannatta, 2005). The value of .008 was determined, since six dependent variables were analyzed and an overall α level for the analysis is set as .05. In post hoc tests, Scheffé test was utilized to examine the mean difference in the dependent variable between the groups.

Content analysis was utilized to identify themes in responses and examine how frequently various themes were mentioned in participants' responses to the four open-ended questions. Constant comparison methodology was used to develop a category schema for each question that was exhaustive and unique (Padgett, 1998). The frequency of themes in participants' responses was calculated. Content analysis transforms qualitative material into quantitative data by counting the occurrences of certain forms of content in qualitative data (Rubin & Babbie, 2005). Content analysis has advantages in reducing time and costs. Also, content analysis has good reliability as it has consistency and objectivity in its coding and categorizing process. However, the analysis has weak validity as the definition of certain concepts may be different between participants (Rubin & Babbie, 2005).

CHAPTER 4 Findings

This chapter discusses the quantitative and qualitative findings of this study. The first section presents data collection results, including response rates and a description of sample. The second section describes the process of data prescreening, such as missing data and outliers. The third section presents the results of analysis related to instrumentation, including item analysis, correlations between variables, dichotomization, factor analysis, and paired- t tests. The fourth section describes demographic information of participants, including bivariate analyses among demographic information and dependent variables. The fifth section presents findings of multivariate analysis of variance by testing multivariate assumptions, discussing results of MANOVA, and summarizing the findings. In the sixth section, qualitative findings from content analysis are discussed, in relation to quantitative findings. The final section provides a comprehensive synthesis of the quantitative and qualitative results.

Data Collection Results

Response Rate

Among 1,802 of Asian American social workers in the NASW database, those aged 65 or older were excluded and total 900 of Asian social workers were randomly chosen for this study. Among the drawn sample, two Asian social workers declined to participate in the study, and 24 people reported that they are not Asians. Also, there were four who

reported wrong addresses. A total of 370 Asian American social workers participated in this study yielding a 41.1 % return rate. A total of 43 participants (11.62%) completed the online survey, while the rest of the participants (n = 327, 88.38%) completed the paper mail-return questionnaire. One participant completed the online survey twice, and all of his/her responses were excluded from data analysis, because the two sets of responses were different from each other. Therefore, the responses of 369 Asian American social workers remained and were analyzed in the study.

Description of Sample

As shown in the demographic summary Table I, females were dominate among 370 participants of Asian American social workers (missing n = 12). Approximately 82 % (n=302) of participants were females, while 15.1% (n=56) were males. The participants averaged 46.93 years old, ranging from 24 to 65. About 55.4% of the participants had lived in the U.S. for their entire life, while 43.5% immigrated to the states. Participants who immigrated to the states have lived in the U.S. for about 29.23 years on average, ranging from 6 to 59.66. Among 370 participants, 42.8% (n=158) represented the 1st generation of immigration, while 23.5% (n=87) represented the 2nd generation of immigration. Asian social workers who were in the 3rd generation of immigration represented 16.2% (n=60), and those who were the 4th generation comprised only 14.1% (n=52) of the sample. A total of 3% of participants (n=11) reported that they were in the 5th or higher generation of immigration. For further analysis, family immigration status was divided into three groups (total n= 370, missing n=2): the 1st generation (n= 158, 42.7 %); the 2nd generation (n= 87, 23.5%); and the 3rd and higher generation (n= 123, 33.2%).

Japanese descendants represented 29.5% (n=109), the largest Asian subgroup, followed by Chinese descendants (23%, n=85). Filipinos 10.8% (n=40), Asian Indians 9.7% (n= 36), and Koreans 9.2% (n= 34). Most of the participants (89.5%, n=331) had a Master of Social Work degree, and 6.2% of participants (n=23) had a Doctor of Social Work or Ph. D degree. Few respondents had a Bachelors of Social Work (1.6%, N=6) or other degrees (1.4%, n=5).

Participants reported an average of 17.76 years of paid social work experience, ranging from 0 to 44 years. A vast majority of the participants (91.4%, n= 338) were currently employed. Over half of them (68.9%, n= 255) were working in urban areas, while only a small proportion of them worked in rural (7.3%, n=27) or suburban areas (4.9%, n=18). The largest proportion of the participants lived in Hawaii (23.5%, n= 87), followed by California (21.4%, n=79), and New York (9.2%, n=34), which parallels states identified with a large Asian population (U.S. Census Bureau, 2004).

The four most frequently reported primary methods of current practice were direct practice/clinical social work (59.5%, n=220), administration/management (20.8%, n=77), supervision (5.9%, n= 22), and teaching/ education (3.8%, n=14). In terms of the primary setting/area of current practice, mental health or community mental health was the most frequent (29.25%, n= 108), followed by health (16.2%, n = 60) and aging/gerontological social work (11.1%, n= 41).

Overall, the participants reported that they were very satisfied with their choice of social work as their profession ($M = 5.83$) on a 7-point scale ranging from 1 (extremely

dissatisfied) to 7 (extremely satisfied). Most of the participants (89.2%, n= 330) were satisfied to extremely satisfied with their choice of social work.

Table 3

Sociodemographic Characteristics of Participants

	N	Total Sample %
Age (years)		
Mean (SD)	46.93 (10.78)	
Range	24-65	
Gender (%)	358	(Missing n=12)
Female	302	81.6%
Male	56	15.1%
Ethnic Group		
Asian Indian	36	9.7%
Chinese	85	23%
Filipino	40	10.8%
Hmong	1	.3%
Japanese	109	29.5%
Korean	34	9.2%
Laotian	2	.5%
Pakistani	2	.5%
Thai	2	.5%
Vietnamese	14	3.8%
Others	11	3.0%
Bi-Asian	12	3.2%
Biracial	18	4.9%
Generational Status (Missing values, n=1)		
1 st generation	158	42.7%
2 nd generation	87	23.5%
3 rd or higher generation	123	33.3%

The living period in the U.S.		
Mean (SD)	29.23 (11.06)	
Range	6 - 59.66	
Highest educational level achieved		
BSW	6	1.6%
MSW	331	89.5%
DSW/Ph. D	23	6.2%
Post Doctorate	1	.3%
Other	5	1.4%
The number of working years in the social work field		
Mean (SD)	17.76 (10.32)	
Range	0 - 44	
Employment status		
Not currently employed	25	6.8%
Employed	338	91.4%
A geographical area of the employment		
Rural	27	7.3%
Urban	255	68.9%
Other	18	4.9%
Suburban	18	4.9%
The primary method of current practice (Circle one)		
Direct practice/clinical social work	220	59.5%
Supervision	22	5.9%
Policy or planning	7	1.9%
Administration/management	77	20.8%
Other	22	5.9%
Teaching/Education	14	3.8%
(Table Continues)		

The primary setting/area of current practice (Circle one)		
Aging/Gerontological social work	41	11.1%
Alcohol, drug, or substance abuse	10	2.7%
Child welfare	29	7.8%
Community planning	4	1.1%
Corrections/criminal justice	13	3.5%
Developmental disabilities	10	2.7%
Family services	13	3.5%
Group services	1	.3%
Health	60	16.2%
International social work	1	.3%
Occupational/industrial social work	4	1.1%
Mental health or community mental health	108	29.2%
Public assistance/public welfare (not child welfare)	6	1.6%
Rehabilitation	1	.3%
School social work	20	5.4%
Other	24	6.5%
University/Education	13	3.5%
Private Practice	5	
The Satisfaction with their career choice		1.4%
Mean (SD)	5.83 (1.13)	
Range	1-7	

Data Prescreening

Missing Data

Missing data analysis was conducted to identify patterns of non-response. The highest rates of missing responses were found in one question of perceived career barriers, “My spouse/partner doesn’t approve of my choice of job/career.” This question asked both perceived hindrance and likelihood of the career barrier. A total of 7.9 percent of participants did not answer to the question inquiring how much the following career barrier

hindered your career progress (Perceived hindrance, $n= 29$, 7.9%), while six percent of participants did not respond to the question how much the following career barrier was likely to occur (Perceived likelihood, $n= 22$, 6%). Many of participants added comments that this question did not apply to them. Thus, it was assumed that their marital or relations status is single. The questionnaire did not include a question of marital/relationship status, so it could not be confirmed. Another question of acculturation, “If you could pick, whom would you prefer to associate with in the community?” were found with a relatively high missing data rate ($n= 23$, 6.2%). Many participants made comments that they did not have any racial preference for their friends. Thus, this question was considered inappropriate to ask, especially to a sample of social workers that value diversity.

When one or two questions on a standard instrument, such as CBI-R, SL-ASIA, and SWCIQ, were missing, the overall mean values of a variable were calculated and utilized for the analysis as a conservative approach of replacing the missing values (Mertler & Vannatta, 2005). However, the missing data rate was relatively low, so it was not considered as a big concern in data analysis and any further data change was not done.

Outliers

Using Box plots, outliers were prescreened for possible errors of data entry. A number of values were identified as outliers, which were beyond the range of answer choices in the standard measurements. Those data entry errors were corrected by checking the questionnaires again and confirming the values.

Instrumentation

In this study, the measurements and scales included: SL-ASIA (Suinn-Lew Asian Self-Identity Acculturation Scale; Suinn et al., 1987) for measuring acculturation; CBI-R (Career Barreirs Inventory-Revised; Swanson et al., 1996) for assessing perceived career barriers; parental involvement scales from Tang et al.'s Asian American Career Development Questionnaire; and SWCIQ (Social Work Career Influence Questionnaire; Biggerstaff, 2000) assessing career outcome expectation. In this section, several issues related to these measurements and scales are discussed, including dichotomization, item analysis, factor analysis to determine the number of dependent variables, and t-tests. Each variable and related instrumentation issues are presented the below.

Acculturation

Description. The Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Rickard-Figueroa, Lew, & Vigil, 1987) was utilized to assess acculturation. The overall mean score of acculturation was slightly above the middle point ($M = 3.29$, Median = 3.43, $SD = .64$) on a 5-point scale of 1 (low acculturation) to 5 (high acculturation). The scores of acculturation ranged from 1.63 to 4.62.

Item analysis. The SL-ASIA scale had a reliability of $\alpha = .907$. An item analysis was conducted to further test the reliability of the measurement. One item reported a low reliability value ($\alpha = .284$) in *Corrected Item- total correlation*: question 19 of SL-ASIA, "If you consider yourself a member of the Asian group (Oriental, Asian, Asian-American, Chinese-American, etc., whatever term you prefer), how much pride do you have in this group?" The low reliability value indicated fairy bad internal consistency and identified

this item as a potential problem. However, since the sample size was large, smaller correlation coefficients were acceptable. The values in *Cronbach's Alpha if Item deleted* indicate that most of the items would not increase the reliability if they were deleted because most of the values in this column were less than the overall reliability of .907. However, the value of question 19 of SL-ASIA, "If you consider yourself a member of the Asian group (Oriental, Asian, Asian-American, Chinese-American, etc., whatever term you prefer), how much pride do you have in this group?," indicated that deleting this item would improve reliability from an α value of .907 to .908. Nevertheless, this increase was not dramatic and both values reflected a reasonable degree of reliability. Thus, it was decided to keep the item since the overall reliability was still good and the item was considered important to assess parental involvement.

Dichotomization. As discussed in chapter three, dichotomizing a continuous variable may have disadvantages, including loss of power and effective size, loss of information about individual differences, the potential to overlook non-linear relations, and loss of measurement reliability (MacCallum, Zhang, Preacher, & Rucker, 2002; Maxwell & Delaney, 1993; Owen & Froman, 2005). However, dichotomization also can be beneficial by simplifying the presentation of results and producing meaningful findings that can be easily interpreted and understood (Farrington & Loeber, 2000; Dattalo, Personal communication, October 1, 2007). Also, the disadvantages of dichotomization are less severe if a variable has a skewed distribution (Farrington & Loeber, 2000).

The dichotomization of SL-ASIA was justified by several reasons. First, the following practice of dichotomization has been used in previous research. Davis and

Katzman (1999) divided respondents into two categories of high acculturation and low acculturation. They combined those scoring “bicultural or mostly Anglos” on SL-ASIA as the high acculturation category, while they referred to those scoring “very or mostly Asian” as the low acculturation category.

The second justification of the dichotomization was that the distribution of acculturation was skewed ($M= 3.29$, Median = 3.43, $SD= .636$, skewness = $-.505$, kurtosis = $-.536$, $KS_z = 2.245$, $p= .0001$). Because the values for skewness and kurtosis were less than zero, the distribution had a negative skew. The negative kurtosis value ($-.536$) indicated that the distribution was too flat with many cases in the tail. The histogram of acculturation indicated that there was a sudden increase right after the median. Since there was an apparent difference of the distribution below and above the median, it was dichotomized using a median split. The histograms comparing the distribution of acculturation before and after dichotomization are presented in table 10. It was concluded that there was very little loss of information, due to the skewed distribution.

In addition, dichotomization did not cause a decrease in the measured strength of association (Farrington & Loeber, 2000). A preliminary correlation analysis was conducted to compare correlation coefficients of acculturation and the dependent variables and those of dichotomized acculturation and dependent variables (Crosby, Yarber, Sanders, & Graham, 2004). Acculturation ($M= 3.294$, $SD= .64$, $n= 368$) had significant correlations with perceived likelihood ($r = -.261$, $\alpha = .0001$) and perceived hindrance of career barriers ($r = -.323$, $\alpha = .0001$), and social change mission of the profession ($r = -.119$, $\alpha = .023$). However, although these correlations were statistically significant, they were considered

weak. Acculturation had non-significant correlations with parental involvement ($r = -.053$, $\alpha = .313$), desire to be a therapist ($r = -.083$, $\alpha = .114$), and prestige of the profession ($r = -.010$, $\alpha = .848$).

After dichotomizing acculturation, independent samples of t-tests were conducted to compare the two groups of high and low acculturated Asian social workers on each of the dependent variables. The findings of t-tests indicated that the low acculturation group was significantly different from the high acculturation group on perceived likelihood [$t(350) = 4.673$, $p = .0001$] and hindrance of career barriers [$t(346) = 4.688$, $p = .0001$], and social change mission of the profession [$t(350) = 2.566$, $p = .011$]. However, the two groups did not have significant differences in reporting parental involvement [$t(348) = 1.277$, $p = .202$], desire to be a therapist [$t(349) = 1.715$, $p = .087$], and prestige of the profession [$t(349) = .686$, $p = .493$]. The findings of bivariate and t-test analysis were similar, which indicated the measured strength of association did not decrease after dichotomization.

Based on the findings of distribution, correlation coefficients and t-tests, it was determined to dichotomize acculturation at the median point: Scores above the median (3.42858) were categorized as a high acculturation group, while scores below the median were categorized as a low acculturation group. This generated two groups with fairly equal sizes ($n = 379$, missing=16): There were 175 participants (49.6 %) for the low acculturation group and 178 (50.4%) for the high acculturation group. The equal group sizes are very beneficial in increasing the power of MANOVA, which was utilized to test group differences on the dependent variables (Field, 2005).

Table 4

Comparison of Correlation Coefficients between Acculturation and Dichotomized Acculturation on Dependent Variables

Dependent variables		Acculturation
Perceived likelihood (N = 366)	Pearson	-.261(**)
	Correlation	
	Sig. (2-tailed)	
Perceived hindrance (N = 362)	Pearson	-.323(**)
	Correlation	
	Sig. (2-tailed)	
Parental involvement (N = 365)	Pearson	-.053
	Correlation	
	Sig. (2-tailed)	
Desire to be a Therapist (N = 366)	Pearson	-.083
	Correlation	
	Sig. (2-tailed)	
Prestige of the profession (N = 366)	Pearson	-.010
	Correlation	
	Sig. (2-tailed)	
Social change mission of the profession (N = 367)	Pearson	-.119(*)
	Correlation	
	Sig. (2-tailed)	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

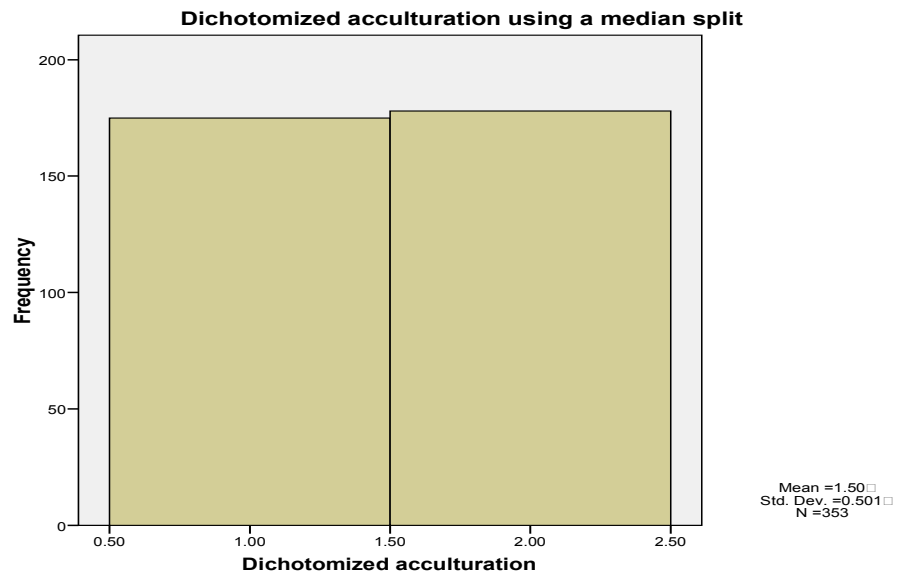
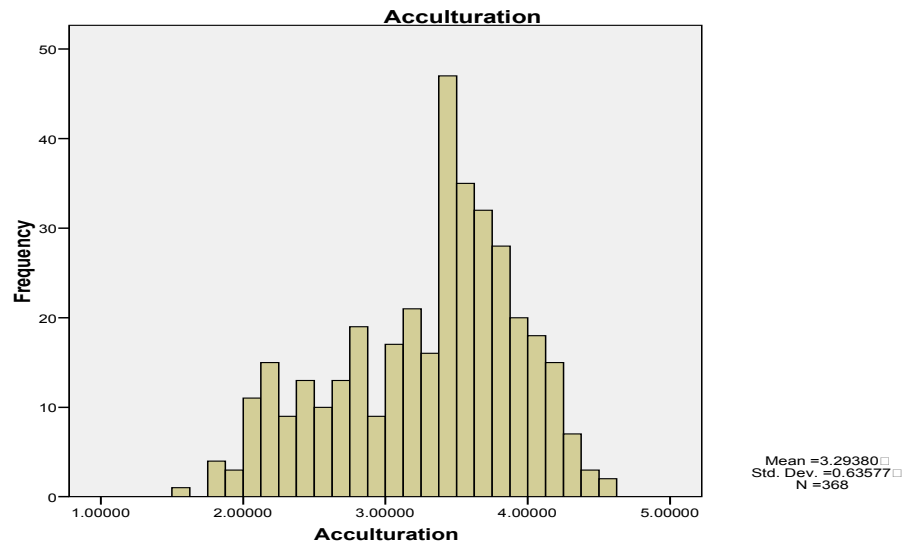
Table 5

Independent Samples of T-Tests between Low and High Acculturated Groups

<i>Dependent variables</i>	<i>Below Median (Low acculturation)</i>	<i>Above Median (High acculturation)</i>	<i>t-value</i>	<i>Significance</i>
Perceived likelihood	<i>N</i> = 175, <i>M</i> = 2.94, <i>SD</i> = 1.18	<i>N</i> = 177, <i>M</i> = 2.38, <i>SD</i> = 1.06	<i>t</i> (350)= 4.673	α =.0001
Perceived hindrance	<i>N</i> = 173, <i>M</i> = 2.27, <i>SD</i> = 1.18	<i>N</i> = 175, <i>M</i> = 1.75, <i>SD</i> = .87	<i>t</i> (346)= 4.688	α =.0001
Parental involvement	<i>N</i> = 173, <i>M</i> = 2.38, <i>SD</i> = .79	<i>N</i> = 177, <i>M</i> = 2.28, <i>SD</i> = .74	<i>t</i> (348)= 1.277	α =.202
Desire to be a therapist	<i>N</i> = 174, <i>M</i> = 2.52, <i>SD</i> = .98	<i>N</i> = 177, <i>M</i> = 2.35, <i>SD</i> = .91	<i>t</i> (349)= 1.715	α =.087
Prestige of the profession	<i>N</i> = 174, <i>M</i> = 2.56, <i>SD</i> = .88	<i>N</i> = 177, <i>M</i> = 2.49, <i>SD</i> = .85	<i>t</i> (349)= .686	α =.493
Social change mission of the profession	<i>N</i> = 175, <i>M</i> = 4.11, <i>SD</i> = .71	<i>N</i> = 177, <i>M</i> = 3.89, <i>SD</i> = .89	<i>t</i> (350)= 2.566	α =.011

Table 6

Comparison of Histograms Before and After Dichotomizing Acculturation



Perceived Career Barriers

Description. The Career Barriers Inventory-Revised (CBI-R: Swanson et al., 1996) was utilized to measure perceived career barriers. The CBI-R has four subscales: Racial Discrimination, Disapproval by Significant Others, Discouraged from Choosing Nontraditional Careers, and Difficulties with Networking/Socialization. Each subscale has two components of perceived likelihood and hindrance

Among CBI-R subscales, both perceived likelihood ($M = 3.11$, $SD = 1.42$) and hindrance ($M = 2.86$, $SD = 1.49$) for Difficulties with Networking/Socialization yielded the highest scores, followed by perceived likelihood ($M = 2.88$, $SD = 1.50$) and perceived hindrance ($M = 2.57$, $SD = 1.53$) for Racial Discrimination. Also, the Discouraged from Choosing Nontraditional Careers subscale was less likely to occur or hinder participants' choice of career in social work ($M = 2.34$, $SD = 1.19$ for perceived likelihood; $M = 2.00$, $SD = 1.13$ for perceived hindrance). Participants reported that Disapproval by Significant Others as a career barrier least likely occurred (perceived likelihood; $M = 1.82$, $SD = 1.13$) or hindered (perceived hindrance; $M = 1.48$, $SD = .87$) their social work career choice.

The overall mean scores for perceived likelihood of career barriers ($M = 2.64$, $SD = 1.15$) were higher than those for perceived hindrance ($M = 2.00$, $SD = 1.08$). However, the scores of perceived likelihood and perceived hindrance were considered low for a 7-point scale where the scores were close to the choice that career barriers were “not at all likely to occur” or “not at all hinder” in their career choice in social work.

Item analysis. The Career Barriers Inventory-Revised (CBI-R: Swanson et al., 1996) had an overall reliability of .958, thereby exceeding the acceptable reliability

coefficient value of .7 (Nunnally, 1978). According to the results of the CBI-R item analysis, the values for the *Corrected Item-total Correlation* column were all above the acceptable level of .3. Most of the values in the *Alpha if Item Deleted* column indicated that they were positively contributing to the overall reliability. The overall α was excellent (.958) because it is above .8. Two items of perceived likelihood, question 2 and 10, “Unsure of how to “sell myself” to an employer,” and “My parents/family don't approve of my choice of job/career,” had α values (.959) which is higher than the overall Cronbach alpha value. However, the increase was not large and the reliability was still acceptable without removing those items. Therefore, the two items were retained for further analysis.

Factor analysis. Factor analysis was utilized to determine whether or not the subscales of the CBI-R should be considered as separate dependent variables. The factor analysis was conducted on perceived likelihood and hindrance of the four subscales: Racial Discrimination; Disapproval by Significant Others; Discouraged from Choosing Nontraditional Careers; and Difficulties with Networking/Socialization.

A four-component model was expected, as four subscales were included in CBI-R. However, when four factors were determined to be retained based on the criteria of eigenvalue, variance, scree plot and residuals, the four-component model was very different from the original model (Swanson et al.,1996). Based on factor analysis on all items of CBI-R, the findings indicated that some items of perceived likelihood and hindrance were not retained in the same factor. For example, perceived likelihood of an item had a factor loading in component one, while its perceived hindrance had a factor loading in component two. The distinction of subscales of CBI-R was not clear and could

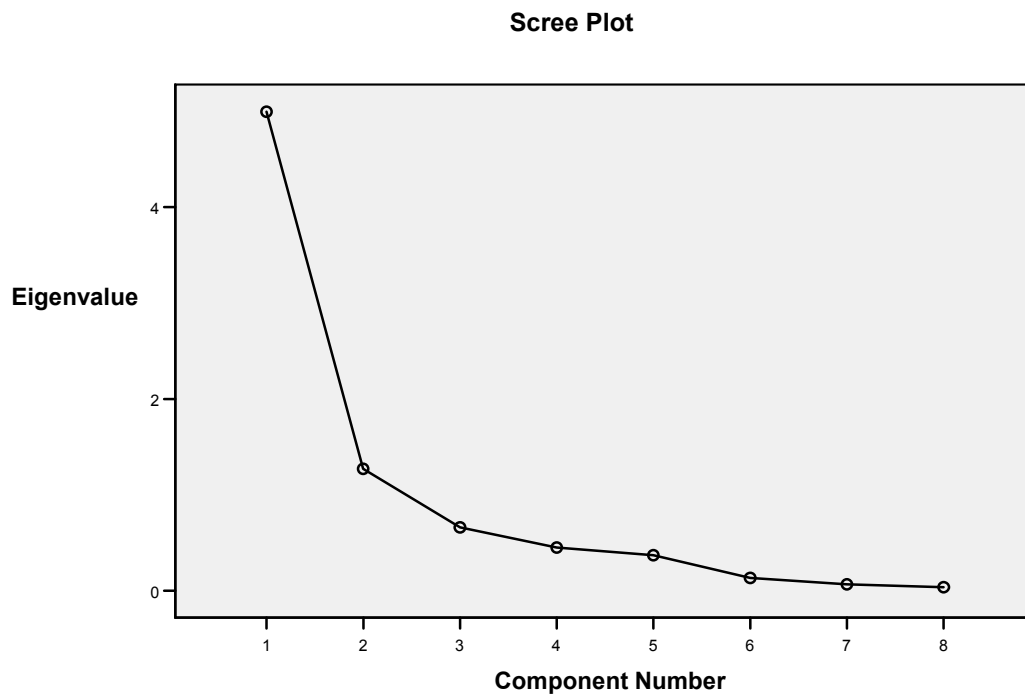
not be confirmed. Thus, it was concluded that the four-component model was not appropriate for further analysis.

Instead of conducting factor analysis on the total items of perceived career barriers, separate factor analyses on each perceived likelihood and hindrance of career barriers were conducted. As a result, a three-component model was found. The results revealed that the three-component model was generated by merging the modified subscale, Discouraged from Choosing Nontraditional Careers, into other subscales. The three-component model was not consistent with the original factor structure of the instrument (Swanson et al., 1996) as well (See Appendix A for factor loadings).

Paired t-test. Because of the inconsistency of the factor analysis findings, the general mean scores of perceived likelihood and hindrance of career barriers were suggested as a gross measure to be utilized in MANOVA, rather than four different subscale scores. Paired t-tests were conducted to determine whether there was a significant difference between likelihood and hindrance on the subscales of CBI-R. The findings revealed that perceived likelihood mean scores were significantly greater than perceived hindrance mean scores on subscales of the CBI-R. A significant difference between total summed perceived likelihood ($M=49.54$, $SE = 20.98$) and hindrance scores ($M=43.49$, $SE =21.00$, $t(311) = 9.081$, $p = .0001$) was found. Also, there was a significant difference between mean scores of perceived likelihood ($M=2.65$, $SE = 1.14$) and hindrance scores ($M=2.00$, $SE=1.08$, $t(361) = 14.655$, $p = .0001$). The mean scores of the total perceived likelihood and hindrance had a strong correlation ($r = .709$). Also, the total perceived likelihood and hindrance scores were found to have a strong correlation ($r = .843$).

Based on the paired t-test results indicating significant differences between perceived likelihood and hindrance, the total scores of likelihood and hindrance were used for further analysis, instead of the subscale scores of perceived career barriers.

Figure 3. The scree plot of CBI-R.



Parental Involvement

Description. Parental involvement was assessed by scales from Tang et al.'s (1999) Asian American Career Development Questionnaire. The scores of parental involvement ranged from 1 (never) to 5 (always), and the overall mean score ($M = 2.32$,

$SD = .76$) of parental involvement was between 2 (seldom) and 3 (sometimes), indicating a low level of parental involvement.

Item analysis. The parental involvement scale had acceptable reliability of .758. Most of the values in the *Corrected Item-total Correlation* column were above the acceptable level of .3, except for one item, question 3 of parental involvement, “Have (did) your parents listen(ed) to your opinion about career plans?” Most of the values in *Cronbach’s Alpha if Item Deleted* column indicated that they were positively contributing to the overall reliability. However, the value of one item, question 3 of parental involvement, “Have (did) your parents listen(ed) to your opinion about career plans?” indicated that deleting this item would increase α from .758 to .801. Despite the findings, this item remained since the scale already had a fairly good reliability ($\alpha = .758$), and the item was considered to be a good question to assess parental involvement in career choices.

Career Outcome Expectation

Description. Three subscales of the Social Work Career Influence Questionnaire (SWCIQ; Biggerstaff, 2000), including the Desire to be a Therapist, Prestige of the Profession, and Social Change Mission of the Profession, assessed career outcome expectation. The overall mean scores on a 5-point scale ranging from 1 (not at all) to 5 (strongly) included: Desire to be a Therapist ($M = 2.42$, $SD = .95$) influenced between a little and somewhat their choice of social work; Prestige of the Profession ($M = 2.53$, $SD = .87$) influenced their career choice between a little and somewhat; and Social Change Mission of the Profession ($M = 4.01$, $SD = .81$) influenced moderately their choice.

Item analysis. The Social Work Career Influence Questionnaire (SWCIQ; Biggerstaff, 2000) had good reliability of .882. The item analysis results on the SWCIQ (Biggerstaff, 2000), revealed two values in *Corrected Item- total correlation* below .3: question 4 of SWCIQ, “Your commitment to helping people with social problems” ($\alpha = .227$); and question 19 of SWCIQ, “Your commitment to provide services to persons experiencing poverty” ($\alpha = .208$). This finding indicated poor internal consistency and identified these items as potential problems. However, smaller correlation coefficients were acceptable, since the sample size was big. In addition, the value of an item, question 19 of SWCIQ, “Your commitment to provide services to persons experiencing poverty,” indicated that deleting this item would increase α from .882 to .883. However, this item remained, since the increase was not dramatic and both values reflected a reasonable degree of reliability.

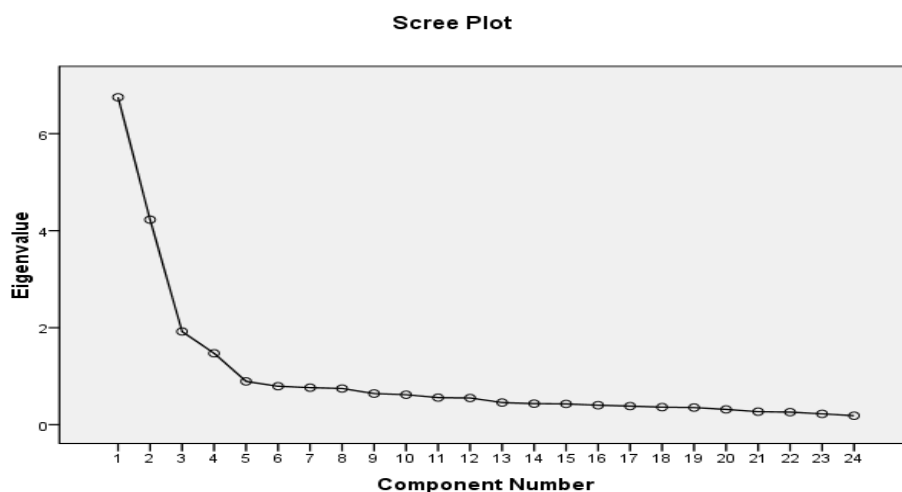
Factor Analysis. Factor analysis was conducted to determine whether or not each subscale of SWCIQ should be considered as separate variables. The subscales are: Desire to be a Therapist, Prestige of the Profession, and the Social Change Mission of the Profession. Kaiser-Meyer-Olkin provided a means to assess the extent to which the indicators of a construct belonged together. A resultant value of Kaiser-Meyer-Olkin (.879) was considered excellent, since it was above a value of .8 (Kaiser & Rice, 1974). Also, Bartlett's test of Sphericity ($\alpha = .0001$) indicated that there were correlations between variables. According to commonalities, there were many items with a value lower than .60.

There were four components that had eigenvalues greater than 1. According to "Kaiser's rule", components with eigenvalues greater than 1 should be retained. However,

the eigenvalue criteria is only reliable when the number of variables is less than 30 and commonalities are greater than .70, or the number of individuals is more than 250 and the mean communality is equal or bigger than .60 (Mertler & Vannatta, 2005). Although the sample size of this study was larger than 250, the mean commonality was smaller than .60. Because it was not clear that the application of the eigenvalue criteria was appropriate, another criteria, scree plot, was utilized to decide the remaining factors. According to the scree plot, the eigenvalues dropped off significantly after the 3rd component. From the 3rd factor on the line was almost flat, indicating that each successive factor accounted for smaller amounts of the total variance. Therefore, three factors were retained, which was a different result from what eigenvalue criteria indicated.

When three factors were retained, 53.74% of the total variance was explained. The first component accounted for 28.13%, the second component represented 17.61%, and the third component accounted for 8.01%. Those results for all three components were quite similar to previously represented factor components (Biggerstaff, 2000) (See Appendix B for factor loadings). Since the three-component model was fairly consistent with the original factor structure of the SWCIQ (Biggerstaff, 2000), the three subscales of SWCIQ were determined as three separate dependent variables.

Figure 4. The scree plot for SWCIQ.



Summary of Instrumentation

The reliability of each measurement was assessed using item analysis. All instruments had very good overall reliability, ranging from .758 to .958. The results of item analysis on each measurement are addressed the below.

Based on factor analyses and t-tests, a total of six dependent variables remained and included perceived likelihood and perceived hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession. Also, the predictor variable, acculturation, was dichotomized at a median point, based on the findings of distribution and correlation coefficients resulting in two groups of a low and high acculturation.

Table 7

The Results of Item Analysis

Measures	Cronbach's α	Range	<i>M</i>	<i>SD</i>
<i>Career Barriers Inventory-Revised</i>	.958	1-7		
<i>Perceived likelihood</i>	.916	1-7	2.64	1.15
<i>Perceived hindrance</i>	.935	1-7	2.00	1.08
<i>Parental Involvement</i>	.758	1-5	2.32	.76
<i>SWCIQ</i>	.882	1-5		
<i>Desire to be a therapist</i>		1-5	2.42	.95
<i>Prestige of the profession</i>		1-5	2.53	.87
<i>Social change mission of the profession</i>		1-5	4.01	.81
<i>SL-ASIA</i>	.907	1-5	3.29	.64

Demographic Information

This section presents the results of univariate and bivariate analyses testing the relations among demographic variables and six dependent variables, including perceived likelihood, perceived hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession.

Acculturation Groups

Univariate analyses were used to examine the socio-demographic characteristics of each acculturation and family immigration group. Acculturation groups did not differ in terms of age, educational level, employment status, the primary method and setting of the current practice. The mean age of the low acculturation group was 46.37 ($N= 169$, $SD= 10.86$), while that of the high acculturation group was 46.86 ($N= 174$, $SD= 10.80$). The high acculturation group had average 18.29 years of paid social work experience ($N= 170$,

$SD= 10.45$), and the low acculturation group had in average 16.74 years of experience ($N= 161$, $SD= 10.06$).

Differences between acculturation groups, however, were found for gender, ethnicity, and satisfaction with a choice of the social work profession. The chi-square results indicated that gender and acculturation had a significant relationship: The high acculturation group (21.1%, $n= 37$) was found to have more males than the low acculturation group (8.9%, $n= 15$; $X^2 = 9.942$, $df = 1$, $p = .002$). Ethnicity had a significant relationship with acculturation ($X^2 = 50.548$, $df = 12$, $p = .0001$), but it had a very weak association with acculturation ($p = .0001$, $\lambda = .086$). The satisfaction with the choice of the social work profession was significantly different between the low acculturation group ($M = 5.69$, $SD = 1.283$) and the high acculturation group ($M = 5.96$, $SD = .930$, $t(341) = -2.197$, $p = .029$). However, both low and high acculturation groups reported that they were satisfied with their choice of social work profession.

Table 8

Demographic Characteristics by Acculturation Groups

<i>Variable</i>	<i>Acculturation Groups</i>	
	<i>Low Acculturation (n= 175)</i>	<i>High Acculturation (n= 178)</i>
<i>Gender</i>		
<i>Male</i>	8.9% (n= 15)	21.1% (n= 37)
<i>Female</i>	91.1% (n= 153)	78.9% (n= 138)
<i>Mean Age</i>	46.37 years	46.86 years
<i>Ethnicity</i>		
<i>Asian Indian</i>	15% (n= 26)	5.6% (n= 10)
<i>Chinese</i>	28.3% (n= 49)	18.6% (n= 33)
<i>Filipino</i>	13.3% (n= 23)	8.5% (n= 15)
<i>Japanese</i>	18.5% (n= 32)	37.9% (n= 67)
<i>Korean</i>	6.4% (n= 11)	13% (n= 23)
<i>Vietnamese</i>	6.4% (n= 11)	1.7% (n= 3)
<i>Bi-Asian</i>	3.5% (n= 6)	3.4% (n= 6)
<i>Biracial</i>	1.2% (n= 2)	9% (n= 16)
<i>Others</i>	7.5% (n= 13)	2.3% (n= 4)
<i>Educational level</i>		
<i>BSW</i>	1.7% (n= 3)	1.7% (n= 3)
<i>MSW</i>	88.4% (n= 152)	92.1% (n= 164)
<i>DSW/Ph. D</i>	7.6% (n= 13)	5.6% (n= 10)
<i>Post-Doctorate</i>	0.6% (n= 1)	--
<i>Other</i>	1.7% (n= 3)	0.6% (n= 1)
<i>Employment Status</i>		
<i>Unemployed</i>	7.6% (n= 13)	5.6% (n= 10)
<i>Employed</i>	92.4% (n= 159)	94.4% (n= 167)
<i>Years of Paid Social Work Experience</i>	16.74 years	18.29 years
<i>The Mean Satisfaction with their Choice of Social Work as Profession</i>	5.69 on a 7-point scale	5.96 on a 7-point scale

Family Immigration Status Groups

Family immigration status groups did not differ in terms of educational level, employment status, the primary method and setting of the current practice. However, differences between groups were found on the demographic variables of age, gender, ethnicity, years of paid social work experience, and satisfaction with a choice of the social

work profession. The chi-square results indicated that gender and ethnicity had a significant relationship with family immigration status. The 3rd or higher generation group was found to have more males than the 1st or 2nd generation groups [$X^2 = 8.129, df = 2, p = .017$]. Ethnicity had a significant relationship with family immigration status [$X^2 = 197.197, df = 24, p = .0001$], but it indicated a weak association ($\Lambda = .152$).

A one-way ANOVA was used to investigate differences in age, years of paid social work experience, and satisfaction with a choice of the social work profession among family immigration status groups. The results indicated that there were differences across the family immigration status groups, in terms of age ($F = 5.565, df = 2, p = .004$), years of paid social work experience ($F = 11.106, df = 2, p = .0001$), and satisfaction with a choice of social work profession ($F = 3.419, df = 2, p = .034$). A post hoc Bonferroni's contrast identified differing age, years of paid social work experience, and satisfaction with a choice of the social work profession among family immigration status groups. The 3rd or higher generation group ($M = 49.50, SD = 9.972$) was older than the 1st ($M = 45.45, SD = 10.79$) or 2nd generation groups ($M = 45.16, SD = 11.37$). Then, as expected from the age differences, the years of paid social work experience varied among family immigration status groups: The 3rd or higher generation group ($M = 21.57, SD = 10.77$) had longer years of paid social work experience than other two groups ($M = 15.77, SD = 9.53$ for the 1st generation group; and $M = 16.47, SD = 10.13$ for the 2nd generation group). In addition, the 3rd or higher generation group ($M = 6.06, SD = .91$) was found to have higher satisfaction with their choice of social work as profession compared to the 1st generation group ($M = 5.69, SD = 1.29$).

Table 9

Demographic Characteristics by Family Immigration Status Groups

<i>Variable</i>	<i>Generation Groups</i>		
	<i>The 1st generation (n= 158)</i>	<i>The 2nd generation (n= 87)</i>	<i>The 3rd or higher generation (n= 123)</i>
<i>Gender</i>			
<i>Male</i>	9.3% (n= 14)	18.8% (n= 16)	21.3% (n= 26)
<i>Female</i>	90.7% (n= 136)	81.2% (n= 69)	78.7% (n= 96)
<i>Mean Age</i>	45.41 years	44.93 years	50.04 years
<i>Ethnicity</i>			
<i>Asian Indian</i>	17.9% (n= 28)	9.2% (n= 8)	-
<i>Chinese</i>	30.8% (n= 48)	24.1% (n= 21)	13.1% (n= 16)
<i>Filipino</i>	10.9% (n= 17)	25.3% (n= 22)	.8 % (n= 1)
<i>Japanese</i>	7.7% (n= 12)	21.8% (n= 19)	63.1% (n= 77)
<i>Korean</i>	16% (n= 25)	9.2% (n= 8)	.8% (n= 1)
<i>Vietnamese</i>	7.7% (n= 12)	2.3% (n= 2)	-
<i>Bi-Asian</i>	.6% (n= 1)	2.3% (n=2)	7.4% (n= 9)
<i>Biracial</i>	.6% (n= 1)	3.4% (n=3)	11.5% (n= 14)
<i>Others</i>	15.4% (n= 24)	2.3% (n=2)	3.3% (n= 4)
<i>Educational level</i>			
<i>BSW</i>	1.3% (n= 2)	3.4% (n= 3)	0.8% (n= 1)
<i>MSW</i>	89.7% (n= 139)	92% (n= 80)	90.2% (n= 111)
<i>DSW/Ph. D</i>	8.4% (n= 13)	3.4% (n= 3)	5.7% (n= 7)
<i>Post-Doctorate</i>	-	-	0.8% (n= 1)
<i>Other</i>	0.6% (n= 1)	1.1% (n= 1)	2.4% (n= 3)
<i>Employment Status</i>			
<i>Unemployed</i>	5.8% (n= 9)	5.8% (n= 5)	7.5% (n= 9)
<i>Employed</i>	94.2% (n= 147)	94.2% (n= 81)	92.5% (n= 111)
<i>Years of Paid Social Work Experience</i>	15.55 years	16.24 years	21.53 years
<i>The Mean Satisfaction with their Choice of Social Work as Profession</i>	5.67 on a 7-point scale	5.82 on a 7-point scale	6.05 on a 7-point scale

Correlations among dependent variables and demographic variables, including age, years of paid social work experience, and satisfaction with a choice of the social work profession, were tested. The findings indicated that weak correlation coefficients were found among dependent variables and demographic variables. Years of paid social work experience had weak negative correlation coefficients with perceived likelihood of career

barriers ($r = -.216, p = .0001$) and parental involvement ($r = -.273, p = .0001$). Those who had more years of paid social work experience reported less perceived likelihood of career barriers and less parental involvement. Age also had a weak correlation with perceived likelihood of career barriers ($r = -.139, p = .009$) and parental involvement ($r = .347, p = .0001$). Also, those who were older reported less perceived likelihood of career barriers and less parental involvement in their career choice. Satisfaction with a choice of the social work profession had weak correlation coefficients with perceived likelihood of career barriers ($r = -.170, p = .001$) and social change mission of the profession ($r = .247, p = .0001$). Those who had greater satisfaction with a choice of social work as profession were more likely to have less perceived likelihood of career barriers and greater social change mission of the profession. Since there were no strong correlations, further analysis were not performed.

Table 10

A Correlation Matrix Showing Interrelations for Demographic Information and Dependent Variables

	1	2	3	4	5	6	7	8	9
1. Perceived likeliness									
2. Perceived hindrance	.709(**)								
3. Parental involvement	.285(**)	.193(**)							
4. Desire to be a Therapist	.097	.090	.208(**)						
5. Prestige of the profession	.090	.124(*)	.184(**)	.640(**)					
6. Social change mission of the profession	.047	.084	.182(**)	.129(*)	.094				
7. Years of paid social work experience	-.216(**)	-.095	-.273(**)	-.025	.077	.019			
8. Age	-.139(**)	-.037	-.347(**)	.004	.071	.003	.765(**)		
9. The satisfaction with a choice of social work as profession	-.170(**)	-.081	-.047	.001	.040	.247(**)	.135(*)	.081	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Multivariate Analysis of Variance

In this section, the results of MANOVA are analyzed and discussed to examine the research hypotheses of the study, exploring the relations among acculturation, family immigration status, perceived likelihood and hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession. The research hypotheses involved between-group analyses across acculturation and family immigration status groups. Acculturation was categorized into

two groups of low and high acculturation. Among 353 participants (missing $n=16$), the group of low acculturation consisted of 175 (49.6 %) Asian American social workers, while the group of high acculturation consisted of 178 (50.4%). Family immigration status was categorized into three groups of the 1st generation, 2nd generation, and 3rd or higher generation of immigration. There were group size differences among family immigration status groups ($n=368$, missing $n=1$): The 1st generation group consisted of 158 (42.9%); the 2nd generation group was made up of 87 (23.6%); and the 3rd or higher generation group consisted of 123 (33.4%).

Before testing multivariate analyses of variances, the assumptions of MANOVA were examined, in order for a proper use of the MANOVA test and interpretation of the results. Assumptions of normal distribution, linearity, and homogeneity of variance-covariance were examined the below.

Multivariate Assumptions

Normal distribution. Based on results of the Kolmogorov-Smirnov tests, the normal Q-Q plots, and histogram, normality of variables were examined. The Kolmogorov-Smirnov test was utilized to examine the assumption of normality among variables, including perceived likelihood and hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession. All of dependent variables had significant α values at a criterion of .05, indicating a non-normal distribution (Mertler & Vannatta, 2005): Perceived likelihood, $KS_Z=.083, p=.0001$; perceived hindrance, $KS_Z=.239, p=.0001$; parental involvement, $KS_Z=.096, p=.0001$; desire to be a therapist, $KS_Z=.095, p=.0001$; prestige of the

profession, $KS_Z = .053$, $p = .016$; and social change mission of the profession, $KS_Z = .117$, $p = .0001$. The results of the normal Q-Q plots for dependent variables supported these findings as the observed values deviated somewhat from the straight lines. Also, the findings based on histograms indicated that social change mission of the profession was negatively skewed, while the other variables were all positively skewed. Although these variables were not normally distributed, the sample size was fairly large and the MANOVA was robust to non-normality. Thus, transformation for a better normal distribution was not conducted.

Linearity. Linearity of the six dependent variables was tested by calculating the Pearson correlation coefficient. Although the correlation coefficients between dependent variables were statistically significant, their correlation coefficients were considered low to moderate: perceived likelihood-perceived hindrance of career barriers ($r = .709$, $r^2 = .50$, $p = .0001$), desire to be a therapist- prestige of the profession ($r = .640$, $r^2 = .41$, $p = .0001$), parental involvement- perceived likelihood ($r = .285$, $p = .0001$), parental involvement – perceived hindrance ($r = .193$, $p = .0001$), parental involvement –desire to be a therapist ($r = .208$, $p = .0001$), prestige of the profession – perceived hindrance ($r = .124$, $p = .018$), prestige of the profession - parental involvement ($r = .184$, $p = .0001$), social change mission of the profession- parental involvement ($r = .182$, $p = .0001$), and social change mission of the profession- desire to be a therapist ($r = .129$, $p = .013$).

Table 11

Correlations among Dependent Variables

	1	2	3	4	5	6
1. Mean of Likeliness	1.000					
2. Hindrance of perceived career barriers	.709** P= .0001	1.000				
3. Parental involvement	.285** P= .0001	.193** P= .0001	1.000			
4. Desire to be a therapist	.097	.090	.208** P= .0001	1.000		
5. Prestige of the profession	.090	.124* P= .018	.184** P= .0001	.640** P= .0001	1.000	
6. Social change mission of the profession	.047	.084	.182** P= .0001	.129* P= .013	.094	1.000

Homogeneity of variance-covariance. The last assumption, homogeneity of variance-covariance, was tested within MANOVA. The results of Box's Test revealed that equal variances could not be assumed, $F(105, 32373.093) = 1.612, p = .0001$. Also, Levene's tests were not significant for desire to be a therapist [$F(5, 339) = .904, p = .478$], prestige of the profession [$F(5, 339) = .596, p = .711$], and social change mission of the profession [$F(5, 339) = 2.107, p = .064$], indicating the assumption of homogeneity of variance was tenable. However, the results showed that Levene's tests were significant for perceived likelihood [$F(5, 339) = 2.251, p = .049$], perceived hindrance of career barriers [$F(5, 339) = 5.344, p = .0001$], and parental involvement [$F(5, 339) = 2.682, p = .022$]. The findings indicated that the assumption of homogeneity of variances had been violated for perceived likelihood, perceived hindrance of career barriers, and parental involvement.

Although the homogeneity assumption was violated, group sizes for acculturation was equal and group sizes for family immigration status were fairly big, which increased power of MANOVA (Field, 2005). A robust test, Pillai's Trace, was used as the test statistic, in order to complement the violation of the homogeneity assumption.

Results of MANOVA

A two-way MANOVA was conducted to determine the effect of family immigration status and acculturation on the six dependent variables: perceived likelihood, perceived hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession. This study proposed three hypotheses which were divided and explained below in terms of dependent variables, in order to help readers better understand the results.

Hypothesis 1.

H₁: Perceived career barriers, parental involvement, and career outcome expectations will differ by levels of acculturation among Asian social workers.

H₀: Perceived career barriers, parental involvement, and career outcome expectations will not differ by levels of acculturation among Asian social workers

MANOVA results indicated that acculturation did not significantly affect the combined dependent variables of perceived likelihood and hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession. Thus, the results failed to confirm the research hypothesis one. With the use of Pillai's Trace criterion, the analysis revealed a non-significant multivariate

effect of acculturation, Pillai's Trace= .033, $F(6, 334)= 1.919$, $p=.077$, multivariate $\eta^2=.033$. Since the result of the overall multivariate test indicated non-significant group differences in the acculturation category, the univariate tests of individual dependent variables were not preceded. Although the results were not statistically significant, there were some group differences of acculturation category on dependent variables. The findings were presented below for each dependent variable.

In Terms of Perceived Career Barriers: The low acculturated Asian social workers' group had higher perceived likelihood ($M = 2.94$, $SD = 1.15$) and hindrance ($M = 2.25$, $SD = 1.16$) scores of career barriers than the highly acculturated group did ($M= 2.37$, $SD = 1.03$ for perceived likelihood; and $M=1.75$, $SD= .87$ for perceived hindrance).

Although there were no statistically significant differences, the low acculturated Asian American social workers reported higher scores of perceived likelihood ($M = 2.94$, $SD = 1.15$) and hindrance of career barriers ($M = 2.25$, $SD= 1.16$) than the highly acculturated Asian social workers ($M = 2.37$, $SD= 1.03$ for perceived likelihood; $M = 1.75$, $SD = .87$ for perceived hindrance).

In Terms of Parental involvement: Although it was not statistically significant, low acculturated Asian social workers reported higher parental involvement ($M= 2.39$, $SD = .79$) than highly acculturated Asian social workers ($M= 2.28$, $SD = .74$).

In Terms of Career Outcome Expectations: Although there were no statistically significant differences, the low acculturation group reported higher scores of desire to be a therapist ($M= 2.53$, $SD = .99$), prestige of the profession ($M= 2.55$, $SD = .89$), and social change mission of the profession ($M= 4.11$, $SD = .71$) than the high acculturation group did

($M= 2.35$, $SD = .91$ for desire to be a therapist; $M= 2.50$, $SD = .85$ for prestige of the profession; and $M= 3.92$, $SD = .86$ for social change mission of the profession).

Hypothesis 2.

H₁: Perceived career barriers, parental involvement, and career outcome expectations will differ by family immigration status among Asian social workers.

H₀: Perceived career barriers, parental involvement, and career outcome expectations will not differ by family immigration status among Asian social workers.

With the use of Pillai's trace criterion, the MANOVA results indicated a significant multivariate effect of family immigration status on the combined dependent variables of desire to be a therapist, prestige of the profession, social change mission of the profession, perceived likelihood and hindrance of career barriers, and parental involvement, Pillai's Trace= .134, $F(12, 670)= 4.010$, $p=.0001$, multivariate $\eta^2=.067$. Thus, the results confirmed the research hypothesis two. Since the results of multivariate analysis were significant, univariate tests were preceded as a next step. Univariate ANOVA results were interpreted using a more conservative alpha level ($\alpha= .008$), as six dependent variables were analyzed and an overall α level for the analysis was set as .05. When univariate tests revealed significant group differences across family immigration status groups, the Scheffé post hoc test was conducted to determine which group was significantly different. The results of univariate and post hoc tests were individually presented in terms of each dependent variable, in order to provide better explanations and presentations to readers.

In terms of perceived career barriers: Significant group differences were found in family immigration status categories on both perceived likelihood [$F(2, 339)= 6.645$, $p= .001$, partial $\eta^2= .038$] and hindrance of career barriers [$F(2, 339)= 5.307$, $p= .005$, partial $\eta^2= .030$]. Examination of post hoc results indicated that the group of the 3rd generation or higher of immigration ($M = 2.19$, $SD = .93$) significantly differed in reporting the perceived likelihood of career barriers from other groups of the 1st ($M = 2.92$, $SD = 1.18$) and the 2nd generation of immigration ($M = 2.78$, $SD = 1.08$).

Asian American social workers who represented the 1st generation of immigration reported the highest scores of both perceived likelihood ($M= 2.92$, $SD= 1.18$) and hindrance ($M= 2.33$, $SD= 1.17$) of career barriers; those who represented the 3rd or higher generation of immigration reported the lowest perceived likelihood ($M= 2.19$, $SD= .93$) and hindrance scores ($M= 1.61$, $SD= .79$) of career barriers.

Table 12

Means and Standard Deviations for Perceived Career Barriers by Family Immigration Status

	Perceived Barriers							
	Likelihood				Hindrance			
Family immigration status (Generation)	M(SD)	F	p	partial η^2	M(SD)	F	p	partial η^2
		6.645	.001	.038		5.307	.005	.030
1 st	2.92(1.18)				2.33(1.17)			
2 nd	2.78(1.08)				1.90(.90)			
3 rd or higher	2.19(.93)				1.61(.79)			

In terms of parental involvement: With a conservative alpha level ($\alpha = .008$), univariate ANOVA results revealed that there were non-significant differences between family immigration status groups in terms of parental involvement [$F(2, 339) = 4.770$, $p = .009$, partial $\eta^2 = .027$]. Since the univariate test of parental involvement was not significant, the next step, a post hoc test was not preceded. However, the results indicated that Asian American social workers who were the 3rd and higher generation of immigration had the lowest score of parental involvement ($M = 2.12$, $SD = .64$), compared to those who were the 1st generation ($M = 2.38$, $SD = .75$) and the 2nd generation ($M = 2.52$, $SD = .87$) of immigration.

Table 13

Mean and Standard Deviation for Parental Involvement by Family Immigration Status

Family immigration status (Generation)	Parental involvement			
	M(SD)	F	p	partial η^2
1 st	2.38(.75)	4.770	.009	.027
2 nd	2.52(.87)			
3rd or higher	2.12(.64)			

In terms of career outcome expectations: MANOVA results indicated that family immigration status significantly affected the combined dependent variable of desire to be a therapist, prestige of the profession, and social change mission of the profession. With the conservative alpha level ($\alpha = .008$), results of univariate tests revealed that there were non-

significant differences between family immigration status groups in terms of desire to be a therapist [$F(2, 339)= 4.779, p= .009, \text{partial } \eta^2= .027$], prestige of the profession [$F(2, 339)=1.041, p= .252, \text{partial } \eta^2= .008$], and social change mission of the profession [$F(2, 339)=2.603, p= .126, \text{partial } \eta^2= .012$]. Since the univariate tests of desire to be a therapist, prestige of the profession, and social change mission of the profession were not significant, the next step, post hoc tests were not preceded.

Although there were no statistically significant differences, Asian American social workers who were the 3rd or higher generation of immigration reported the lowest score of desire to be a therapist ($M= 2.19, SD= .92$), compared to those who were the 1st generation ($M= 2.53, SD= .95$) or the 2nd generation of immigration ($M= 2.60, SD= .94$). Asian American social workers who represented the 2nd generation of immigration reported the highest score of prestige of the profession ($M= 2.60, SD = .82$), while the Asian social workers who were the 1st generation reported the lowest score of prestige of the profession ($M= 2.49, SD = .89$). The 1st generation Asian social workers had the highest scores of social change mission of the profession ($M= 4.10, SD= .68$), while the 3rd or higher generation had the lowest scores ($M= 3.85, SD= .88$).

Table 14

*Means and Standard Deviation for Career Outcome Expectations by Family Immigration**Status*

	Career Expectations											
	Desire to be a therapist				Prestige of the profession				Social change mission of the profession			
	M(SD)	F	p	partial η^2	M(SD)	F	p	partial η^2	M(SD)	F	p	partial η^2
Family immigration status		4.779	.009	.027		1.383	.252	.008		2.088	.126	.012
1 st	2.53(.95)				2.49(.89)				4.10(.68)			
2 nd	2.60(.94)				2.60(.82)				4.06(.85)			
3 rd or higher	2.19(.92)				2.52(.87)				3.85(.88)			

Hypothesis 3.

H₁: Levels of acculturation and family immigration status will not result in differences among perceived career barriers, parental involvement, and career outcome expectations.

H₀: Levels of acculturation and family immigration status will result in differences among perceived career barriers, parental involvement, and career outcome expectations.

With the use of Pillai's Trace criterion, the analysis indicated non-significant multivariate interaction effects of family immigration status and acculturation, Pillai's Trace = .039, $F(12, 670) = 1.114$, $p = .345$, multivariate $\eta^2 = .020$. MANOVA results indicated that the interaction of acculturation and family immigration status did not significantly affect the combined dependent variables. Thus, the results failed to confirm the research

hypothesis three. Since the result of the overall multivariate test indicated non-significant group differences in the interaction of acculturation and family immigration status categories, the univariate and post hoc tests of individual dependent variables were not preceded. Although the results were not statistically significant, there were some group differences of interactions of acculturation and family immigration status category on dependent variables. The findings were presented for each dependent variable.

In terms of perceived career barriers: Although there were no significant factor interactions, the highly acculturated 3rd or higher generation group of Asian American social workers reported the highest perceived likelihood score of the career barriers ($M = 2.14, SD = .88$), while the low acculturated 2nd generation group reported the highest perceived likelihood score ($M = 3.14, SD = .99$). The highly acculturated 3rd or higher generation group rated the lowest perceived hindrance score of the career barriers ($M = 1.59, SD = .78$), while the low acculturated 1st generation group reported the highest perceived hindrance score ($M = 2.44, SD = 1.22$).

In terms of parental involvement: Despite non-significant factor interactions, the results revealed that the highly acculturated group of the 3rd or higher generation Asian American social workers reported the lowest parental involvement ($M = 2.11, SD = .63$), while the low acculturated group of the 2nd generation Asian social workers reported the highest parental involvement ($M = 2.57, SD = .94$).

In terms of career outcome expectations: Although there were no statistically significant factor interactions, the results indicated that low acculturated Asian American social workers who represented the 2nd generation reported the highest score of desire to be

a therapist ($M = 2.76, SD = .95$), while low acculturated social workers who represented the 3rd or higher generation reported the lowest score ($M = 2.12, SD = .95$). The low acculturated 2nd generation group had the highest score of prestige of the profession ($M = 2.73, SD = .84$), while the high acculturated 1st generation group rated the lowest score ($M = 2.29, SD = .81$). The low acculturated 2nd generation of Asian American social workers reported the highest score of social change mission of the profession ($M = 4.23, SD = .68$), and the low acculturated 3rd or higher generation of Asian social workers reported the lowest score of social change mission of the profession ($M = 3.84, SD = .92$).

Summary of the MANOVA Findings

A two-way MANOVA was conducted to determine the effect of family immigration status and acculturation on the six dependent variables: Perceived likelihood, perceived hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession.

The MANOVA results rejected the research hypothesis one. The Pillai's Trace criteria indicated there was no significant multivariate effect of acculturation on perceived likelihood and hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession, Pillai's Trace = .033, $F(6, 334) = 1.919, p = .077$, multivariate $\eta^2 = .033$. Also, the research hypothesis three was rejected. With the use of Pillai's Trace criterion, the analysis indicated non-significant multivariate interaction effects of family immigration status and acculturation, Pillai's Trace = .039, $F(12, 670) = 1.114, p = .345$, multivariate $\eta^2 = .020$.

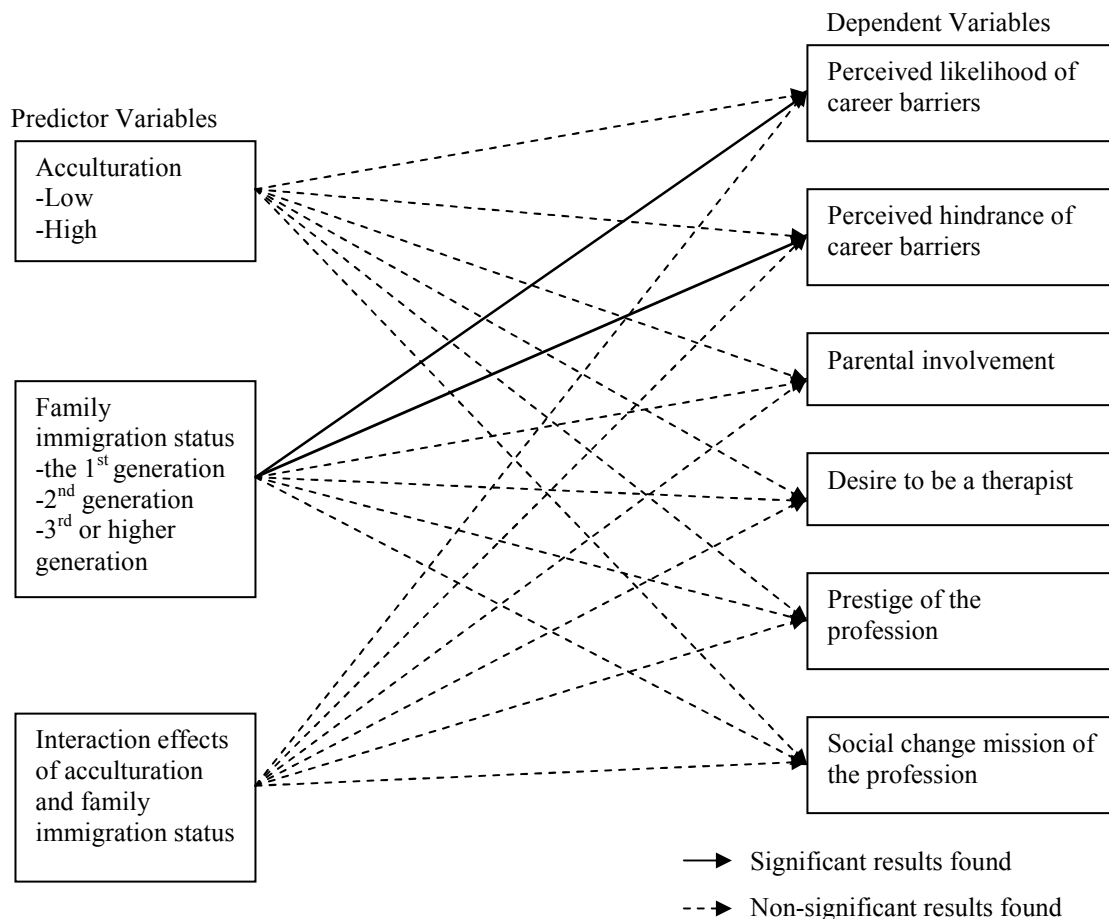
Unlike the research hypotheses one and three, the research hypothesis two was confirmed, as the Pillai's Trace criteria indicated significant group differences in family immigration status category with respect to dependent variables, Pillai's Trace= .134, $F(12, 670)= 4.010, p=.0001$, multivariate $\eta^2=.067$. Thus, family immigration status significantly affected the combined dependent variables of perceive likelihood, perceived hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession.

With a conservative alpha level of .008, significant group differences were found in family immigration status category on perceived likelihood [$F(2, 339)= 6.645, p= .001$, partial $\eta^2= .038$] and perceived hindrance of career barriers [$F(2, 339)= 5.307, p= .005$, partial $\eta^2= .030$]. However, results revealed that there were non-significant differences between family immigration status groups in terms of parental involvement [$F(2, 339)= 4.770, p= .009$, partial $\eta^2= .027$]. Also, there was no significant group differences across family immigration status groups in terms of desire to be a therapist [$F(2, 339)= 4.779, p= .009$, partial $\eta^2= .027$], prestige of the profession [$F(2, 339)=1.041, p= .252$, partial $\eta^2= .008$], and social change mission of the profession [$F(2, 339)=2.603, p= .126$, partial $\eta^2= .012$].

The Scheffé post hoc test was conducted to identify which family immigration status category was significantly different in terms of perceived likelihood and hindrance of career barriers, since the ANOVA results could indicate only group differences. Examination of post hoc results indicated that the group of the 3rd or higher generation of immigration ($M = 2.19, SD = .93$) significantly differed in reporting the perceived

likelihood of career barriers from other family immigration status groups of the 1st ($M = 2.92, SD = 1.18$) and the 2nd generation ($M = 2.78, SD = 1.08$) of immigration. Asian American social workers who represented the 1st generation of immigration reported the highest scores of both perceived likelihood ($M = 2.92, SD = 1.18$) and hindrance ($M = 2.33, SD = 1.17$) of career barriers; those who were 3rd and higher generation of immigration reported lowest perceived likelihood ($M = 2.19, SD = .93$) and hindrance scores ($M = 1.61, SD = .79$) of career barriers.

Figure 5. A diagram representing the results of MANOVA.



Qualitative Findings

Four open-ended questions in the questionnaire gave participants the opportunity to share their own thoughts and experiences about making a career choice. This qualitative data help gain a better and richer understanding on the relations among factors that may have influenced Asian American social workers' career choice. Four open-ended questions were posed: 1. What advice would you give to an Asian American regarding a career choice?; 2. What advice would you give to an Asian American who is considering social work as a career?; 3. Why do you think that Asian Americans are not selecting social work as a career?; and 4. Why do you think Asian Americans are selecting social work as a career? Only questions three and four were analyzed, since they were most relevant to the study hypotheses.

After reading through all of the participants' responses, the researcher divided each response into units of thought so that only one concept or idea was represented (Rodwell, 1998). Each unit of meaning was indexed by participants' identification numbers, in order to link back to the raw data and ultimately preclude more than one unit per respondent being counted within any one of the categories that ultimately were developed. Through an inductive, constant comparing process, units were sorted into themes, which were mutually exclusive and exhaustive (Padgett, 1998). The process of unitizing data and identifying emerging themes was conducted by using a qualitative software program, *Atlas/ti*. The chair of the dissertation committee who has used this analysis process reviewed the themes and their decision rules, in order to ensure trustworthiness and authenticity. The process of

auditing enhances the rigor of the study by allowing others to reproduce and confirm the findings (Padgett, 1998).

Responses to Question 3: Why do you think that Asian Americans are not selecting social work as a career?

Among the 369 study participants, 306 responded to open-ended question 3 and generated 546 units. These responses provided another perspective of variables that might have influenced Asian Americans to choose social work as a career. Constant comparison analysis was used to sort answers into categories (Glaser & Strauss, 1967) resulting in a total of six themes: status and money barriers; cultural factors; lack of information and resources; challenges of the social work profession; communication barriers; and individual barriers. The six themes with examples are presented in Table 19, listed from the most prevalent to the least.

After categorizing units into themes, units were examined again so that participant responses were not represented more than one time in a specific theme. Some participants' comments resulted in multiple units, but the meaning of the units ultimately represented the same theme. After excluding repeated comments of participants, the total units were reduced to 459.

Table 15

Themes Emerged from Participant Responses to Question 3 (n=306, total units= 459)

<i>Q3 Themes</i>	<i>Decision rules</i>	<i>Unit Frequency (Percent)</i>
Status and money barriers		188 (40.96%)
Low pay	Social workers are not compensated enough for their educational level and workload. (e.g., “The salary is not as high as in other fields, like the medical or business fields,” “No status and no money.”)	
Low prestige	The social work profession is considered to have low prestige. (e.g., “Lack of prestigious status,” “Not a culturally well-respected profession.”)	
Cultural factors		102 (22.22%)
Familial influences (expectations and supports)	Asian Americans may choose other occupations rather than social work, due to familial influence, such as parents’ expectation of children to have a prestigious and high paying job. (e.g., “Pressure from families to enter more prestigious fields,” “Parents are pushing for doctors, lawyers, business or the new favorite, pharmacy.”)	
Cultural values contrast to SW values and practice principles	Asian Americans may not choose social work as a career, since their cultural values often do not match social work values or practice principles. For example, expression of feelings is not congruent with Asian cultural norms. (e.g., “Asian cultures do not generally promote emotional sensitivity to others, not involvement in social problems/societal issues.”)	
Occupational stereotypes/preferences (Medical, math, science oriented)	Asian Americans do not choose social work as a career, due to occupational stereotypes. They prefer law, medical, business, and engineering careers, because they have more prestige and income potential. (e.g., “Not considered a good career choice by traditional standards,” “Because science and commerce/business are more valued.”)	
(Table continues)		

Lack of information and resources		62 (13.51%)
Lack of information about SW/ misconception on SW	Asian Americans do not have much information about social work, and they often have misconceptions or negative stereotypes about social workers. (e.g., “Lack of exposure to the field, no one is talking about the pros and opportunities that exist,” “Like most in the general public, they probably have a very narrow and stereotypical view of social work, i.e., social workers only work in child welfare.”)	
Lack of role model/ Few Asians in field	There are few Asians in the social work profession, thus, there is a lack of role models. (e.g., “Not many mentors/ role models/ sources of support,” “Lack of Asian American in the field.”)	
Challenges of the SW profession		30 (6.54%)
Poor job condition	Working conditions of the social work profession can be challenging for Asian Americans. For example, there is a high rate of burnout, heavy workload, possibly dangerous work settings, lack of promotion opportunity, and so on. (e.g., “Lack of promotion opportunities,” “High stress, high burnout rates, high liability risks.”)	
Possible discrimination	Asian Americans may not choose social work, due to perceived possibility that Asians may not be validated in the role of social worker. (e.g., “Believe that clients may not take them seriously,” “One reason might be the promotion opportunity is less than in the dominant cultural setting. Caucasian client might not want Asian American social worker to do therapy or counseling.”)	
Communication barriers		15 (3.27%)
Lack of SW skills (communication/ social)	Some Asians may not have adequate communication or social skills for the social work profession. (e.g., “Many aren’t well equipped for professions that call for better inter-personal skills. Enter to work in fields like math and engineering where language and personal abilities are less important,” “Socialization or socializing is not Asian’s strengths.”)	
(Table continues)		

Language barriers	Some Asians may not choose social work, due to their lacking English fluency. (e.g., “Social work profession needs highly developed communication skills. It is very difficult functioning in this field without English language ability.”)	
Individual barriers		12 (2.61%)
Personal interests/ characteristics	Asian Americans may not choose social work as a career, since it is not their interest or it does not fit their characteristics (Personality, not cultural). (e.g., “Personal choice, interest,” “The social work field may not be their interest.”)	
Race doesn't play a role in career choice	Race doesn't play a role in Asian Americans' not selecting social work as a career. (e.g., “Not sure that race is part of their decision to follow.”)	
Others		50 (10.89%)
Don't agree that not many Asians choose social work as a career	Many Asians choose social work as a career. (e.g., “Don't know if this is true, especially in HI,” “No idea: Asians are highly represented in our National Association of Social Workers- Read one of the monthly publications.”)	
Generation	The current younger generation is more likely to be superficial and materialistic. (e.g., “Primarily, I think this may be due to an age cohort effect.”)	
Miscellaneous	Units that do not fit into any listed themes are included in this category.	
Don't know		8
Total Units		459 (100%)

Responses to Question 4: Why do you think Asian Americans selecting social work as career?

For the 299 Asian American social workers who responded, they generated 440 units, resulting in the following seven themes (see Table 20): value congruency; exposure to social work; personal motivation and passion for social work; positive job conditions;

acculturation factors; and social support and other resources. After excluding units that were duplicative for a given theme by the same participant, the total units were reduced to 430.

Table 16

Themes Emerged from Participant Responses to Question 4 (n=299, total units= 430)

<i>Q4 Themes</i>	<i>Decision rules</i>	<i>Unit Frequency (Percent)</i>
Value congruency: Professional and personal		190 (44.19%)
SW values/ Perspectives	Their values match SW values or perspectives: social justice; willingness to help others/altruism; compassion; social change/ making differences; respect for diversity; enjoying working with people; advocacy; putting emphasis on values and fulfillment rather than money; and serving community, particularly Asian community (e.g., “Wanting to make a difference and affect social change,” “Passion for helping others,” “Wanting to advocate for the minority; bring more awareness to others about cultural influences social justice.”)	
Cultural values matching SW values	There are many Asian cultural values, matching social work values, including family values, respecting the elder, and so on. (e.g., “Common values found within the social work field are also aligned with many generalized values found in Asian cultures- group (society) vs. individual, self sacrifice, research/data, systemic thinking and approaches to strategic problem solving.”)	
Religion	Religious beliefs lead Asians to choose social work as a career. (e.g., “Religious values,” “Christian ethics- Compassion service.”)	
Exposure to social work		54 (12.56%)
Life experiences/ Exposure to SW	They have individual or family experiences that led them to social work, for example, their experiences as minority and immigrants. They are exposed to social work through their life experiences. (e.g., “It’s resonating with racial identity experiences of bi-culturally, oppression, and family dynamics that are so much a part of their growing up years.”)	
(Table continues)		

See needs for SW/ Importance of SW	Asians see more needs for social workers, especially Asian social workers and acknowledge importance of the social work profession. (e.g., “Because they see many of the same problems of depression, anxiety, etc. occurring with Asians without there being many resources that provide cultural sensitivity with this cultural group.”)	
Personal motivation & passion for social work		47 (10.93%)
Interest/ Passion/ Desire	They have interests/ passion/ desire for social work. (e.g., “Interest and motivation”)	
Individual characteristics	Asians choose social work as a career, due to their caring characteristics. (e.g., “Because they are caring personalities.”)	
Race doesn't play a role in a career choice	Choosing social work as a career is individual decision, and ethnicity doesn't play a role in making a career choice. (e.g., “It's an individual choice, not about the certain “groups” to be selecting.”)	
Positive job conditions		37 (8.60%)
Many job opportunities/ flexibility	People choose social work as a career, because there are many job opportunities and flexibility in the profession. (e.g., “Job availability in various populations/specialties,” “Flexibility of the degree, i.e., the ability to work in different setting i.e., hospital, school, government agencies etc.”)	
Rewarding/ fulfillment	Asians choose social work since the profession is rewarding and fulfilling. (e.g., “...Also, having a (social justice) passion and then advocating for that passion can be very compelling and fulfilling.”)	
Income/ compensation	Asians choose the social work profession to have income. Social work profession provides reasonable income/ compensation. (e.g., “Reasonable pay.”)	
Acculturation factors		27 (6.28%)
Acculturation/ Break stereotypes	People who are acculturated choose social work as a career. Some Asians may choose social work to break occupational stereotypes. (e.g., “Being influenced by Western culture and value systems has changed our views regarding status and making a lot of money,” “I wonder if it is the more “Americanized” Asians that are selecting it,” “Also to help break down stereotypes the general population may have as a whole towards Asian American.”)	
Make their own decision (without other people's influences) (Table continues)	Acculturated Asians are more likely to make their own decision without family influences. (e.g., “Willingness to make autonomous career decision,” “Having the ability to choose different preference and less influence/pressure from parents”)	

Social support and other resources		16 (3.72%)
Social supports (role models or significant others)	Asians choose social work as a career when they have role models in the field or supports of significant others, such as family. (e.g., “Those who select social work as a career may have a good role model,” “ When families encourage and see.”)	
Skills (Bilingual, bicultural backgrounds)	Asians choose social work, when they have skills or resources to success in the profession. Their bilingual and bicultural backgrounds often help them be success in social work. (e.g., “Their bilingual and /or bicultural skills,” “Advantage of Asian Americans being bi-lingual and understanding bi-cultural issues,” “I also feel that Asian Americans are wanting a career for themselves, like everyone else, that they can pursue and succeed at.”)	
Available financial resources	People go to social work, because there is available financial resource, specifically for people studying social work. (e.g., “I was also offered, as an incentive, tuition payment for the MSW program.”)	
Others		59 (13.72%)
Miscellaneous	Units that do not fit into any listed themes are included in this category.	
Don’t know		
Total Units		430 (100%)

Synthesizing Results

As mentioned in chapter 3, using a mixed method of qualitative and quantitative design provides more exact understanding, enhances validity and reliability, enriches explanation, and increases credibility of results (Leahey, 2007; Padgett, 1998). In this study, quantitative findings explained the relations among the given factors that may have influenced Asian American social workers’ career choice in social work. On the other hand, qualitative findings revealed more subjective and diverse perspectives of Asian American social workers on selecting social work as a career as well as identified potential additional factors that may influence Asian Americans’ career choice in the social work

profession. In this section, qualitative and quantitative findings are compared and contrasted.

Differences between Qualitative and Quantitative Findings

According to the participants' responses for question three, cultural factors (22.22%, $n= 102$ units) were one of the major reasons why Asian Americans were not selecting social work as a career. This theme of cultural factors included subcategories of familial influences, cultural values that contrast to social work values and practice principles, and occupational stereotypes/ preferences. However, quantitative findings were not consistent with these qualitative findings. In terms of familial influence, participants reported a low to medium level of parental involvement ($M = 2.32$, $SD = .76$), indicating that parental involvement was not a major factor for participants in making a career choice. Also, participants reported Disapproval by Significant Others as a career barrier that least likely occurred (perceived likelihood; $M = 1.82$, $SD = 1.13$) or hindered (perceived hindrance; $M = 1.48$, $SD = .87$) their career choice in social work. In addition, participants indicated that Discouraged from Choosing Nontraditional Careers were less likely to occur or hinder their choice of career in social work ($M = 2.34$, $SD = 1.19$ for perceived likelihood; $M = 2.00$, $SD = 1.13$ for perceived hindrance). In short, the qualitative findings indicated that participants identified cultural factors as one of the major barriers preventing Asian Americans, *in general*, from selecting social work as a career, but the quantitative findings revealed that cultural factors, such as parental/familial involvement and occupational stereotypes/preference, did not hinder *their own* career choice in social work. This contradictory information will be discussed at the end of this section.

Participants identified lack of resources as the third commonly mentioned reason (13.51%, *unit n*= 62) for Asian Americans not selecting social work as a career. This theme included lack of role models/ few Asians in field. Unlike the qualitative findings, the aforementioned quantitative findings indicated that participants reported fairly low scores for both perceived likelihood ($M = 3.11$, $SD = 1.42$) and hindrance ($M = 2.86$, $SD = 1.49$) of Difficulties with Networking/Socialization.

These inconsistencies between the quantitative and qualitative findings point to differences between the participants' perceptions of the general Asian population in contrast to their own career choice experiences. Participants who actually chose social work as a career may perceive that their experiences cannot be generalized to the whole Asian American population. Although the participants might not have experienced culture-related career barriers, they perceived that those barriers might be one of the major reasons why other Asian Americans were not selecting social work as a career. Perhaps they may exclude themselves from representing any form of stereotyping for Asian Americans.

Similarities between Qualitative and Quantitative Findings

Question four asked why Asian Americans were selecting social work as a career. The most commonly reported theme was value congruency: professional and personal (44.19%, *unit n*= 190), including social work values/ perspectives, cultural values matching social work values, and religion. The quantitative findings also revealed that the "value-based" social change mission of the profession ($M = 4.01$, $SD = .81$) moderately to strongly influenced participants' career choice on a 5-point scale. Thus, both qualitative and quantitative findings indicated that personal and professional values matching the

social work profession were the major reason why Asian Americans chose social work as a career.

Participants also identified acculturation factors as one reason for Asian Americans' choice of the social work profession. This theme included examples of acculturation/ breaking stereotypes and making their own decision without the influence from others. The findings of quantitative data were consistent with this qualitative theme. Participants reported the overall mean score of acculturation that was a little above the middle point ($M = 3.29$, $SD = .64$) on a 5-point scale of 1 (low acculturation) to 5 (high acculturation), indicating participants had an overall fairly high acculturation level. Participants may be able to more easily break occupational stereotypes and make their own decision to choose social work as a career. A low level of parental involvement and low mean scores of Disapproval by Significant Others (perceived likelihood, $M = 1.82$, $SD = 1.13$; perceived hindered, $M = 1.48$, $SD = .87$) supported that participants were able to make their own career choices without familial involvements. Further implications of both quantitative and qualitative findings are discussed in the next chapter 5.

CHAPTER 5 Discussion

This study was developed to gain a better understanding about the relationships among factors that may influence Asian social workers' career choices. The study tested the effects of family immigration status and acculturation levels on Asian American social workers' perceived likelihood and hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession. Additionally, this study included participants' subjective perspectives on factors that may have influenced Asian Americans' career choices by asking two open-ended questions: "Why do you think that Asian Americans are not selecting social work as a career?" and "Why do you think Asian Americans are selecting social work as a career?" Quantitative and qualitative findings will be discussed, related to the previous literature on Asian Americans' career choice behaviors and, in particular, to those individuals who choose social work as a career. Also, the discussion includes: implications for the recruitment and retention of Asians in social work education and professional practice, the development of effective career counseling for Asian Americans, and consideration of culturally-relevant factors for career decision making. Limitations of the current study and suggestions for the future research will conclude this chapter.

Synopsis of the Dissertation

This study employed a cross-sectional survey design utilizing mixed methods to collect both of the quantitative and qualitative data. Quantitative data were collected through the following standardized measurements: SL-ASIA (Suinn-Lew Asian Self-Identity Acculturation Scale; Suinn, et al., 1987); eight items from Tang et al.'s (1999) Asian American Career Development Questionnaire; CBI-R (Career Barriers Inventory-Revised; Swanson, et al., 1996); and SWCIQ (Social Work Career Influence Questionnaire; Biggerstaff, 2000), while qualitative data were obtained through four open-ended short questions. Respondents participated in the study by completing and returning a self-administrated mail survey or accessing a web-based survey.

The target population of the present study was Asian American social workers, and the sample was derived from the members' database of the National Association of Social Work (NASW). Among the 1,802 Asian American social workers in the NASW database, those aged 65 or older are excluded and total 900 of Asian social workers were randomly chosen for this study. A total 370 Asian American social workers participated in this study, yielding a 41.1 % return rate.

Significant Findings

Following univariate and bivariate analyses, a two-way MANOVA was conducted to test three research questions, examining the effect of family immigration status and acculturation on six dependent variables: perceived likelihood and perceived hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession. Of the three research hypotheses, only one

had supportive evidence. There were significant multivariate differences among family immigration status groups on the six dependent variables, Pillai's Trace= .134, $F(12, 670)=4.010$, $p=.0001$, multivariate $\eta^2=.067$. However, the only significant factors that differentiated family immigration status groups were perceived likelihood [$F(2, 339)=6.645$, $p=.001$, partial $\eta^2=.038$] and perceived hindrance of career barriers [$F(2, 339)=5.307$, $p=.005$, partial $\eta^2=.030$]. Examination of post hoc results indicated that the 1st generation group perceived the greatest career barriers (perceived likelihood, $M=2.92$, $SD=1.18$; and perceived hindrance, $M=2.33$, $SD=1.17$) and the 3rd or higher generation group perceived the least career barriers (perceived likelihood, $M=2.19$, $SD=.93$; and perceived hindrance, $M=1.61$, $SD=.79$).

The MANOVA results did not support research hypothesis one and three. There was no significant multivariate effect of acculturation on perceived likelihood and hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession, Pillai's Trace= .033, $F(6, 334)=1.919$, $p=.077$, multivariate $\eta^2=.033$. Based on previous studies (Leong, 1993; Leong & Tata, 1990) indicating that Asian Americans value prestige and financial stability, it was assumed that Asian American social workers with a low acculturation level may have higher aspiration for private practice and a stronger desire to be a therapist and place more emphasis on prestige of the profession. However, the MANOVA findings did not confirm this assumption. Research hypothesis three also was rejected, indicating non-significant multivariate interaction effects of family immigration status and acculturation, Pillai's

Trace= .039, $F(12, 670)= 1.114$, $p=.345$, multivariate $\eta^2=.020$. Further discussion of these quantitative findings will be discussed in the next section in relation to previous literature.

In addition to the quantitative data, qualitative data enriched an understanding of these Asian Americans' diverse perspectives related to their career choice and career development. Of the four open-ended questions, only responses to questions three and four were analyzed through the constant comparison analysis and content analysis. For the responses to Question 3, "Why do you think that Asian Americans are not selecting social work as a career?" a total of six themes emerged from the 459 of data units: status and money barriers (40.96% of all units); cultural factors (22.22% of all units); lack of information and resources (13.51% of all units); challenges of the social work profession (6.54% of all units); communication barriers (3.27% of all units); and individual barriers (2.61% of all units). For responses to question four, "Why do you think Asian Americans selecting social work as career?" seven themes emerged from the 430 of data units: value congruency (44.19% of all units); exposure to social work (12.56% of all units); personal motivation and passion for social work (10.93% of all units); positive job conditions (8.60% of all units); acculturation factors (6.28% of all units); and social support and other resources (3.27% of all units).

Discussion of Findings

In this section, findings of this study are discussed in related to the previous studies. Also, demographic information of participants, including gender, areas of practice and locations of practice, is discussed, related to the U.S. census and the NASW report on

Asian Americans. The quantitative and qualitative findings are reviewed relative to the literature review presented in chapter 2.

Measurement: Perceived Likelihood and Perceived Hindrance of CBI-R

Swanson et al. (1996) suggested that perceived barriers should be assessed by asking both perceived likelihood and hindrance of the barriers, since ratings for perceived likelihood and perceived hindrance could be different. A perceived likelihood rating for each career barrier indicates participants' perceptions of how likely the barrier would occur, while a hindrance rating indicates their perceptions of how much the barrier have hindered the participants. In this study, the results of t-tests indicated that there was a significant difference between the perceived likelihood ($M=2.65$, $SE = 1.14$) and perceived hindrance ($M=2.00$, $SE = 1.08$, $t(361) = 14.655$, $p = .0001$), although the mean scores of the total perceived likelihood and hindrance had a strong correlation ($r = .709$). Overall, the participants perceived that the career barriers had not hindered their career progress, as much as they were likely to occur. These results were consistent with Swanson et al.'s study findings (1996), thereby indicating that perceived likelihood and hindrance are separate constructs.

Demographic Data

The sample of this study revealed that 15.1% of participants were male, while 81.6% were female. Interestingly, the study results indicated that gender had significant relationships with acculturation ($X^2 = 9.942$, $df = 1$, $p = .002$) and family immigration status ($X^2 = 8.129$, $df = 2$, $p = .017$). The high acculturation group (21.1%, $n = 37$) was found to have many more male Asian American social workers than the low acculturation

group (8.9%, $n= 15$). In terms of family immigration status groups, the 3rd or higher generation group was found to have more males (21.3%, $n= 26$) than the 1st (9.3%, $n= 14$) or 2nd generation groups (18.8%, $n= 16$). The social work profession has been traditionally considered as “female-dominated”, and female is a dominant gender group among licensed social workers (NASW, 2006). However, the study findings suggest that Asian Americans, who were highly acculturated and represented a higher immigration generation, are more likely to be unrestrained from gender-stereotyped occupations or traditional gender roles. A further study may need to examine the relationships between gender and Asian Americans’ career choices.

In terms of the areas or fields of practice, a 2006 NASW report (NASW, 2006) found that Asian/Pacific Islander social workers are more likely to practice in health social work (26%) rather than child welfare/family or school social work, where African American and Hispanic social workers are more likely to practice. Inconsistent with the NASW report (2006), this study results revealed that mental health or community mental health was the most popular setting/area where participants practiced (29.25%, $n= 108$), followed by health (16.2%, $n = 60$), and aging/gerontological social work (11.1%, $n= 41$). Only few participants work in child welfare (7.8%, $n= 29$), or school social work (5.4%, $n=20$).

In terms of the location of practice, majority of the study participants worked in Hawaii (23.5%, $n= 87$), California (21.4%, $n=79$), and New York (9.2%, $n=34$), which were identified as states with a high Asian proportion in its population (U.S. Census Bureau, 2004). Asians represented about 4 percent of the U.S. household population, and

Hawaii had the highest Asian proportion in its population (about 43%), followed by California (about 12 %) (U.S. Census, 2007). Also, the state of New York is one of four additional states that had Asian populations of about 5 percent or higher in its population (U.S. Census, 2007). Based on the study findings, it is assumed that the states with a high Asian proportion in its population may have more Asian social workers.

In addition, the participants of this study reported that just over two-thirds of them (68.9%, n= 255) were working in urban areas, while only a small proportion of them worked in rural (7.3%, n=27) or suburban areas (4.9%, n=18). According to U. S. Census (2003), most of Asian Americans (95%) lived in metropolitan areas, and 41% of them lived in central cities located in metropolitan areas. The study findings reflected this but not to the same degree in that most of the Asian social workers worked in urban areas. The higher rate of Asian social workers and a larger Asian population in the community may affect their perceived career barriers or other career-related factors. Further study would be needed to explore the relationships among living locations and career-related factors.

Quantitative Results

According to the study findings, parental involvement had statistically significant but rather weak to moderate correlations with all dependent variables, including perceived likelihood, perceived hindrance, desire to be a therapist, prestige of the profession, and social change mission of the profession ($r = .285$ for perceived likelihood; $r = .193$ for perceived hindrance; $r = .208$ for desire to be a therapist; $r = .184$ for prestige of the profession; and $r = .182$ for social change mission of the profession). The findings confirmed that parental involvement is an important factor influencing Asian Americans'

career choice, which is consistent with the previous studies (Hardin et al., 2001; Gim, 1992; Leong & Serafica, 1995; Tang et al., 1999; Tang, 2001; Leong & Tang, 2002).

The quantitative findings, however, failed to confirm the previous literature review (Leong & Chou, 1994) proposing that Asian Americans with a low acculturation level may have different perceived barriers than those with a high acculturation level. The study results indicated that non-significant differences were found between acculturation groups on perceived likelihood and hindrance of career barriers. However, perceived likelihood and hindrance of career barriers were different among family immigration status groups. The participants who represented the 1st generation of immigration reported the highest scores of both likelihood and hindrance of perceived career barriers; those who were the 3rd and higher generation of immigration reported the lowest of perceived career barriers. This finding was very interesting, since it was assumed that acculturation and family immigration status would have a high association and have similar relationships with perceived barriers. Acculturation may not affect perceived likelihood and hindrance of career barriers, because the participants were fairly acculturated.

In addition, the study results indicated that parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession did not differ by either acculturation groups or family immigration status groups. These findings may have resulted from the characteristics of the study population. The participants already chose a career in the social work profession, which is not a traditional career path for Asian Americans. Furthermore, the participants reported a rather high level of acculturation ($M = 3.29$, Median = 3.43, $SD = .64$) and a fairly low parental involvement ($M = 2.32$, $SD = .76$)

in their career development. Acculturation may not play an important role in the participants' choosing social work as a career, since they reported high acculturation and were able to make a non-traditional career choice without parental involvement. Also, the participants were social workers who are assumed to value social change, diversity, and respect for the human beings. The participants perhaps already had high social work values that might have influenced them to choose the social work profession. The participants reported that social change mission of the profession ($M = 4.01, SD = .81$) influenced moderately their choice. Thus, acculturation and family immigration status may not affect parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession, due to the uniqueness of the present study population. Unlike the previous studies' findings (Leong, 1993; Leong & Tata, 1990) indicating that Asian Americans value prestige and financial stability, the participants of the present study may appreciate social work values and internal rewards (e.g., social justice, fulfillment) more than external rewards (e.g., monetary rewards, prestige).

Qualitative Results

In this study, participants did not select social work as a career, based on the following factors: status and money barriers; cultural factors; lack of information and resources; challenges of the social work profession; communication barriers; and individual barriers. However, participants also explained that Asian Americans select social work as a career due to the following factors: value congruency; exposure to social work; personal motivation and passion for social work; positive job conditions; acculturation factors; and social support and other resources.

The qualitative results of this study are surprisingly similar to the findings of the previous studies on factors that have influenced a career choice as shown in table 17.

Table 17

Career Influences Themes and Previous Research

Themes found in the present study	Concepts of the previous research
Value congruency	<ul style="list-style-type: none"> • “Social work idealism” and altruism (Csikai & Rozensky, 1997)
Acculturation factors	<ul style="list-style-type: none"> • Choosing nontraditional occupations to challenge Asian stereotypes (Leong & Chou, 1994)
Social support and other resources	<ul style="list-style-type: none"> • Social support, role models, mentors (Lent et al., 2002) • Financial resources (Lent et al., 2001)
Status and money barriers	<ul style="list-style-type: none"> • Financial status (Leong, 1993; Leong & Tata, 1990; Lent et al., 2002)
Cultural factors	<ul style="list-style-type: none"> • Family influences (Lent et al., 2001; Lent et al., 2002; Hardin, et al., 2001) • Occupational stereotyping or preferences (Leong & Serafica, 1995; Tang et al., 1999)
Communication barriers	<ul style="list-style-type: none"> • Ability considerations (Lent et al., 2002)
Lack of information and resources vs. Exposure to social work	<ul style="list-style-type: none"> • Direct or vicarious exposure to work-relevant activities (Rompf & Royse, 1994; Lent et al., 2002)
Challenges of the social work profession vs. Positive job conditions	<ul style="list-style-type: none"> • Work conditions that reinforce the career choice (Lent et al., 2002)
Individual barriers vs. Personal motivation and passion for social work	<ul style="list-style-type: none"> • Personal interests (Lent et al., 2002)

Implication of the Findings

The findings of the present study provided a better understanding of the Asian social workers' career decision making process, thus adding to the literature on Asian Americans' career choice behaviors, in particular, to those individuals who already have chosen social work as a career. Also, the findings of this study have many implications for social work practice, the Asian American community, social work education and schools, and social work research. These implications point to suggestions for effective recruitment and retention efforts for Asian Americans in social work education and professional practice, as well as developing effective career counseling for them, which considers culturally relevant factors.

Implications for Social Work Practice

In the following discussion, those who are involved in the recruitment of Asian American social workers, including guidance counselors, career counselors, admissions coordinators, and social welfare agency human resource personnel, henceforth, will be referred to collectively as professionals.

The current study's findings have significant implications for professionals at both the high school or higher education levels and for other professions, providing career counseling to Asian Americans. When career counseling is conducted with Asian Americans, the professionals should assess personal, familial, and cultural levels of career-related factors that may affect the process of Asian Americans' career choices. At a personal level, Asian Americans' values and interests should be assessed. These may be different, depending on the individual, such as the degree of emphasis on prestige, wealth,

a good quality of life, fulfillment, self-actualization or self-expression. Also, the social work professionals should assess the degree of familial and cultural factors, including clients' parental involvement, acculturation levels, cultural backgrounds, and family history (i.e., family immigration status). The professionals should assess the degree to which these factors may serve as context for making a career decision, and incorporate in work with a person recognition of such factors. Thus, the professionals can assist them to come to a decision that is congruent with their values and needs. For example, Asian Americans may encounter conflicts with parents or family members in the process of making career choices. Acculturated Asian Americans may want to make their own career choices, while parents who maintain their own traditional cultural values may want to get involved with their children's career choices. The professionals should help Asian Americans resolve the cultural conflicts by acknowledging strengths and weaknesses of both sides of these cultural perspectives. Thus, Asian Americans can make a career choice, which will give satisfaction and fulfillment for themselves as well as their families. Culture-relevant practice in career counseling should include meeting both the individual and family imperatives of Asian Americans in career decision-making process.

The social work professionals should help Asian Americans have a balanced perspective of their weaknesses and strengths, thus they can overcome inappropriate perceptions of any career barriers. The professionals should help them identify their own resources and capabilities, such as bilingual and bicultural backgrounds, which become assets for their success in the social work profession or other social science occupations. This will help them have other perspectives to occupational choices beyond the typical

career choices of Asian Americans. Identifying their skills and resources will help Asian Americans reduce their perception of career barriers and encourage them to pursue a career choice they are interested in.

In addition, information on diverse occupational areas should be given to Asian Americans and their families. This is supported by the qualitative findings which indicated that Asian Americans had a limited information or knowledge on certain occupational choices. The responses for question three revealed that lack of information and resources was a barrier to Asian Americans for selecting social work as a career. Consistent with the responses for question three, the responses for question four identified that exposure to social work was one of major factors influencing Asian Americans' selecting social work as a career. More information will provide Asian Americans more diverse career options and perspectives on their career choice.

Implications for the Asian American Community

The study participants reported the perception that the general Asian community preferred only certain career choices, such as law and medical areas, and did not have enough information and resources about the social work profession, an atypical Asian career choice. This information can help the Asian American community to be aware that lack of knowledge leading to limited career choices may strengthen occupational stereotyping and thereby limit career options. Furthermore, should this occupational stereotyping be internalized among Asian Americans it also fosters the same within other racial groups. Thus, it may lead to disadvantages for Asian Americans who want to choose a non-traditional career. Also, the concentration of limited career areas may cause a

disproportionate representation of Asian Americans in certain occupational areas where bicultural and/or bilingual Asian Americans are needed. This is particularly relevant for the social work profession. The leaders in an Asian American community should foster more information about other career choices which potentially leads to increased community awareness about the positive aspects of non-traditional career areas. For example, job shadowing programs and volunteer opportunities will provide opportunities for Asian Americans to explore social work career interests and required vocational skills. Also, job shadowing programs can connect professionals and Asian Americans, and further provide career guidance and help them make an informed and educated career decisions.

In terms of recruiting Asian Americans to the social work profession, more opportunities could be provided to experience social work-related activities, gain knowledge about the social work profession in general, or experience the need or mission of the profession. Inviting social work educational programs to provide workshops in the community would be one way to introduce inform Asian Americans to the social work profession. In addition, providing written materials in Asian languages makes social work career information accessible to parents who do not read English but who also influence their children's career choice.

Social supports were another area identified in this study as an important variable for Asian Americans' career choice in social work. Available role models or social support by significant others were described as an important reason to go into the social work profession, whereas a lack of role model or few Asians in this profession was reported as a barrier. Thus, identifying role models and introducing positive role models of Asian

American social workers to the Asian community are essential in raising community awareness of the social work profession and recruiting more Asian Americans in the profession. In areas where there is a dearth of professionally trained Asian-Americans, media sources could be sought from the National Association of Social Workers and other Asian American associations, such as Asian and Pacific Islanders Social Work Educators Association. And, in the age of the internet there is the potential to form internet role model relationships if the objective is to increase the number of Asian American social workers.

Asian American's strengths that may help them succeed in the profession should be acknowledged and articulated to the Asian community, in order to increase their confidence in selecting social work as a career. Interestingly, the study participants acknowledged both weaknesses and strengths of Asian Americans that may have influenced their career choice and further their success in the social work profession. Participants reported Asian Americans' lack of social work skills and language barriers as weaknesses and barriers preventing them from choosing social work as a career. However, participants also identified Asian Americans' bilingual or bicultural background as strengths to be successful in the social work profession. The strengths of Asian Americans should be emphasized in the Asian community, so that Asian Americans are aware that they are capable of success in the social work profession, since it is not a traditional career choice.

Implications for Social Work Education

The qualitative findings indicated that the positive job conditions, including many job opportunities, job flexibility, fulfillment of helping people, and adequate compensation of the social work profession appealed to many Asian Americans, despite challenges of the problems addressed by the social workers such as poor job conditions and possible discrimination. These contradictory responses may reflect acknowledgement of both the disadvantages and advantages of Asian Americans in choosing the social work profession. Therefore, the advantages or positive aspects of the social work job conditions should be widely dispersed to the Asian community, in order to recruit more Asian American into the social work professions. And, paired with this information would be the promise of knowledge and skills through social work education to address these problems.

Social work schools can and do engage in outreach activities, such as recruitment workshops or media advertisements, in order to increase the awareness of the social work profession and appeal positive job conditions. There may be a need to target these efforts to Asians. Asian American social workers can be a part of the outreach activities by providing their own experiences as a social worker and as a role model to the Asian American community. The special skills and diverse perspectives that Asian Americans can bring into the social work profession should be informed to the Asian American community. The quantitative findings of the present study indicated that the 1st generation Asian Americans perceived the greatest career barriers. Thus, materials about the social work programs or profession should be provided, especially for the 1st generation Asian Americans who may be the most reluctant to consider the social work profession, due to

their perceived career barriers related to the profession. As previously noted, materials should be prepared in several different Asian languages and provided in venues where the 1st generation Asian Americans and their children would frequently visit, such as churches and ethnic grocery stores.

Implications for Social Policy

Social policy plays an important role in enhancing diversity among the social work professionals and providing culturally-sensitive and culture-competent practice. Social policy, further, impacts the recruitment of more bilingual and bicultural Asian social workers as well as providing services to meet Asian American clients' needs. Two larger social policies of Council on Social Work Education (CSWE) and National Association of Social Workers (NASW) are reviewed, in terms of promoting diversity and culture-competent practice.

The Council on Social Work Education (CSWE) 2008 Educational Policy and Accreditation Standards (EPAS) provide the bases to accredit bachelor and master's level social work programs by providing criteria of the program mission and goals, explicit curriculum, implicit curriculum, and assessment (CSWE, 2008). EPAS emphasizes that the social work program's commitment to diversity should be reflected in its learning environment, including the demographic make-up of its faculty, staff, and student body, composition of program advisory or field committees, and selection of field education settings and their clientele (CSWE, 2008). According to EPAS, the social work program should put forth continuous efforts to provide a learning environment which respects all persons and promotes the understanding of diversity and differences.

The National Association of Social Workers (NASW) also emphasizes cultural competence and social diversity. According to NASW Code of Ethics (NASW, 1999), social workers should have knowledge of their clients' cultures and be able to demonstrate competence in their area of services that are sensitive to clients' cultures and to differences among people and cultural groups. Also, it states that social workers continually learn and obtain education to increase their professional knowledge and skills and to apply them in practice (NASW, 1999).

These educational and practice policies reinforce diversity and culture-competent practice in the social work profession. The EPAS emphasizes diverse settings and respecting diversity in educational settings, while NASW's code of ethics concerns the cultural competence and social diversity in social work practice. Both of the policies support that the Asian American population should be served by social workers who are not only culturally representative, but also culturally sensitive and competent. The current direction of the social policies, emphasizing cultural diversity, should be continued and enhanced through continual review and revision should Asian-Americans' circumstances vis-à-vis the social work profession evolve over time.

Implications for Research and Knowledge-Building

This section includes discussions about the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn et al., 1987) instrument used in this study and the contributions to theory, based on the findings of the present study.

Instrumentation issues of the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA). The following discussion reflects responses from only a very few respondents

(≤ 10) about specific questions of the instrument. This is included here with the assumption that as the U.S. society becomes increasingly diverse with increasing interaction among these groups, and the concerns identified by respondents in this study are likely to become more prominent.

The use of the measurement, SL-ASIA (Suinn-Lew Asian Self-Identity Acculturation Scale; Suinn et al., 1987) assessing acculturation levels, raised issues among this particular Asian social worker sample. There were three major concerns expressed: (1) inadequate use of terminology; (2) some questions that did not apply to those who are the 1st generation of immigration; (3) inadequate response categories, not inclusive of all racial groups; and (4) one question that did not reflect social work values.

Some terminology used in the measurement is outdated. For example, the terminology, “oriental” is no longer widely used and is considered to have a subtle nuance of racial discrimination. Furthermore, although the measurement was developed for the general Asian American populations, certain Asian subgroups may feel excluded because of the way the terminology was used in response categories, especially for questions 3, 4, and 5 (See Appendix F). One participant explicitly expressed that he or she was offended by the response options of the questionnaire, apparently left with the impression that East Indians were not included: “You may need to know that East Indians from India consider themselves Asians. “Asians” are not just Chinese, Korean, Japanese. I am becoming offended that Asian is being taken away from my ethnic group. Leaving us as a race of its own; like the Chinese, we are large in numbers.”

Some questions were not applicable to those who represent the 1st generation of immigrants (see Table 18). Some participants commented on questions 4 and 5 that their parents were staying in their home country. Also, regarding questions 6 and 7, some participants explained that they had grown up in their home country and immigrated to the U.S. as an adult. Some participants strongly preferred identifying their own very specific ethnicity or nationality versus the general designation of “Asian.” For example, one chose one response category, but added a specific explanation of one’s ethnicity. This problem occurred to questions 3, 4, and 5. One of the major issues raised by participants was inadequate response categories, segregating racial groups. Several participants added comments on questions 6, 7, 8, and 9 that they had a mixed racial group of friends, but the answer categories did not reflect and include all racial groups in the categories. For example, response categories included the choice of “About equally Asian groups and Anglo groups,” but there was no response category for “About equally Asian groups and other minority groups.” Thus, many participants chose one response category along with additional comments. For example, one participant marked the response category of “about equally Asian groups and Anglo groups,” and specifically added Blacks and Hispanics. Another participant chose the category of “Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups,” and added a comment “with many Asian friends.” Some participants even marked more than one answer categories to reflect their responses. Also, a few participants complained that the answer categories were not adequate: “Categories are not adequate. #3 (About equally Asian groups and Anglo groups) + #4 (Mostly Anglos,

Blacks, Hispanics, or other non-Asian ethnic groups) + Blacks, Hispanics?” and “Why are Anglos, Asians, Blacks, and Hispanics not a category?”

In addition, question 9 was considered inappropriate to ask, particularly for the participants who are social workers who respect diversity. Participants expressed their discomfort about the question: “Don’t care. Any person who I like and can easily build a relationship with.”, “Race and ethnicity unimportant. Want friend who reciprocate friendship.”, and “None of these answers are appropriate. I chose to have friends whose character and values are similar to mine.”

Based on the issues addressed by the participants, it is believed that the SL-ASIA instrument may need to be modified if used in future research to meet the current social values within our increasingly diverse society.

Table 18

Measurement Issues Related to SL-ASIA, Raised by Participants

		Not applied to the 1 st generation of immigration	Indicating specific ethnicity or nationality	Inadequate answer categories
Q3. How do you identify yourself?	Answer categories for Q3, Q4, and Q5: 1. Oriental 2. Asian 3. Asian-American 4. Chinese-American, Japanese-American, Korean-American, etc. 5. American		X	
Q4. Which identification does (did) your mother use?		X	X	
Q5. Which identification does (did) your father use?		X	X	
Q6. What was the ethnic origin of the friends and peers you had, as a child up to age 6?	Answer categories for Q6, Q7, Q8, and Q9: 1. Almost exclusively Asians, Asian-Americans, Orientals 2. Mostly Asians, Asian-Americans, Orientals 3. About equally Asian groups and Anglo groups 4. Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups 5. Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups	X		X
Q7. What was the ethnic origin of the friends and peers you had, as a child from 6 to 18?		X		X
Q8. Whom do you now associate with in the community?				X
Q9. If you could pick, whom would you prefer to associate with in the community?				X

Contributions to theory. Several concepts of Social Cognitive Career Theory (SCCT) were identified by the qualitative findings of the study: self-efficacy and contextual influences. First, the concept of self-efficacy refers to peoples' beliefs about their capabilities of performing particular behaviors required to attain certain types of careers (Bandura, 1986; Lent et al, 2002; Lent & Brown, 2006). According to SCCT, self-efficacy is an essential concept, directly influencing other career-related factors, such as outcome expectations, interests, and goals. Although self-efficacy is not included in the quantitative model of the present study, the qualitative findings indicated that self-efficacy is one of the important factors that may influence Asian Americans to select or not select social work as a career. The participants identified that communication barriers, including lack of social work skills (e.g., communication or social skills) and language barriers, are some factors that prevented Asian Americans from selecting social work as a career. In the other words, Asian Americans may not perceive themselves as capable to perform social work related activities.

Besides self-efficacy, contextual influences are important factors influencing the individuals' learning experiences and opportunities to be exposed to a certain career, according to SCCT (Lent et al, 2002; Lent & Brown, 2006). In the present study, the participant responses included many contextual environmental factors that may have influenced Asian Americans' selecting social work as a career. These included lack of information and resources vs. exposure to social work; occupational stereotyping and preferences; and cultural factors, such as parental involvement, Asian cultural values, and acculturation.

According to the qualitative findings, lack of information and resources (13.51%, n= 62 units) were identified as preventing Asian Americans from choosing social work as a career. Participants reported that Asian Americans did not have much information about social work, and they often had misconceptions or negative stereotypes about social workers. Also, participants explained that there were few Asians in the social work profession, thus, there was a lack of role models. In a complementary way, exposure to social work (12.56%, n= 54 units) was reported as a factor leading Asian Americans to selecting the social work profession. Participants said that life experiences, such as individual or family experiences, and their experiences as minority and immigrants, might lead Asian Americans to social work. They reported that they were exposed to social work through their life experiences. Participants also reported that acknowledging the importance of the social work profession and needs for social workers, especially Asian social workers, was a factor promoting Asian Americans to select social work as a career. Exposure to the social work profession may affect Asian Americans' development of career interests. This qualitative finding reflected SCCT that contextual factors further influence the process of socialization and cognition, which shapes the individuals' career interests and development (Lent et al., 2002).

Occupational stereotypes and preferences were also recognized in the previous literature as a contextual influence of Asian Americans' career choice (Lent et al., 2002). Again, this occupational stereotype is that Asian Americans are typically successful in, or predominately interested in, math-, science-, technology-, and medical-related careers rather than in verbal, persuasive, or social careers (Leong & Serafica, 1995; Tang et al.,

1999). In the qualitative findings the participants explained that Asian Americans did not choose social work as a career, due to occupational stereotypes. Participants reported that Asian Americans preferred law, medical, business, and engineering careers, because they had more prestige and income potential, which goes back to the theme of status and money as barriers to choosing social work. The comments of participants were consistent with Leong and Serafica (1995)'s arguments that Asian Americans' career interests and aspirations disproportionately focus on certain occupations, and as a result Asian Americans' career choices become stereotyped and segregated.

Cultural factors, including parental involvement, Asian cultural values, and acculturation were identified in this study as contextual influences. Parental involvement is an important contextual factor in choosing a career among Asian Americans. Many studies suggested that parental or familial involvement play an important role in Asian Americans' career choices (Gim, 1992; Tang et al., 1999). Consistent with the previous studies, participants of this study reported in the qualitative responses that familial influence is one of the major cultural factors why Asians are not choosing social work as a career. Again supported by the qualitative findings, parental involvement was one of the major factors noted to influence respondents' career choice.

Asian cultural values were identified as both barriers and resources that influence Asian Americans' selecting a career in social work. Certain Asian cultural values do not match social work values and practice principles: For example, expression of feelings, an important element of social work practice, was not congruent with Asian cultural norms. Whereas, the participants identified that many Asian cultural values matched social work

values, including family values, respecting elders, and emphasizing group and society over the individual.

In the qualitative responses, acculturation also was considered to be an important career influencing factor, although the quantitative results did not confirm this influence on other career-related factors. Participants explained that Asian Americans who were acculturated and had changed their value systems chose social work as a career and that some Asians may even choose social work to break occupational stereotypes.

In conclusion, the qualitative findings support Lent et al.'s model that self-efficacy and contextual environmental factors influence Asian Americans' process of socialization and cognition, and further shape their career interests and development (Lent et al., 2002). The findings of the present study led the researcher to conclude that culture-related contextual variables, such as occupational stereotyping, parental involvement, cultural values, and acculturation should be considered in future research related to Asian Americans' career choice.

Limitations of the Study

A major limitation of the study is errors found in the NASW list of Asian social workers. The sample of this study was drawn from the members' database of NASW (National Association of Social Workers). InFocus, a contract company releasing the list of the NASW members for research, informed that only Asian social workers were included in the list. However, a total number of 25 of the 900 people of the NASW list, who were contacted for this study, reported that they were not Asian Americans. The researcher informed the possible error of the list to InFocus. The NASW list may have errors itself,

which the researcher could not control. It is considered as random errors, rather than systematic errors. However, these errors may limit generalization of the findings of the present study, if any data was included from a respondent who may not have been Asian American.

Another limitation of the study is that the study design did not allow Asian subgroup differences to be identified and taken into account in data analysis. Asian subgroups have differences, some subtle, in terms of immigration history, different acculturation levels, socioeconomic status, and culture. However, the percentage of Asian social workers is very small, so distinctions between Asian subgroups may not have much meaning.

Suggestions for Future Research

The relationships among demographic information and career-related factors should be explored further. Specifically, the differences of dependent variables between states with a large Asian population and states with a small Asian population need further examination. In their qualitative responses, many participants expressed that they did not perceive that there was few Asian American social workers or perceive any ethnicity-related barriers. It seems logical that whether participants live or work in a community with a large Asian population, or not, may affect Asian American social workers' perceived barriers, outcome expectations, career satisfactions, and other factors related to their career choice. In addition, the relationships between other demographic information, such as practice setting/areas, practice method and gender, and the career-related factors

need to be further explication as a basis for developing geographically unique recruitment and retention efforts.

Future research can be conducted in terms of instrumentation, specifically the Career Barriers Inventory-Revised (CBI-R: Swanson et al., 1996). In this study, one of the subscales of CBI-R, Discouraged from Choosing Nontraditional Careers, was modified to assess non-traditional career choices of Asian Americans. The modified CBI-R was tested for its factor components, and the results revealed that the modified CBI-R did not have the same factor component model as the original CBI-R did. In this study, the gross mean scores of likelihood and hindrance were used for further analysis, instead of the four subscale scores of CBI-R (Swanson et al., 1996). However, future research may want to focus on how each career barrier may be differently perceived by the participants by utilizing the subscale scores of CBI-R for further analysis. Also, the modified component model needs to be further assessed, in order to see how this modified model is different from the original model, or whether it is perhaps a better model of the measurement.

Future research also could explore variables that were identified in the qualitative findings of the present study that were not included in the current quantitative study. For example, low pay and prestige of the social work profession (40.96%, n= 188 units) were identified as a major barrier preventing Asian Americans from going into the social work profession. Also, participants explained that lack of information and resources (13.51%, n= 62 units) may be one of reasons why few Asian Americans chose social work as a career. Further explication of the relationships among working conditions, exposure to the social

work professions, and the career choices may broaden our understanding and point to new or modified recruitment and retention efforts.

Because only responses for the two of the four open-ended questions were analyzed in the present study, due to time feasibility, the remaining responses need to be analyzed. However, it will be very meaningful to look at the rest of the responses to identify the advice Asian American social workers would like to give to Asian Americans regarding a career choice or to those who are considering social work as a career.

Lastly, future research may benefit from comparing Asian American social workers with other minority social work groups, in order to see how unique Asian Americans are or are not. Also, comparisons of Asian Americans and other minority groups in other helping professions like teaching and nursing may yield valuable information.

Conclusion

There are increasing needs for Asian American social workers providing culture-competent services to Asian Americans and other racial groups. This study was conducted among Asian American social workers who already chose a career and have worked in the social work profession, which is a non-stereotypical career choice for Asian Americans. This study was developed to explore how the culturally-relevant factors of acculturation and family immigration status influence career-related factors, such as perceived likelihood, perceived hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession. Also, qualitative data from two open-ended questions added valuable and diverse perspectives on why Asian Americans are selecting or not selecting social work as a career choice.

The quantitative findings of this study did not support the research hypotheses related to acculturation and other career-related factors. Quantitative findings of the study supported that perceived likelihood and hindrance of career barriers were different among family immigration status groups. However, no significant group differences were found between acculturation groups on perceived likelihood, perceived hindrance of career barriers, parental involvement, desire to be a therapist, prestige of the profession, and social change mission of the profession.

The qualitative findings, however, ensured that socio-cultural factors affected Asian Americans' career choice in the social work profession. In the qualitative findings, participants identified familial influences; cultural values in contrast to social work values and practice principles; and occupational stereotypes/preferences, as barriers of choosing social work. The study participants identified barriers for Asian Americans to select social work as a career: status and money barriers; cultural factors; lack of information and resources; challenges of the social work profession; communication barriers; and individual barriers. On the other hand, participants explained that Asian Americans' selecting social work as a career was influenced by the following factors: value congruency; exposure to social work; personal motivation and passion for social work; positive job conditions; acculturation factors; and social support and other resources.

The findings of this study suggest many implications for social work practice, the Asian American community, social work education and schools, social policies, and social work research and knowledge building. The results of this study can contribute to the recruitment and retention of Asian Americans in social work education and professional

practice, as well as in developing effective career counseling approaches for them that are more culturally relevant. Also, the findings are added to the literature on Asian Americans' career choice behaviors, in particular, to those individuals who choose social work as a career.

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APPENDIX A

Component Loadings of Modified CBI-R

Component loadings for perceived likelihood of career barriers

Component 1: Perceived likelihood of racial discrimination and societal discouragement from choosing nontraditional careers	1
1. Experiencing racial discrimination in hiring for a job - Likelihood	.759
4. Having a boss or supervisor who is biased against people of my racial/ethnic group - Likelihood	.812
6. Experiencing racial harassment on the job - Likelihood	.766
7. Other people's beliefs that certain careers are not appropriate for people of my racial/ethnic group - Likelihood	.639
8. Experiencing racial discrimination in promotions in job/career - Likelihood	.824
12. Not being paid as much as coworkers of another racial/ethnic group - Likelihood	.522
14. People of other racial/ethnic groups receive promotions more often than people of my racial/ethnic group - Likelihood	.677
18. Lack of opportunities for people of my racial/ethnic group in nontraditional fields - Likelihood	.624

Component 2: Perceived likelihood of disapproval by significant others and personal/ individual discouragement from choosing nontraditional careers	2
3. Being discouraged from pursuing field which are nontraditional for my racial/ethnic group (e.g., There are not many Asians in the social work profession, but many in engineering and medical areas) - Likelihood	.537
5. My spouse/partner doesn't approve of my choice of job/career - Likelihood	.700
10. My parents/family don't approve of my choice of job/career - Likelihood	.751
13. My belief that certain careers are not appropriate for me because of my racial/ethnic group - Likelihood	.529
16. Fear that people will consider me "un-Asian like" because my job/career is nontraditional for my racial/ethnic group - Likelihood	.562
19. My friends don't approve of my choice of job/career - Likelihood	.714

Component 3: Perceived likelihood of difficulties with networking/socialization	3
2. Unsure of how to "sell myself" to an employer - Likelihood	.675
9. Not having a role model or mentor at work - Likelihood	.528
11. No opportunities for advancement in my career - Likelihood	.647
15. Unsure of how to advance in my career - Likelihood	.800
17. Not knowing the "right people" to get ahead in my career - Likelihood	.674

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

Component Transformation Matrix

Component	1	2	3
1	.718	.486	.497
2	-.397	.874	-.281
3	-.571	.004	.821

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Component loadings for perceived hindrance of career barriers

Component 1: Perceived hindrance of racial discrimination and societal discouragement from choosing nontraditional careers	1
1. Experiencing racial discrimination in hiring for a job - Hindrance	.796
4. Having a boss or supervisor who is biased against people of my racial/ethnic group - Hindrance	.790
6. Experiencing racial harassment on the job - Hindrance	.840
7. Other people's beliefs that certain careers are not appropriate for people of my racial/ethnic group - Hindrance	.600
8. Experiencing racial discrimination in promotions in job/career - Hindrance	.822
12. Not being paid as much as coworkers of another racial/ethnic group - Hindrance	.513
14. People of other racial/ethnic groups receive promotions more often than people of my racial/ethnic group - Hindrance	.744
18. Lack of opportunities for people of my racial/ethnic group in nontraditional fields - Hindrance	.572

Component 2: Perceived hindrance of difficulties with networking/socialization	2
2. Unsure of how to "sell myself" to an employer - Hindrance	.691
9. Not having a role model or mentor at work - Hindrance	.603
11. No opportunities for advancement in my career - Hindrance	.659
15. Unsure of how to advance in my career - Hindrance	.792
17. Not knowing the "right people" to get ahead in my career - Hindrance	.724

Component 3: Perceived hindrance of disapproval by significant others and personal/individual discouragement in choosing nontraditional careers	3
5. My spouse/partner doesn't approve of my choice of job/career - Hindrance	.638
10. My parents/family don't approve of my choice of job/career - Hindrance	.715
13. My belief that certain careers are not appropriate for me because of my racial/ethnic group - Hindrance	.614
16. Fear that people will consider me "un-Asian like" because my job/career is nontraditional for my racial/ethnic group - Hindrance	.631
19. My friends don't approve of my choice of job/career - Hindrance	.826

Component Transformation Matrix

Component	1	2	3
1	.687	.545	.481
2	-.442	-.212	.872
3	-.577	.811	-.095

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser

Normalization.

APPENDIX B

Component Loadings of SWCIQ

Component 1: Social Change Mission of the Profession	Loading
SW 1: Your commitment to social change	.775
SW 4: Your commitment to helping people with social problems	.702
SW 7: The stated values of the social work profession	.616
SW10: The commitment of the social work profession to social change	.846
SW 13: The commitment of the social work profession to advocacy on behalf of clients	.807
SW 16: Your commitment to social justice	.773
SW 19: Your commitment to provide services to persons experiencing poverty	.606
SW 22: The match of your personal values with the values of the social work profession	.713

Component 2: Prestige of the profession	Loading
SW 2: The availability of an MSW program	.717
SW 3: The salary potential in a social work position	.650
SW 5: The ease of obtaining an MSW degree	.743
SW 11: The prestige of the social work profession	.576
SW 14: The admission requirements for the MSW	.749
SW 17: The availability of jobs in the social work profession	.583
SW 20: The length of time required for the MSW degree compared with others	.606
SW 23: The respect afforded social workers by clinical psychologists	.538

Component 3: Desire to be a Therapist	Loading
SW 6: The opportunity for private practice as a social work profession	.785
SW 9: The ability of social workers to practice autonomously	.694
SW 12: The availability of licensing for social workers	.610
SW 15: The opportunity to work as a marital or family therapists	.737
SW 18: Your desire to be a therapist	.776
SW 21: The availability of insurance payments to reimburse the services provided by social workers	.587

Component Transformation Matrix

Component	1	2	3
1	.411	.669	.619
2	.911	-.310	-.270
3	.012	.675	-.737

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

APPENDIX C
Invitation Letter

March 18, 2008

«NAME7»
«ADDRES9»
«ADDRES10»
«CITY11», «STATE12» «ZIP13»

Please help us understand Asian American social workers' career choices!

Dear «NAME7»,

A few days from now you will receive in the mail a request to fill out a brief questionnaire for an important research project being conducted by Soon Min Lee, a doctoral candidate at the School of Social Work at Virginia Commonwealth University, in Richmond, VA.

You are selected through database of National Association of Social Workers (NASW). The study concerns the relationships among factors influencing Asian Americans to choose social work as their careers.

I am writing in advance because we have found many people like to know ahead of time that they will be contacted. The study is an important one that may help understand Asian American social workers' career choices as well as improve retention and recruitment of more Asian American social workers like yourself.

If you want more information about this study or would like to participate in this study via online, please visit the following website: <https://survey.vcu.edu/cgi-bin/qwebcorporate.dll?N67M9J>

Thank you for your time and consideration. It is only with the generous help of people like you that our research can be successful.

Sincerely,

Soon Min Lee
Doctoral Candidate, MSW
School of Social Work
Virginia Commonwealth University
1001 W. Franklin St.
P.O. Box 842027
Richmond, VA 23284-2027

APPENDIX D

Cover Letter

March 26, 2008

Please help us understand Asian American social workers' career choices!

Dear «NAME7»,

I am writing to ask your help in a study of Asian American social workers being conducted for my doctoral dissertation. The study concerns the relationships among factors influencing Asian Americans to choose social work as their careers as well as improving recruitment and retention of persons like yourself.

We are contacting a random sample of Asian American social workers from the database of National Association of Social Workers (NASW). You are selected for this study, as you are a member of NASW and provide social services.

It should take about 30 minutes to complete this survey. It is believed that participating in this study has only a minimal risk of causing you harm or stress. A few questions might cause you some uncomfortable feelings to answer.

Your answers are completely confidential. When you return your completed questionnaire your name will be deleted from the mailing list and never connected to your answers in any way. Participation and return of a completed questionnaire will constitute your informed consent. Your participation is voluntary. You may decline to participate in this study, or leave blank any questions you do not want to answer. However, you can help me very much by taking a few minutes to share your experiences and thoughts about choosing social work as a career.

If you agree to participate in this research, please complete the questionnaire and return it by **April 11th, 2008** by using the enclosed envelope with a return stamp. If you dismiss the enclosed envelope, please return the questionnaire to the following address:

Soon Min Lee
School of Social Work
Virginia Commonwealth University
1001 W. Franklin St.
P.O. Box 842027
Richmond, VA 23284-2027

You can also participate in the study through an online survey. Please visit the following link:
<https://survey.vcu.edu/cgi-bin/qwebcorporate.dll?N67M9J>.

When you access the web-based survey, you will need an identification number which is marked on the top of this letter. This identification number is only for deleting your name from the mailing list, so you will not receive another letter or paper questionnaire. The identification number will not be connected to your answers.

If you have any questions or comments about this study, I am happy to talk with you. You can reach Soon Min Lee by phone: 804-503-7559 or by email: leesm3@vcu.edu.

Information on the rights of human subjects in research is available through the Institutional Review Board at the Virginia Commonwealth University. The contact number for the Internal Review Board is (804) 828-0868.

Office for Research Subjects Protection
Virginia Commonwealth University
800 East Leigh Street, Suite 111
P.O. Box 980568
Richmond, VA 23298

Thank you very much for helping with this important study.

Sincerely,

Soon Min Lee, Doctoral candidate, MSW
School of Social Work
Virginia Commonwealth University

APPENDIX E
Reminder Postcard

April 3, 2008

ID#:

Please help us understand Asian American social workers' career choices

Last week a questionnaire asking about your career choice in social work was mailed to you. You are selected from a list of National Association of Social Workers (NASW).

If you have already completed and returned the questionnaire to us, please accept our sincere thanks. If not, would you please do so today? It is only by asking people like you to share your experiences that we can understand the relationships among factors that may have influenced Asian American social workers' career choices.

Your responses are very important for us. It is only by hearing from nearly everyone that the results can be truly representative. We are concerned that people who have not responded may have different experiences than those who have responded.

Thank you very much for your consideration and time.

Soon Min Lee, Doctoral Candidate, MSW

Please visit the website for an online survey: <https://survey.vcu.edu/cgi-bin/qwebcorporate.dll?N67M9J>
If you need a questionnaire, please email to: leesm3@vcu.edu

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APPENDIX F
Study Questionnaire

A survey exploring relationships of factors influencing Asian American social workers' career choices

Please help us understand Asian American social workers' career choices.

This following statements are factors that may have influenced you in your choice of social work as a career. There are no right or wrong answers to the items that follow. Please circle the ONE response category that most closely fits you.

To what degree do you feel that each of the following factors influenced your choice of social work as a career?	Not at all	A Little	Somewhat	Moderately	Strongly
1. Your commitment to social change.	1	2	3	4	5
2. The availability of an MSW program.	1	2	3	4	5
3. The salary potential in a social work position.	1	2	3	4	5
4. Your commitment to helping people with social problems.	1	2	3	4	5
5. The ease of obtaining an MSW degree.	1	2	3	4	5
6. The opportunity for private practice as a social worker.	1	2	3	4	5
7. The stated values of the social work profession.	1	2	3	4	5
8. The respect afforded social workers by the medical profession.	1	2	3	4	5
9. The ability of social workers to practice autonomously.	1	2	3	4	5
10. The commitment of the social work profession to social change.	1	2	3	4	5
11. The prestige of the social work profession.	1	2	3	4	5
12. The availability of licensing for social workers.	1	2	3	4	5
13. The commitment of the social work profession to advocacy on behalf of clients.	1	2	3	4	5
14. The admission requirements for the MSW.	1	2	3	4	5
15. The opportunity to work as a marital or family therapist.	1	2	3	4	5
16. Your commitment to social justice.	1	2	3	4	5
17. The availability of jobs in the social work profession.	1	2	3	4	5

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To what degree do you feel that each of the following factors influenced your choice of social work as a career?

	Not at all	A Little	Somewhat	Moderately	Strongly
18. Your desire to be a therapist.	1	2	3	4	5
19. Your commitment to provide services to persons experiencing poverty.	1	2	3	4	5
20. The length of time required for the MSW degree compared with others.	1	2	3	4	5
21. The availability of insurance payments to reimburse the services provided by social workers.	1	2	3	4	5
22. The match of your personal values with the values of the social work profession.	1	2	3	4	5
23. The respect afforded social workers by clinical psychologists.	1	2	3	4	5
24. The prestige of the social work profession in the provision of therapeutic services.	1	2	3	4	5

For each of the common barriers listed below, think about how much it is likely to occur and how much it hinders your career progress.

Barriers	How much is it likely to occur?			How much it hinders your career progress?		
	Not at all likely (1)	Somewhat	Very Likely (7)	Not at all hinder (1)	Somewhat	Very hinder (7)
1. Experiencing racial discrimination in hiring for a job	1 — 2 — 3 — 4 — 5 — 6 — 7			1 — 2 — 3 — 4 — 5 — 6 — 7		
2. Unsure of how to "sell myself" to an employer	1 — 2 — 3 — 4 — 5 — 6 — 7			1 — 2 — 3 — 4 — 5 — 6 — 7		
3. Being discouraged from pursuing fields which are nontraditional for my racial/ethnic group (e.g., There are not many Asians in the social work profession, but many in engineering and medical areas)	1 — 2 — 3 — 4 — 5 — 6 — 7			1 — 2 — 3 — 4 — 5 — 6 — 7		

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For each of the common barriers listed below, think about how much it is likely to occur and how much it hinders your career progress.

Barriers	How much is it likely to occur?			How much it hinders your career progress?										
	Not at all likely (1)	Somewhat	Very Likely (7)	Not at all Hinder (1)	Somewhat	Very hinder (7)								
4. Having a boss or supervisor who is biased against people of my racial/ethnic group	1	2	3	4	5	6	7	1	2	3	4	5	6	7
5. My spouse/partner doesn't approve of my choice of job/career	1	2	3	4	5	6	7	1	2	3	4	5	6	7
6. Experiencing racial harassment on the job	1	2	3	4	5	6	7	1	2	3	4	5	6	7
7. Other people's beliefs that certain careers are not appropriate for people of my racial/ethnic group	1	2	3	4	5	6	7	1	2	3	4	5	6	7
8. Experiencing racial discrimination in promotions in job/career	1	2	3	4	5	6	7	1	2	3	4	5	6	7
9. Not having a role model or mentor at work	1	2	3	4	5	6	7	1	2	3	4	5	6	7
10. My parents/family don't approve of my choice of job/career	1	2	3	4	5	6	7	1	2	3	4	5	6	7
11. No opportunities for advancement in my career	1	2	3	4	5	6	7	1	2	3	4	5	6	7
12. Not being paid as much as coworkers of another racial/ethnic group	1	2	3	4	5	6	7	1	2	3	4	5	6	7
13. My belief that certain careers are not appropriate for me because of my racial/ethnic group	1	2	3	4	5	6	7	1	2	3	4	5	6	7
14. People of other racial/ethnic groups receive promotions more often than people of my racial/ethnic group	1	2	3	4	5	6	7	1	2	3	4	5	6	7
15. Unsure of how to advance in my career	1	2	3	4	5	6	7	1	2	3	4	5	6	7

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Barriers	How much is it likely to occur?			How much it hinders your career progress?		
	Not at all likely (1)	Somewhat	Very Likely (7)	Not at all hinder (1)	Somewhat	Very hinder (7)
16. Fear that people will consider me "un-Asian like" because my job/career is nontraditional for my racial/ethnic group	1 2 3 4 5 6 7			1 2 3 4 5 6 7		
17. Not knowing the "right people" to get ahead in my career	1 2 3 4 5 6 7			1 2 3 4 5 6 7		
18. Lack of opportunities for people of my racial/ethnic group in nontraditional fields	1 2 3 4 5 6 7			1 2 3 4 5 6 7		
19. My friends don't approve of my choice of job/career	1 2 3 4 5 6 7			1 2 3 4 5 6 7		

The following questions collect information about your parental involvement in your career choices. Choose the ONE answer which best describes you.

How often have (did) your parents or any family members:	Never	Seldom	Sometimes	Usually	Always
1. Discussed your career plans with you?	1	2	3	4	5
2. Asked you to carry on the family tradition/business/career?	1	2	3	4	5
3. Listened to your opinion about career plans?	1	2	3	4	5
4. Pressured you to take a job that is financially secure?	1	2	3	4	5
5. Tried to influence/convince you to follow their choice of occupation for you?	1	2	3	4	5
6. Provided you various information on world of work?	1	2	3	4	5
7. Provided you only the information of the job that they want you to pursue?	1	2	3	4	5
8. Compared you with others who are successful in certain occupations?	1	2	3	4	5

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The following questions collect information related to your cultural identity.
Choose the ONE answer which best describes you.

- | | |
|---|--|
| 1. What language can you speak? | <input type="checkbox"/> Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
<input type="checkbox"/> Mostly Asian, some English
<input type="checkbox"/> Asian and English about equally well (bilingual)
<input type="checkbox"/> Mostly English, some Asian
<input type="checkbox"/> Only English |
| 2. What language do you prefer? | <input type="checkbox"/> Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
<input type="checkbox"/> Mostly Asian, some English
<input type="checkbox"/> Asian and English about equally well (bilingual)
<input type="checkbox"/> Mostly English, some Asian
<input type="checkbox"/> Only English |
| 3. How do you identify yourself? | <input type="checkbox"/> Oriental
<input type="checkbox"/> Asian
<input type="checkbox"/> Asian-American
<input type="checkbox"/> Chinese-American, Japanese-American, Korean-American, etc.
<input type="checkbox"/> American |
| 4. Which identification does (did) your mother use? | <input type="checkbox"/> Oriental
<input type="checkbox"/> Asian
<input type="checkbox"/> Asian-American
<input type="checkbox"/> Chinese-American, Japanese-American, Korean-American, etc.
<input type="checkbox"/> American |
| 5. Which identification does (did) your father use? | <input type="checkbox"/> Oriental
<input type="checkbox"/> Asian
<input type="checkbox"/> Asian-American
<input type="checkbox"/> Chinese-American, Japanese-American, Korean-American, etc.
<input type="checkbox"/> American |
| 6. What was the ethnic origin of the friends and peers you had, as a child up to age 6? | <input type="checkbox"/> Almost exclusively Asians, Asian-Americans, Orientals
<input type="checkbox"/> Mostly Asians, Asian-Americans, Orientals
<input type="checkbox"/> About equally Asian groups and Anglo groups
<input type="checkbox"/> Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
<input type="checkbox"/> Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups |

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7. What was the ethnic origin of the friends and peers you had, as a child from 6 to 18?

- Almost exclusively Asians, Asian-Americans, Orientals
- Mostly Asians, Asian-Americans, Orientals
- About equally Asian groups and Anglo groups
- Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
- Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups

8. Whom do you now associate with in the community?

- Almost exclusively Asians, Asian-Americans, Orientals
- Mostly Asians, Asian-Americans, Orientals
- About equally Asian groups and Anglo groups
- Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
- Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups

9. If you could pick, whom would you prefer to associate with in the community?

- Almost exclusively Asians, Asian-Americans, Orientals
- Mostly Asians, Asian-Americans, Orientals
- About equally Asian groups and Anglo groups
- Mostly Anglos, Blacks, Hispanics, or other non-Asian ethnic groups
- Almost exclusively Anglos, Blacks, Hispanics, or other non-Asian ethnic groups

10. What is your music preference?

- Only Asian music (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
- Mostly Asian
- Equally Asian and English
- Mostly English
- English only

11. What is your movie preference?

- Asian-language movies only
- Asian-language movies mostly
- Equally Asian/English English-language movies
- Mostly English-language movies only
- English-language movies only

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The following questions collect information related to your cultural identity.
Choose the ONE answer which best describes you.

12. What generation are you?

- 1st Generation—I was born in Asia or country other than U.S.
- 2nd Generation—I was born in U.S., either parent was born in Asia or country other than U.S.
- 3rd Generation—I was born in U.S., both parents were born in U.S., and all grandparents born in Asia or country other than U.S.
- 4th Generation—I was born in U.S., both parents were born in U.S., and at least one grandparent born in Asia or country other than U.S. and one grandparent born in U.S.
- 5th Generation—I was born in U.S., both parents were born in U.S., and all grandparents also born in U.S.
- Don't know what generation best fits since I lack some information.

13. Where were you raised?

- In Asia only
- Mostly in Asia, some in U.S.
- Equally in Asia and U.S.
- Mostly in U.S., some in Asia
- In U.S. only

14. What contact have you had with Asia?

- Raised one year or more in Asia
- Lived for less than one year in Asia
- Occasional visits to Asia
- Occasional communications (letters, phone calls, etc.) with people in Asia
- No exposure or communications with people in Asia

15. What is your food preference at home?

- Exclusively Asian food
- Mostly Asian food, some American
- About equally Asian and American
- Mostly American food
- Exclusively American food

16. What is your food preference in restaurants?

- Exclusively Asian food
- Mostly Asian food, some American
- About equally Asian and American
- Mostly American food
- Exclusively American food

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17. Do you _____?

- Read only an Asian language
- Read an Asian language better than English
- Read both Asian and English equally well
- Read English better than an Asian language
- Read only English

18. Do you _____?

- Write only an Asian language
- Write an Asian language better than English
- Write both Asian and English equally well
- Write English better than an Asian language
- Write only English

19. If you consider yourself a member of the Asian group (Oriental, Asian, Asian-American, Chinese-American, etc., whatever term you prefer), how much pride do you have in this group?

- Extremely proud
- Moderately proud
- Little pride
- No pride but do not feel negative toward group
- No pride but do feel negative toward group

20. How would you rate yourself?

- Very Asian
- Mostly Asian
- Bicultural
- Mostly Westernized
- Very Westernized

21. Do you participate in Asian occasions, holidays, traditions, etc.?

- Nearly all
- Most of them
- Some of them
- A few of them
- None at all

Open-Ended Questions

1. What advice would you give to an Asian American regarding a **career choice**?

2. What advice would you give to an Asian American who is considering **social work** as a career?

3. Why do you think that Asian Americans are **not selecting** social work as a career?

4. Why do you think Asian Americans are **selecting** social work as a career?

5

Demographic Information

How old are you? _____ Years of age

What is your sex? 1. Female 2. Male 3. Self-identified (Please specify): _____

What is your ethnic group?

- | | |
|-----------------|-----------------|
| 1. Asian Indian | 7. Korean |
| 2. Cambodian | 8. Lantian |
| 3. Chinese | 9. Pakistani |
| 4. Filipino | 10. Thai |
| 5. Hmong | 11. Vietnamese |
| 6. Japanese | 12. Other _____ |

How long have you lived in the U.S.?

1. For my entire life 2. _____ years and/or _____ months

What is your highest educational level achieved?

1. BSW
2. MSW
3. DSW/ PhD
4. Post Doctorate
5. Other _____

How many years of paid social work experience do you have? _____ Years of experience

Are you currently employed? _____

1. Not currently employed 2. Employed

If so, what is the state of your employment? _____ (Indicate U.S. state)

And where is the location of your employment?

- a) Rural area
- b) Urban area
- c) Other _____

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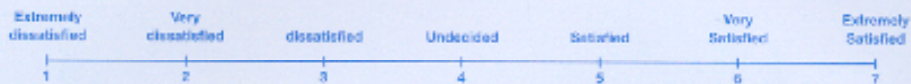
What is your **primary** method of current practice? Please select **ONE** response that best describes your practice.

1. Direct practice/clinical social work
2. Supervision
3. Policy or planning
4. Administration/management
5. Other _____

What is your **primary** setting/area of current practice? Please select **ONE** response that best describes your practice.

- | | |
|--------------------------------------|--|
| 1. Aging/Gerontological social work | 10. Immigration |
| 2. Alcohol, drug, or substance abuse | 11. International social work |
| 3. Child welfare | 12. Occupational/industrial social work |
| 4. Community planning | 13. Mental health or community mental health |
| 5. Corrections/criminal justice | 14. Public assistance/public welfare (not child welfare) |
| 6. Developmental disabilities | 15. Rehabilitation |
| 7. Family services | 16. School social work |
| 8. Group services | 17. Other _____ |
| 9. Health | |

How satisfied are you with your choice of social work as your profession?



**Thank you
for your
participation**

Please check here if you want to have a summary of the findings from the study.

04/15/09

VITA

Soon Min Lee was born in October 1979 in Seoul, South Korea and is a citizen of Republic of Korea. She grew up in Korea and moved to the U.S. in 2002. She earned her Bachelor of Arts Degree in English Education and Political Science as a second major from Hankuk University of Foreign Studies, Seoul, Korea in 2002. During her undergraduate program, she spent one year from fall 2000 to spring 2001 as an exchange student at University of Arkansas at Fayetteville, Arkansas, U.S. This experience motivated her to study social work in the U.S. She returned to the U.S. in 2002 and earned her Master of Social Work Degree from University of Illinois at Urbana-Champaign in 2004. She also obtained her Illinois license as a Licensed Social Worker.

Her research interests are mental health issues of the Asian immigrant population, acculturation/assimilation dynamics, Asian immigrant family functioning, immigrant women in domestic violence situations, career choices of Asian Americans, and social work education. Ms. Lee has presented at national conferences on these research interests.

Ms. Lee decided to pursue her doctoral degree at Virginia Commonwealth University (VCU), Richmond, VA. While at VCU, she served as a graduate research assistant, taught baccalaureate social work program, and worked in the clinical learning center at the VCU School of Nursing. Her email is smlee2@gmail.com.