CONTRIBUTING FACTORS IN THE ENDORSEMENT OF SOCIAL ANXIETY

FOR CHINESE-, KOREAN- AND FILIPINO-AMERICANS

By

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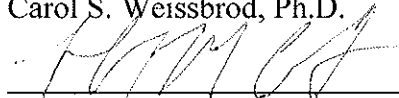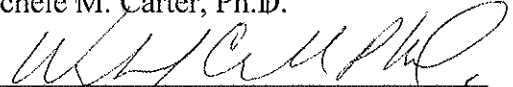
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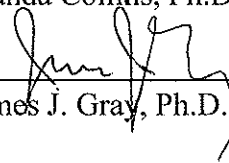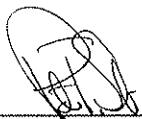
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ABSTRACT

The current study examines how social anxiety (SA) operates across different East Asian American ethnic groups (Chinese-, Korean- and Filipino-Americans). This study attempts to understand whether Asian American (AA) subgroups are similar or dissimilar in terms of SA and the factors that may moderate the endorsement of it. Three hypotheses were: 1) AAs will score higher than a comparison group of Caucasian Americans (CAs) on measures of SA; 2) When comparing AA groups, these groups will report different levels of SA based on a) behavioral and value acculturation differences and b) gender differences in the three subgroups and 3) the three studied groups will endorse different variables that predict their SA based on unique historical and cultural factors.

Results show that AAs endorse significantly more SA than CAs on one measure of SA (SIAS) when age was accounted for as a covariate. The AA groups did not endorse significantly different levels of SA from each other, and did not have different levels of behavioral or value acculturation. While this would initially indicate that AA groups are more similar, when each AA group was compared with CAs, it revealed that on a measure of social interaction anxiety (SIAS), both Chinese- and Korean-Americans endorsed significantly more anxiety than CAs. Filipino-Americans endorsed equivalent amounts of anxiety to CAs. This indicates dissimilarity. Preliminary analysis showed an interaction between gender and ethnicity for the Chinese-, Korean- and Filipino-American groups, and it was found Korean women reported more SA than Caucasian women and Korean men. Regression analysis also revealed differences between the

groups, as they reported different variables that predicted their SA. Further, the regression models for Chinese- and Filipino-Americans yielded relatively low variable predictability, while more of the variance was accounted for in the Korean-American regression model ($\approx 60\%$).

The analysis indicates that different variables are associated with SA in AA groups. For better understanding and conceptualization, it may be more beneficial to examine AAs by ethnicity rather than racially. Ignoring the differences different AA ethnic groups have in culture, history and acculturation may lead to less than optimal treatment of a diverse people.

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INTRODUCTION

East Asian Americans (e.g. Chinese-Americans, Japanese-Americans, Korean-Americans, Filipino-Americans, etc.) seem to experience social anxiety distress differently from other minorities and individuals in mainstream American culture. East Asian Americans also seem to express this distress differently from other ethnic groups. It has been repeatedly established that East Asian Americans report more social anxiety distress when compared with Caucasian Americans (Abe & Zane, 1990; Hardin & Leong, 2005; Hsu & Alden, 2007; Lee, Okazaki & Yoo, 2006; Okazaki, 1997; Okazaki, 2002; Okazaki, Liu, Longworth, & Minn, 2002; Okazaki & Kallivayalil, 2002; Hong & Woody, 2007). However, this distress expression seems to be more subtle, more introverted and, therefore, difficult to discern. This is thought to be largely a result of culture and cultural norms about display rules that are unique to many, if not all, East Asian American cultures (Lau, Fung, Wang & Kang, 2009; Hsu & Alden, 2007). However, no research has examined if *all* East Asian American ethnic groups experience social anxiety in the same way. Though often thought of as a similar group by mainstream American society, there are perceptible differences between these groups suggesting the need for further examination (Hendershot, Dillworth, Neighbors & George, 2007; Willgerodt & Thompson, 2006; Yeh, 2003; Kim & Omizo, 2010; Ruzak, Nguyen & Herzog, 2011; Chung, 2001). This research focuses on four variables that may impact the endorsement of social anxiety with East Asian Americans (referred to as Asian Americans in the rest of this paper, unless otherwise noted): enculturation, acculturation, gender and age.

Typical social anxiety or social phobia is characterized as a striking fear of one or more social situations, such as interacting with others or public speaking (American Psychiatric Association, 2000). While most people have differing levels of anxiety in social situations

ranging from mild to disabling, the excessiveness of the social anxiety interferes with functioning and causes intense disturbance, whether in specific situations or generalized to all social situations (American Psychiatric Association, 2000). This distress can lead to avoidance of the specific social situation or a general avoidance of interacting with people. DSM-IV-TR criteria for social anxiety stipulates that one fears he or she will act in a way that will be humiliating or embarrassing and yet recognizes the fear is unreasonable and/or excessive (American Psychiatric Association, 2000). However, it is important to recognize that social anxiety is conceptualized using a Western framework. All measures used in this study have been developed in the United States, using Western cultural norms, which significantly differ from Eastern cultural norms.

Discrepancy Between Reported Subjective and Objective Distress

East Asian culture is typified as guarding against strong emotional expression and emphasizing "emotional control and moderation" (Okazaki, 2002; Hsu & Alden, 2007; Ruzek et al., 2011; Shea & Yeh, 2008; Lau et al, 2009). An inhibition of distress reporting is expected from more interpersonal and socially interactive styles of reporting and assessment, such as face-to-face interviews. With Asian Americans, it seems that the distress and anxiety is most likely to occur in more socially interactive situations than performance related ones. For example, dating or mingling at parties is likely to cause more stress and anxiety than public speaking or other performance related tasks. Uba (1994) asserts that Asian Americans may experience more uncertainty in social relationships, compared to Caucasian Americans. This is due to difficulty interpreting "unspoken behavioral norms; another contributing factor could be the differences between Asian American cultures and Euro-Americans in the amount of cultural conflict that they experience because of their behavior" (Uba, 1994, p. 67).

While it has been repeatedly found that they experience and report high levels of distress in comparison to Caucasian Americans (Abe & Zane, 1990; Hardin & Leong, 2005; Hsu & Alden, 2007; Lee et al., 2006; Okazaki, 1997; Okazaki, 2002; Okazaki et al., 2002; Okazaki & Kallivayalil, 2002; Hong & Woody, 2007; Lin, Endler, & Kocovski, 2001), there has also been research indicating that Asian Americans have lower prevalence rates for Social Anxiety Disorder (SAD) diagnoses (Asnaani, Richey, Dimaite, Hinton & Hofmann, 2010; Grant et al., 2005). The discrepancy between these findings may be because the two studies that found lower prevalence rates were measuring whether participants met criteria for the SAD, rather than surveying whether participants experienced the distress and symptoms of social anxiety, as the other studies did. So Asian Americans may not meet diagnostic criteria for SAD, they may still experience symptoms of social anxiety in greater numbers. For example, Asian Americans may not see their anxiety as excessive or unreasonable, which is a criterion for a SAD diagnosis.

Asnaani, Richey, Dimaite, Hinton and Hofmann (2010) theorize that the methodology used to survey social anxiety does not capture the minority experience. As stated above, the minority experience is likely predicated on the norms of the country of origin. Therefore, if Asian cultures find some social awareness, sensitivity and responsiveness to others as a functional, desired concept, then measures pathologizing these traits are likely not capturing what this actually is. Is it dysfunctional social anxiety or is functional social awareness?

Jang, Chiriboga and Okazaki (2009) also point to under-reporting of distress because of valuation of stoicism and conversion of emotional distress to physical distress (somatization). So while the diagnostic picture is not clear, what is clear is that Asian Americans exhibit little of the reported distress. There is a significant discrepancy between the distress subjectively reported by the self and the behavioral distress objectively observed by others.

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Okazaki (2002) found considerable inconsistency between the report of distress and the behavioral expression of Asian Americans' depression and social anxiety. The subjects in Okazaki's study in 2002 were matched with informants, who were people close to the subject (friends, roommates, spouses, significant others). These informants were asked to rate the subjects' levels of distress during a social performance task. The informants consistently rated the Asian American subject as having little distress during the performance task, though the subjects reported high levels of distress.

Okazaki (2002) also found greater discrepancies between peer-rated measures of distress and self-rated measures of distress for Asian Americans than for the control group of Caucasian Americans. While the Asian Americans generally reported very high levels of distress, the informants rated the behavioral distress they observed as much lower. This difference was significantly greater than the difference found for Caucasian Americans. There was a clear Self-Observer disjoint between what the Asian American self-reported and what others observed.

This finding is supported by another study that found substantial differences between Asian Americans and Caucasian Americans in reports of distress and others' perceptions of this distress (Okazaki et al. 2002). In a social performance task, Asian Americans reported a much higher level of social anxiety than Caucasian Americans. However, in the social performance task, no significantly discernible difference of this anxiety between the groups was observed. The groups were rated by trained observers on anxious behaviors such as fidgeting, twitching, tapping fingers or feet, or difficulty speaking (Okazaki et al. 2002). These observers were both Asian American and Caucasian American. Race made no difference in how the informant rated the performer, meaning that Asian Americans viewing fellow Asian Americans also did not perceive the distress felt.

There is an evident discrepancy in that Asian Americans feel worse, as seen by self-reported elevated scores of depression and social anxiety, yet do not display this emotion behaviorally.

<div align="center">Cultural Directive</div>

This emotional inexpressiveness has been examined in terms of its cultural basis. In traditional East Asian culture, open or blatant displays of emotion are considered to be shameful and connote a lack of maturity or lack of control (Sue & Sue, 2003). In addition, there is an emphasis on the collectivistic view of the individual as a member of the group, rather than as an independent self (Markus & Kitayama, 1991). The individual must function and cooperate within the group context rather than acting as an autonomous agent. In order for the group to function efficiently, each member should be aware of and responsive to other members' prompts and subtle signals, rather than focusing on what is going with the self (Lau et al., 2009). When one focuses on the self, one disrupts the group rather than promoting harmony and the overall good of the group. The individual socialized with traditional Asian values must become adept at reading and interpreting others' actions, verbal and nonverbal cues, especially as these are generally subtle, small and vague (Kirmayer, 1991). Cultural indoctrination helps in recognizing these signals and interpreting them. There must be great sensitivity as Asian culture values subtlety and indirect communication rather than directness and candor (Sue & Sue, 2003). It is considered polite and respectful to convey ideas and especially feelings in an artful, complex and *indirect* way. Indirectness allows for many shades of meaning in communication which is much more valued than transparency, candor and directness.

Within the United States, social anxiety, or phobia, is different for the various ethnic minorities. Asian Americans experience a great deal of social anxiety, perhaps because of an

intense sense of interpersonal sensitivity, as has been discussed. Many traditional Asian cultural norms advocate the collectivistic attitude of traversing social interactions by paying attention to nonverbals and indirect communication. Yet Asian Americans are also often reared to suppress any discontent or strong emotion. Lau et al. (2009) and Chen and Danish (2010) report that Asian values (of emotion regulation, prevention of personal and group shame, and indirect communications) will lead to higher levels of distress nondisclosure in order to preserve the group harmony. This leads to the masking of social anxiety, which is an important distinction when considering how Asian Americans experience and display social anxiety. So while Asian Americans are more socially anxious than other groups, they do not display this anxiety to any perceptible degree (Okazaki, 2000; Okazaki, 2002).

There are also conflicting cultural pressures that demand interpersonal sensitivity and, at the same time, inhibition of negative emotions. Both of these pressures can lead to a taxing level of social anxiety, as one tries to satisfy each cultural demand. A comparison between Chinese-American and Caucasian American students revealed that the Chinese-American students had higher levels of social anxiety, more so than state or trait anxiety (Xie & Leong, 2008). The authors assert this is because of Asian cultural values (Xie & Leong, 2008).

There are limited ways to appropriately express negative emotions in Asian culture, and it is essential to be vigilant about the others' perception of one's own behavior. Okazaki et al. (2002) theorize that some social anxiety about social situations may be normal and even desirable within Asian cultures. This anxiety may be a way of signaling one will act as a member of the group, careful of others' reactions and perceptions, rather than being concerned with one's own independent actions and feelings (Lau et al., 2009).

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Differences Between East Asian Cultures

Asian American culture is variable across ethnic groups. Values and customs are emphasized and regulated differently across groups. There are general values, such as a collectivistic attitude and respect for the family and group that pervade, but more culture-specific differences abound that are just as powerful and meaningful to each ethnic group.

In the World Values Survey, it was found that different East Asian countries varied widely in their endorsement of different values (Inglehart, Basanez & Mareno, 1998). For example, 84% of South Koreans and 70% of Japanese thought "greater emphasis on the development of the individual" was a good change, but only 40% of Chinese endorsed this as a positive change (Inglehart et al., 1998). Kim, Yang, Atkinson, Wolfe & Hong (2001) conjecture that Asian Americans' cultural values are often reflective of the country of origin. With differences in values within the country of origin, it is likely there will be differences in different ethnic groups in the United States. The literature on Asian American psychology has had several calls for examination of the Asian subgroups (e.g.: Willgerodt & Thompson, 2006; Sanchez & Gaw, 2007; Hendershot et al., 2007; Ruzek et al., 2011; Kim et al., 2006; Shen & Takeuchi, 2001). While Asian Americans may share similarities, they are a dissimilar group.

This heterogeneity has been found in several studies comparing Asian American subgroups for different factors, such as: drinking behavior among Chinese- and Korean-American college students (Hendershot et al., 2007); suicidal ideation among Chinese, Vietnamese, Filipino and "other Asian" groups (Cheng et al., 2010); the association between self-rated measures of mental health and psychiatric disorder diagnoses (Kim et al., 2012); effects of discrimination on Chinese-, Filipino- and Vietnamese-Americans' mental and physical health (Mereish, Liu & Helms, 2011); emotional distress and risk behaviors for Chinese- and Filipino-American adolescents (Willgerodt & Thompson, 2006) and mental health referral

patterns for Chinese-, Japanese-, Filipino- and Korean-Americans (Akutsu, Castillo & Snowden, 2007). All studies found differences between the different Asian American subgroups.

In order to more sensitively explore differences in social anxiety with Asian American subgroups, the three top responding Asian American ethnic groups in this study were analyzed for differences: Chinese, Korean and Filipino. These groups are within the top five most populous within the U.S. (U.S. Census Bureau, 2010).

Chinese-Americans

In 2008, the U.S. Census estimated that there were 3.62 million people of Chinese descent in the U.S. Chinese-Americans represent the largest Asian American group and Chinese is the second most widely used non-English language used in the U.S. behind Spanish (American Community Survey, 2008). Chinese-Americans are among the oldest Asian groups in the U.S., having first immigrated to the U.S. in the late 1840s (Uba, 1994; Lai, 1998). A second surge of Chinese immigration occurred after World War II as the U.S. government encouraged Chinese professionals and scientists to immigrate to the U.S. (Uba, 1994). Finally, a third surge of Chinese immigration to the U.S. followed the 1965 Immigration Act, which extended priority to immigrants who were joining their families in the U.S. and those with special skills (Uba, 1994). Chinese people have immigrated to the U.S. from mainland China, Hong Kong, Taiwan and other Chinese communities for purposes such as educational goals, family reunification and political asylum (Tsai, Ying & Lee, 2000). Chinese-Americans' history of immigration to the United States speaks to the diversity that characterizes the current population, with a wide variation in educational and socio-economic attainment (Lai, 1998; Tsai et al., 2000).

While this lengthy history of Chinese-Americans within American culture may indicate more acculturation, Lin et al. (2001) describe Chinese-American culture as continuing to be

traditionally collectivistic. Lin et al. (2001) also describe Chinese-Americans as being resistant to change and preferring to take no-action rather than the wrong action, as prescribed by Confucian principals. Kwan, Chun and Chesla (2011) conducted a four year study of family and cultural issues in diabetes management with Chinese-American immigrants. Their study revealed four cultural norms which shaped their group interview process: 1) sensitivity to social hierarchy (with those older, male and/or of higher socioeconomic status being deferred to), 2) monitoring of public displays of strong emotion, 3) face concerns (so that one can maintain one's own pride and avoid shame and also to help facilitate others to avoid shame and lose face) and 4) emphasis on group harmony (Kwan, Chun & Chesla, 2011).

In terms of mental health, Chinese-Americans tend to subvert emotional distress into somatization of symptoms in order to "preserve harmony in social interactions" (Mak & Zane, 2004). Shen and Takeuchi (2001) found that more acculturated Chinese-Americans experienced more stress because they more often took part in or were placed in stressful social and occupational situations which resulted in reporting more depressive symptoms than those less acculturated. Hwang and Myers (2007) also found a relationship between depression and acculturation with Chinese-Americans with those more highly acculturated being at greater risk for depression. Kim et al. (2012) found that Chinese-Americans had a higher prevalence rate of psychiatric disorders (e.g., major depressive disorder, dysthymia, social phobia, alcohol abuse, posttraumatic stress disorder, etc.) than either Filipino-Americans or Vietnamese-Americans. According to Cheng et al. (2010) Chinese-Americans show a trend (that does not reach statistical significance) of reporting more suicidal ideation than Vietnamese-Americans, Filipino-Americans and "other Asian" Americans (e.g., Asian Indian-, Korean-, Japanese-American). Abe-Kim, Takeuchi and Hwang (2002) also found that Chinese-Americans were more likely to

seek out mental health services when experiencing family conflict, despite overall lower rates of using mental health services.

Within the Chinese-American community, there are also strong gender differences. In 1985, Dyal and Chan found that Chinese women were more likely to report distress and anxiety symptoms. Tata and Leong (1994) found that Chinese women were also more likely to seek professional help when in distress and conjectured it is because of socialization that allows women to seek help more than men, as it is more accepted for a woman to admit to distress than the man. Tang and Dion (1999) also found that Chinese men tended to assimilate less than women and were considered more traditional. However, Okazaki (1998) posits that with modernization in China and the further development of China as a world power, there is more of a move towards gender equality.

<center>Korean-Americans</center>

For the purposes of this study, South Korean-Americans will be referred to as Korean-Americans as there were no North Korean respondents.

Compared with Chinese- and Filipino-Americans, Korean-Americans have had the shortest immigration history to the U.S., starting with immigration to Hawaii in 1903-1905 to work on plantations as replacements for the Chinese workforce (Lai, 1998). Following the Korean War in the 1950s, a second wave of Korean immigration began in the U.S. as Korean wives and children of U.S. servicemen came to the U.S. (Lai, 1998). A third wave of immigration came after the United States government passed the Immigration Act of 1965 which removed restrictions on the number of immigrants from a country (Kim, Kim & Kelly, 2006). Today, Korean-Americans comprise the fourth largest East Asian group in the U.S. behind Chinese-, Indian- and Filipino-Americans (American Community Survey, 2008).

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Despite the shorter immigration history, Lee, Falbo, Doh and Park (2001) found that Korean-Americans reported biculturalism and in their sample, and they were able to integrate into American culture, while still maintaining a connection to Korean culture. Kim, Kim and Kelly (2006) describe the Korean ethnic church as a significant community resource with approximately 70% of Korean-Americans attending Korean ethnic churches.

However, despite this biculturalism and community connection, several studies have found Korean-Americans tend to have more mental health issues than other Asian Americans. Yeh (2003) found that Korean-American adolescents reported more negative mental health symptoms than both Chinese- and Japanese-American adolescents. Oh, Koeske and Sales (2002) found a complicated relationship between depressive symptoms and acculturation with Korean Americans. They found that more acculturated Korean-Americans scored higher on depressive symptoms, but Korean-Americans who were more fluent in English and interacted more with mainstream culture had lower acculturative stress and scored lower on depressive symptoms (Oh, Koeske & Sales, 2002). Hendershot et al. (2007) found that among college students, Korean-American students were more likely to use alcohol than Chinese-Americans. Shin, Han and Kim (2007) found that sense of mastery and more social support led to less depression with Korean-American immigrants. They also use health services less than other Asian American groups (Shin, Song, Kim & Probst, 2005). Barry, Bernard and Beitel (2006) found Korean-Americans reported feeling less self-esteem than other Asian American groups. Korean-Americans are also more likely to have less English fluency than other Asian Americans (Kim et al., 2006). An early study by Kuo (1984) found Korean-Americans had the highest rates of depression compared to other Asian American ethnic groups which the author speculated was due to a shorter history in the United States, lower socioeconomic status and difficulty adjusting

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to the U.S. High rates of depression (42% of the participants) were also found in Hovey et al.'s 2006 study on Korean-Americans.

Kim et al. (2006) describe three core Korean cultural values: *haan* (suppressed sorrow/anger), *jeong* (strong feelings of kinship/interpersonal trust) and *noon-chi* (being able to evaluate a situation or a person from subtle, indirect clues). All three values would seem to predict Koreans will experience more social anxiety. With *haan*, this unexpressed anger or sadness is due to feeling wronged and not being able to express it or do anything about it, which is similar to findings that Asian Americans experience social anxiety distress but do not display it. With *jeong*, one would be indoctrinated to preserve harmony in order to preserve trust and foster relationships by suppressing one's own negative feelings which may negatively impact the other person or the group. Finally, *noon-chi* clearly places importance on subtly and sensitivity to interpersonal and cultural cues rather than explicit, assertive cues, which is not in line with Western values of direct, clear communication (Kim et al., 2006).

In terms of gender, Hovey, Kim and Seligman (2006) found that both male and female Korean-American college students who ascribed to traditionally Korean values, such as collectivism, filial piety and male-dominant inequality endorsed more depression. Hovey et al. (2006) suggest that because Korean values dictate such a patriarchal society, when Korean-American men attend American universities where gender equality is more expected, this creates distress. But Hurh and Kim (1990) found that Korean women in an older sample (mean age = 41.6) had to operate under a double-burden of the traditional Korean role as caretaker of the family and also the more Western role of working outside the home and being a breadwinner, and, therefore, reported more distress. It is more acceptable for Korean women to express distress and discuss problems with others, while Korean men are still expected to ignore distress

in order to protect the image of the strong man and avoid bringing shame to the group (Cheung, Leung & Cheung, 2011; Yoo, Goh & Yoon, 2005). Additionally, because Korean immigrant women work outside of the home in the U.S. more than in Korea, Korean-American men may feel shame because of the role-change in the culture (Cheung et al., 2011). Korean-American women are, like Chinese-American women, taking on less traditionally gender normative roles while Korean-American men are more invested in maintaining these traditionally gender normative roles (Gloria, Castellanos, Park & Kim, 2008). There appears to be a dichotomy along gender lines for the Korean-American group.

Filipino-Americans

Filipino-Americans are also one of the earliest groups of U.S. immigrants of any ethnicity, with records indicating Filipinos arrived in Louisiana in 1763 (Sanchez & Gaw, 2007). However, this immigration history is better characterized by two later waves of immigration to the U.S.: from 1909-1920, male agricultural workers immigrated in large numbers and then after the 1965 Immigration Act as families sought employment opportunities the U.S. offered (Uba, 1994). The Philippines is also unique among East Asian countries as the only country to be colonized by the U.S. (David & Okazaki, 2006). This has set Filipino-Americans apart from other Asian American groups, as a consequence of having a unique history in relation to American culture. Today, when compared to other Asian American groups, Filipino-Americans reportedly have less educational achievement, with more high school and college drop-out rates (Nadal, 2004), though they have the highest rates of workforce participation among all Asian American groups (Sanchez & Gaw, 2007).

David and Okazaki (2006) theorize that Filipino-Americans often have a colonial mentality which they describe as an internalized colonialism where a person will reject anything

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culturally Filipino and express preference for anything American. This will often lead to negative mental health outcomes (David, 2008). Willgerodt and Thompson (2006) found that Filipino-American adolescents reported higher delinquency and mean depression scores compared to Chinese-American and Caucasian American youth. However, Kim et al. (2012) found that Filipino-Americans rated their mental health more positively than Chinese- and Vietnamese-Americans rated their own mental health. They speculate that Filipino-American participants in their study were more likely to have been born in the U.S. and therefore "their greater exposure to the U.S. culture might have affected their self-ratings of mental health and its association with objective diagnoses for mental disorders" (Kim et al., 2012, p. 50).

Filipino-Americans tend to endorse values more in line with Hispanic American culture than other Asian Americans (Kim et al., 2001). For example, Filipino-Americans report less adherence and value to group conformity than Chinese- and Japanese-Americans (Kim et al., 2001; Willgerodt & Thompson, 2006). Agbayani-Siewert (2004) found that Filipino-Americans were more culturally similar to Caucasian Americans than Chinese-Americans. Nadal (2004) discusses three key differences between Filipino culture and other Asian cultures: 1) a robust Catholic presence as a result of a long history of Spanish rule; 2) the U.S. colonization of the Philippines which brought more Western values to the Philippines and consequently, English is commonly taught in most schools; and 3) more gender-neutrality not common in traditional Asian cultures where patriarchy is stressed.

However, there still appear to be gender differences with Filipino-Americans. Espiritu's work with Filipinos in San Diego (2001) indicates that Filipino women are considered responsible for dissemination of culture from one generation to the next, have more expectations of proper behavior than men and are regulated more strictly by the family than men. Javier,

Lahiff, Ferrer and Huffman (2010) found that Filipino-American women endorsed more depression than men. Wolf (1997) suggests that this distress is due to Filipino-American women being more controlled by their families than their male counterparts. Wolf (1997) further found high rates of suicidal ideation (46.6%) among Filipino-American adolescent girls in a San Diego public high school.

Sanchez and Gaw (2007) describe *timbang*, which is balance central to maintaining good health and also to social relationships. This balance seems to be a foundation for the Filipino-American emphases on social relationships, getting along with others and fostering relationships by displaying proper etiquette and pro-social behaviors (Uba, 1994).

<center>Acculturation/Enculturation</center>

Acculturation is a process of learning and adapting to a new culture's standards and expectations, while enculturation is a person's retention of his or her own indigenous culture's standards and expectations (Kim & Omizo, 2006).

Overall, Okazaki (1997) found that Asian Americans who were foreign born, or recently immigrated, reported the highest levels of distress, including depression and social anxiety. This group is theorized to be more enculturated. The distress levels for the enculturated group were higher than levels for Caucasian Americans and more acculturated Asian Americans (Okazaki, 1997). This indicates that acculturation is a factor in the dynamic between culture and distress. Lower levels of acculturation to Western culture seem to predict higher levels of interpersonal anxiety and distress (Sue & Sue, 2003). Stephan and Stephan (1989) found that high social anxiety among this group may occur because less acculturated Asian Americans "fear making mistakes, being misunderstood, or being rejected." Enculturated and/or newly arrived Asians and Asian Americans may feel unknowledgeable and even ignorant of mainstream American

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cultural mores and customs, as is likely true for most immigrants regardless of ethnic descent (Hsu & Alden, 2007; Constantine, Okazaki & Utsey, 2004; Lau et al., 2009). This lack of knowledge will make understanding and discerning the subtle cues of social interactions especially troublesome.

This is particularly problematic for Asian Americans, with East Asian culture being especially dependent on picking up the subtle cues and interpreting indirect behavior as previously discussed. Being essentially handicapped by ignorance of cultural norms, increased anxiety should be expected. The enculturated Asian American will likely have difficulty in knowing how to react or fear reacting/acting in the wrong, inappropriate way. When the most prevalent, entrenched fear is acting in an offensive way, anxiety is likely to soar. Asnaani et al. (2010) call for further research on the relationship between acculturative stress and the development of psychopathology.

When there is less acculturation, interpersonal and cultural sensitivity has increasing importance to the Asian American. The more acculturated an Asian American is to the social customs and beliefs of the culture in which he or she interacts (the United States, for this study), the more likely it is for that person to gain more comfort and ease in interacting with members of that culture. There seems to be a strong correlation between acculturation and social anxiety for Asian Americans, keeping in mind Asian Americans report more social anxiety than both control groups of Caucasian Americans (Abe & Zane, 1990; Okazaki, 1997; Okazaki, 2002; Okazaki et al., 2002; Okazaki & Kallivayalil, 2002) and Hispanic Americans (Stephan & Stephan, 1989).

Types of Acculturation

It is important to distinguish that there are two kinds of acculturation at work: behavioral acculturation and value acculturation. While this is bi-directional and not on a spectrum,

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meaning that one can be high in both value and behavioral acculturation, Asian Americans are more likely to more rapidly acculturate behaviorally than they are to acculturate in values (Szapocznik, Scopetta, Kurtines & Arandale, 1978, LaFramboise, Coleman & Gerton, 1993). Certain behaviors are required to survive within the larger, dominant group, but private values often resist change (LaFramboise et al., 1993). Sodowsky, Kwan and Pannu (1995) posit that Asian Americans may quickly adopt mainstream American behavior such as in clothing, food and music, but maintain Asian cultural values indefinitely. Because behavioral acculturation can be thought of as a kind of camouflage, a way of blending into the dominant culture, it is unclear how much the Asian American actually adopts the values and understands and recognizes the social cues and rules of the dominant culture, rather than just wearing the camouflage. Chen and Danish (2010) discuss *awareness* of values and what effect this may have on acculturation. Using the camouflage example, if one wears the camouflage, but does not know what it means, then this may not be especially salient.

Being well-camouflaged within the culture through behavioral acculturation may decrease the anxiety of not fitting in or standing out. However, adopting the *values* of the dominant culture will likely further reduce the anxiety as value acculturation is more entrenched in the individual's psyche. When there is value acculturation, one may feel more a part of the culture, rather than an outsider trying to fit into the culture.

Berry's (1980) original model of a bicultural orientation conjectures that cultural adoption (of the dominant culture's behaviors) while maintaining one's own ethnic values (cultural maintenance) will lead biculturalism and the ability to navigate in both cultures successfully. LaFramboise and colleagues (1993) speculate that ethnic biculturalism (high acculturation and enculturation) will lead to a sense of mastery at having communication skills in

both cultures and being able to interact in culturally appropriate ways. However, Kim and Omizo's study in 2010 suggest that higher enculturation was related with more positive psychological functioning, while higher acculturation was not. A possible explanation for why higher acculturation predicted more distress is because of bicultural stress (Soto, Perez & Lee, 2012). Bicultural stress occurs when a Western culture-identified individual is censured for abandoning ethnic cultural values (Soto, Perez & Lee, 2012).

Most studies have only addressed the behavioral aspects of acculturation in regards to Asian Americans. It is perhaps just as important to understand the values driving their specific behaviors. Are the changing behaviors, such as changing a style of dress or music preference, a gesture to fit into the dominant culture? Or is the behavior a sign of the actual adoption of the dominant culture's preferences and values?

<u>Ethnic Identity</u>

Another factor of note is ethnic identity which can be thought of as related, but not analogous to acculturation (Chae & Foley, 2010). Phinney and Ong (2010) describe ethnic identity as "a sense of self, but it differs in that it involves a shared sense of identity with others who belong to the same group" (p. 275). Phinney's ethnic identity model (1990) describes ethnic identity as developing over the time spent in one's ethnic culture, with factors such as feeling like one belongs to his or her ethnic group, having a positive valuation for that ethnic group, in addition to incorporating and displaying learned behaviors. While early research on ethnic identity found that high ethnic identity correlated with low acculturation to the host culture, more current research theorizes that one can still feel a sense of belonging and pride in one's ethnic identity and still be acculturated to the dominant culture (Chae & Foley, 2010). Among North American people of color, strong ethnic identity has been associated with

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subjective reports of well-being, but was not related to mental health measures (e.g. , depression or anxiety) (Smith & Silva, 2011).

With Asian Americans, strong ethnic identity has been associated with well-being and self-esteem (Lee, 2003), and as a protective factor for the effects of racism (Yoo & Lee, 2005, Yip, Gee & Takeuchi, 2008). Asian American college students reported more well-being, acceptance and positive relationships with others when they had a strong ethnic identity and ethnic pride (Iwamoto & Liu, 2010).

Hypotheses

The current study proposes to examine how social anxiety operates across different Asian American ethnic groups (e.g., Chinese-, Korean- and Filipino-Americans). Do Asian American ethnic groups report social anxiety in an equivalent manner so that Asian Americans can be thought of as a similar group in terms of social anxiety? Or are there important differences that need to be noted and understood in order to gain a more salient and meaningful comprehension of social anxiety and Asian Americans?

Hypothesis 1

Asian Americans Will Endorse More Social Anxiety Than
the Comparison Group of Caucasian Americans.

While there have been mixed results in the literature, with some pointing to less social anxiety with Asian Americans (e.g., Asnaani et al., 2010; Grant et al., 2005), there have numerous studies that have found Asian Americans have more social anxiety (e.g., Abe & Zane, 1990; Hardin & Leong, 2005; Hsu & Alden, 2007; Lee et al., 2006; Okazaki, 1997; Okazaki, 2002; Okazaki et al., 2002; Okazaki & Kallivayalil, 2002; Hong & Woody, 2007). The discrepancy may be because the two studies that found lower levels of social anxiety were

measuring diagnoses of social anxiety, rather than the distress of social anxiety. One may feel

the distressing effects, but not meet criteria for the disorder.

Hypothesis 2, part A

The Three Asian Groups Will Endorse
Different Levels of Social Anxiety.

While recently there has been more of an effort to examine Asian Americans by ethnic

subgroup, much of the literature still has a propensity to either examine one Asian American

subgroup and generalize findings to all Asian Americans or uses a mixed group of Asian

American ethnicities which does not take into account the different histories, values, and

experiences. Based on the literature on Filipino-Americans and their reported biculturalism, it is

hypothesized that Filipino-Americans will report significantly less social anxiety than both

Chinese-Americans and Korean-Americans. We hypothesize that Korean-Americans, with a

shorter immigration history and reported more mental health issues than other Asian American

subgroups, will report significantly higher social anxiety than either Chinese-Americans or

Filipino-Americans.

Hypothesis 2, part B (Acculturation)

The Three Asian American Groups Will Endorse Different Levels
of Value and Behavior Acculturation Which Will Then
Influence the Endorsement of Social Anxiety.

There has been some indication in the literature that Korean-Americans and Filipino-

Americans tend to be more bicultural, with strong adherence to traditional ethnic values, but also

able to navigate with ease in the Western world. Compared with Chinese-Americans, who are

thought to be more traditional, Korean-Americans and Filipino-Americans will be higher on

measures of value acculturation and behavior acculturation. Therefore, because these two groups

may be more comfortable with the cultural norms of the dominant culture, they are likely to feel more at ease in social situations. This ease, it is proposed, will decrease endorsement of social anxiety.

<center>Hypothesis 2, part C (Gender)</center>

*Because Chinese-, Korean- and Filipino-Americans Vary in the Importance
They Ascribe to Traditional Gender Normative Roles, Gender and the
Interaction of Gender and Ethnicity May Influence
the Endorsement of Social Anxiety.*

In general, women report more anxiety than men (e.g., McLean et al., 2011; McLean & Anderson, 2009). Chinese-American women report more anxiety (Lin et al., 2001). Chinese-, Korean-, and Filipino-American women all report more depressive symptoms than their male counterparts (Javier et al., 2010; Chung, 2001). It is also of note that all three ethnic subgroups come from patriarchal cultures that give more freedom and prestige to men. Asian American women may be under the double burden of being expected to ascribe to these traditional gender normative roles in Western society that at least gives some credence to gender equality. Further, it seems that it is somewhat more acceptable for Asian American women to express distress (more so than Asian American men). This may indicate women will express more anxiety than men.

However, as previously described, Chinese-Americans and Filipino-Americans may have more gender equality than Korean-Americans. It is proposed more gender inequality in a culture (e.g. Korean-American culture) will increase endorsement of social anxiety. Therefore, it is hypothesized that Korean-American women will endorse the most social anxiety based on gender and ethnic cultural differences. This interaction between gender and ethnicity will be analyzed.

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Hypothesis 3

*It Is Hypothesized That Chinese-, Korean- and Filipino-Americans' Social
Anxiety Will Be Predicted by Different Variables (Including
Behavioral Acculturation, Value Enculturation, Ethnic
Identity, Immigration Status and Age).*

This study proposes that the following factors will influence the endorsement of social anxiety: behavioral acculturation, value enculturation, ethnic identity, length of time in the U.S. (i.e., immigration status) and age. However, it is hypothesized that these variables will impact the three Asian American groups' endorsement of social anxiety differently because of variations in their histories, values and unique cultural beliefs. If the three Asian American groups do not show differences from one other, then results from studies which study only one ethnic subgroup or use a dissimilar Asian sample will be able to be generalized to all Asian Americans and Asian American subgroups will not need to be disaggregated, despite current mandates in the literature (e.g., Chung, 2001; Yeh, 2003; Willgerodt & Thompson, 2006; Hendershot et al., 2007).

CHAPTER 2

METHOD

Participants

Initially, 440 participants over the age of 18 gave informed consent. Two hundred and

eighty two of the participants (64.1 %) identified themselves as Asian or Asian American, 109

participants (24.8 %) identified as Caucasian, 22 participants (5%) identified as multi-

racial/ethnic, 16 participants (3.6%) identified as African American, nine participants (2%)

identified as Hispanic/Latina and two participants (0.5 %) identified as Native American.

Of the Asian American participants, 119 were Chinese (27%), 58 were Filipino (13.2%),

55 (12.5%) were South Korean, 16 (3.6%) were Japanese, 12 (2.7%) were East Indian, 12 (2.7%)

identified as Vietnamese, 11 (2%) identified as a mix of Asian ethnicities, 6 (1.4%) were Thai, 3

(0.7%) identified as Cambodian, 2 (0.5%) identified as Lao, 2 (0.5%) identified as Malay, 2

(0.5%) identified as Polynesian, 1 (0.2%) identified as Nepali and 1 (0.2%) identified as

Indonesian. Therefore, the three top responding groups (Chinese, Filipino and South Korean)

were used in the data analysis. Caucasian Americans were used as a comparison group.

In these four groups (Caucasian, Chinese, Filipino, Korean, $n = 338$), all participants

were between 18 to 77 years of age at the time of the study ($M = 30.98$, $SD = 9.93$). Participants

were grouped into six age cohorts (see Table 1). Age seemed to be normally distributed with a

positive skew towards younger age (see Figure 1). The 77 year old participant was examined to

determine if this person should be excluded as an outlier. When compared with the next age

cohort (60-69 years old), this person's answers were not significantly different from the 60-69

year old age cohort's answers and it was decided this person would be included in the analysis.

Table 1. Age Frequencies by Ethnicity

Age Cohort	Caucasian	Chinese	Korean	Filipino
18-29	57	72	33	31
30-39	28	26	17	20
40-49	11	11	3	3
50-59	11	6	0	1
60-69	1	2	0	3
70-79	1	0	0	0
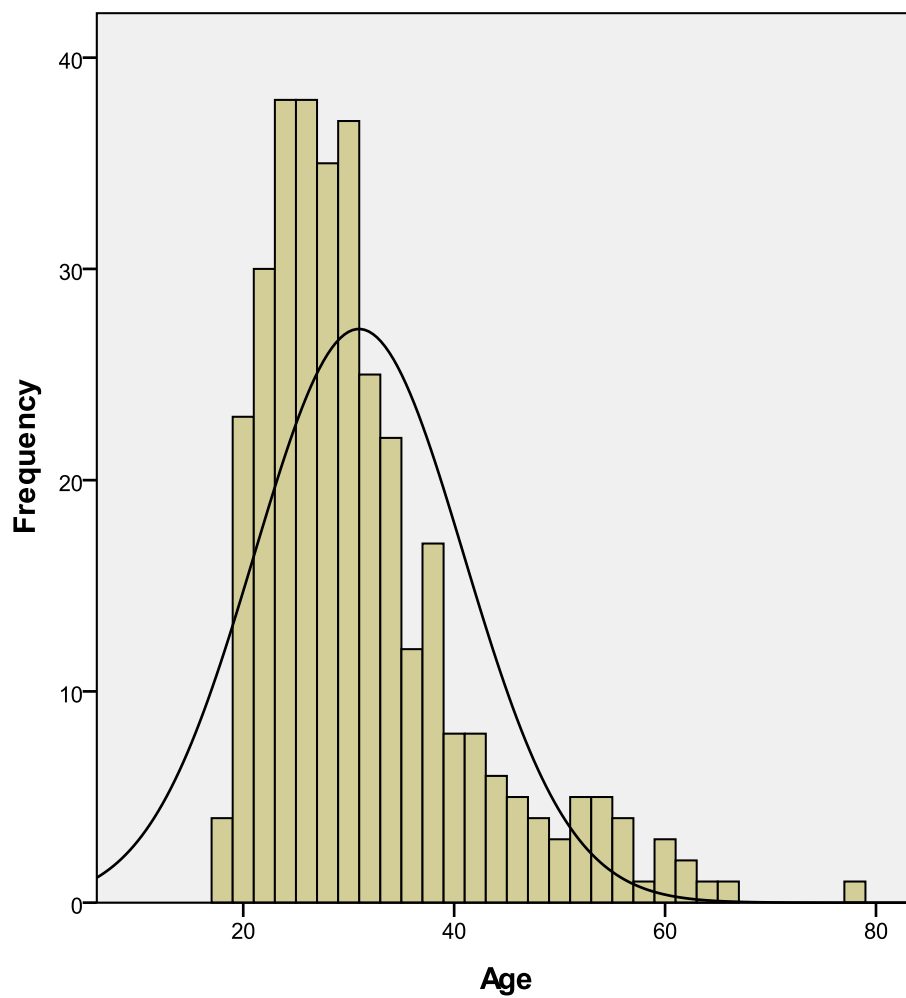
Figure 1. Histogram of Age Distribution

75.1% of the participants were born in the U.S. (therefore 24.9% of the participants were immigrants), 12.2% immigrated before the age of 12, 3.6% immigrated to the U.S. between the ages of 12 and 18 and 9.2% immigrated after the age of 18. Age and immigration status were then examined (see Table 2). The category of "Born in the U.S." also served as a variable for examining whether one was an immigrant, as those who answered no to this question would then be categorized as an immigrant.

Table 2. Distribution of Age and Immigration Status

| | How many years have you lived in the U.S.? | | | |
Age Cohort	Born in the U.S.	Immigrated Before Age 12 (*as a child*)	Immigrated Between 13-18 (*as an adolescent*)	Immigrated After 18 (*as an adult*)
18-29	146	22	7	11
30-39	55	15	4	14
40-49	19	2	1	4
50-59	16	0	0	2
60-69	2	3	0	1
70-79	1	0	0	0

Measures

Acculturation Measures

Three measures were used (the Suinn-Lew Self-Identity Acculturation Scale [SL-ASIA], Asian Values Scale [AVS] and the Multigroup Ethnic Identity Measure [MEIM]) to measure levels of acculturation/enculturation in both behavior and values. Please see Appendix A for correlations between all measures and subscales for acculturation measures.

Suinn-Lew Asian Self-Identity Acculturation Scale
(SL-ASIA) (Appendix B)

The Suinn-Lew Asian Self-Identity Acculturation Scale is a 22-item measure that generates an overall index of the degree of behavioral acculturation into American culture (Suinn et al., 1987). An overall acculturation score is generated from the first 21-questions. These items assess areas of: language (4 questions), friendship choice (4 questions), behaviors (5 questions), generation-geographic history (3 questions), identity (4 questions) and attitudes (1 question). The final four questions make up a value acculturation subscale which was added later by the authors. No reliability/validity data has been conducted on this subscale.

The SL-ASIA has high internal consistency, with coefficient alphas ranging from .88 to .91 (Suinn, Ahuna & Khoo, 1992). For this sample, the Cronbach's alpha for the entire scale for the entire sample (comparison group of Caucasians, Chinese, Korean and Filipino participants) was .84 and .88 for the behavioral subscale. However, the Cronbach's alpha for the value acculturation subscale was .23. For the studied Asian American group consisting of Chinese-, Korean- and Filipino-American participants, the Cronbach's alpha for the SL-ASIA full scale was .85, $\alpha = .87$ for the behavioral subscale and .11 for the value subscale. Therefore, only the behavioral subscale was used in the analysis.

Asian Values Scale (AVS) (Appendix C)

The AVS was "designed to assess adherence to Asian cultural values" via a 36 item scale (Kim, Atkinson & Yang, 1999). This scale provides insight into the level of *value-acculturation* that the SL-ASIA does not. Participants answer each question with Likert-ratings from Strongly Disagree to Strongly Agree.

Factor analysis revealed a six-factor structure, underlying the AVS associated with Asian values: Conformity to Norms, Family Recognition Through Achievement, Emotional

Self-Control, Collectivism, Humility and Filial Piety. However, the coefficient alphas for these factors are unacceptably low, and it is recommended only the AVS total be reported (Kim et al., 1999). For the current sample, the Cronbach's alpha was .87 for the entire sample (Asians' α = .87). With the current sample, the AVS did not correlate to the SL-ASIA (values subscale) (Pearson's r = .114, p = .103).

<div align="center">

Multigroup Ethnic Identity Measure (MEIM)
(Appendix D)

</div>

The MEIM was designed by Phinney to assess self-identification, cultural practices, ethnic-specific relationships, group affiliation and cultural values and attitudes across a range of ethnic groups (Phinney, 1992). There are 14 self-report items assessing feelings of affirmation and belonging to a particular ethnic group such as African American, Asian American, Caucasian (White) or more specifically Chinese-American or Mexican-American.

The MEIM has three internal scales measuring: 1) how much one seeks out more knowledge and connection with their ethnic identity (ethnic identity search); 2) how much one feels affirmation, belonging, and commitment to one's ethnic identity (ethnic identity belonging) and 3) other-group orientation, which is how much one may feel connected to an ethnic group that is not one's own. While the first two scales can be viewed together (mean of all questions of both scales used for scoring), other-group orientation is viewed as a separate construct and should be analyzed separately from the rest of the questions on the MEIM (Phinney, 1992).

The MEIM has shown internal reliability and validity with alphas typically above .80 (Phinnney, 1992; Lee & Yoo, 2004). For this sample, the first two subscales together have a Cronbach's alpha of .89 (Asians' α = .91) and the third subscale ("other-oriented") had an alpha of .70 (Asians' α = .68).

Social Anxiety Measures

Three frequently used scales used to measure social anxiety (the Brief Fear of Negative

Evaluation Scale, the Social Interaction Anxiety Scale and the Social Phobia Scale) were used.

The three scales were highly correlated with each other (see Table 3).

Table 3. Correlations of Social Anxiety Measures

		BFNE	SPS	SIAS
BFNE	Pearson Correlation	1	.607[*]	.702[*]
	Sig. (2-tailed)		.000	.000
	N	381	352	349
SPS	Pearson Correlation	.607[**]	1	.750[*]
	Sig. (2-tailed)	.000		.000
	N	352	364	343
SIAS	Pearson Correlation	.702[**]	.750[*]	1
	Sig. (2-tailed)	.000	.000	
	N	349	343	362

*. Correlation is significant at the 0.01 level

Brief Fear of Negative Evaluation Scale (BFNE)
(Appendix E)

The BFNE was developed by Leary (1983) from the Fear of Negative Evaluation Scale

(FNE) (Watson & Friend, 1969). The BFNE has been used successfully as a measure of fear

of negative evaluation with the same psychometric properties as the original FNE with total

scores of the measures correlating at $r = .96$ (Leary, 1983). Rodebaugh et al. (2004)

recommends use of the BFNE over the FNE due to the more clearly and straightforwardly

worded questions of the BFNE and the added information the BFNE's Likert scale gives in comparison to the FNE's true or false scoring. There are 12 total items, with 4 reverse-worded questions with ratings based on a 5-point Likert scale ranging from 0 (not at all characteristic of me) to 4 (extremely characteristic of me). The Cronbach's alpha for this sample was .88 (Asians' α = .88). Weeks et al. (2005) established psychometric properties for the BFNE for those diagnosed with social phobia (M = 46.91, SD = 9.27) and nonanxious controls (M = 26.81, SD = 4.78). Please see Table 4 for comparison to the norms of the different populations.

<center>Social Interaction Anxiety Scale (SIAS) (Appendix F)
and the Social Phobia Scale (SPS) (Appendix G)</center>

The SPS and the SIAS were developed by Mattick and Clark (1998) to measure aspects of social anxiety. Both the SIAS and the SPS are 20-item measures which are measured on a 5-point Likert scale. The SPS was designed to measure anxiety of being evaluated in performance tasks and activities a person may perform on an everyday basis (drinking in front of people, speaking to others) and the SIAS measures anxiety of interactions in social dyads or groups (Mattick & Clark, 1998). They have Cronbach's alphas of .89-.94 (SPS) and .88-.93 (SIAS) (Brown et al., 1997). This sample had Cronbach's alphas for both scales of .95 (Asians' α = .95 for both scales).

Heidenreich, Schermelleh-Engel, Schramm, Hoffman and Stangier (2011) examined both the SPS and the SIAS through factor analysis to determine if the scales were too similar to be used as separate measures and should, perhaps, be collapsed into one scale. Their analysis confirmed that the SPS and SIAS were measuring similar but not identical aspects of social anxiety and thus, should be used as separate measures (Heidenreich, Schermelleh-Engel, Schramm, Hoffman & Stangier, 2011). Previous research using factor analysis also

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indicates that the SIAS represented one factor (social interaction anxiety) and the SPS represented two other, separate factors (fear of overt attention and fear of attracting attention) (Carleton et al., 2009).

Antony, Orsillo and Roemer (2001) report on norms for individuals diagnosed with social phobia for the SIAS ($M = 24.6$, $SD = 16.4$) and the SPS ($M = 40.0$, $SD = 16.0$). They also report norms for a community sample of nonanxious controls (SIAS: $M = 18.8$, $SD = 11.8$; SPS: $M = 14.4$, $SD = 11.2$). Please see Table 4 for comparison to the norms of the different populations.

Table 4. Comparisons of Each Group on Established Norms

	BFNE		SPS		SIAS	
	M	SD	M	SD	M	SD
Socially Anxious Norms	46.9	9.3	40.0	16.0	24.6	16.4
Community Norms	26.8	4.8	14.4	11.2	18.8	11.8
Caucasians	34.3	9.6	13.7	14.9	22.9	16.3
Asian	37.0	9.8	16.8	15.3	30.3	18.1
Chinese	37.2	9.4	16.4	14.1	30.2	16.9
Korean	37.4	10.9	18.7	15.3	34.0	20.1
Filipino	36.1	9.6	15.9	17.5	27.5	18.3

In summary, for this sample, Caucasian Americans reported less anxiety on all measures than those who are socially anxious, but more anxiety than community norms on measures of fear of negative evaluation and social interactions. Asian Americans (as an aggregated group and also with each separate Asian American group), reported more social anxiety than socially anxious norms on the SIAS and more than community samples on all measures.

Procedure

Participants were recruited online through craigslist.com (New York City, NY, Honolulu, HI, Los Angeles, CA, San Francisco, CA, Boston, MA, Washington, DC, Philadelphia, PA, Houston, TX, Raleigh/Durham, NC, Seattle, WA and Atlanta, GA) by posting in the "Volunteers" section of the website. Recruitment was initially open to all participants regardless of race, though the specific cities chosen were because of a high population of Asians and Asian Americans. However, the majority of respondents were Caucasian. After this initial phase of more open recruitment through craigslist.com, Asian and Asian American participants were more pointedly recruited through Asian/Asian American interest groups via Yahoo Groups (Asian Community Online Network [Chicago and Southern California], Filipino Young Professionals [New York City, Washington, DC], Coalition for Asian-Pacific American Community Development, Filipino-American Network, Asian American Events, Association of Chinese Professionals – Dallas/Fort Worth, UCL-Chinese Student and Scholars Association, Filipino Americans, AsianPower, Asian American Studies Association Community, National Association of Asian American Professionals [New York, San Diego], ACP – Philadelphia). Asian and Asian American churches were also contacted by email and by phone. However, church leaders declined to participate by either direct refusal or failure to respond despite several attempts.

Announcements were posted at each site multiple times with a description of the study and a link to the study webpage (see Appendix H). Once potential participants followed the link, they were shown the informed consent form and asked to enter their full name as consent to participate in the study. They were informed they could withdraw at any time without damaging their chances of winning the lottery. Participants were assured of protection of their information and anonymity. They were directed to contact the study's investigator, the Human Subjects

Committee or the university's Institutional Review Board if they had any questions, concerns or complaints (see Appendix I).

Immediately after entering their name indicating consent, participants were asked to fill out a series of questionnaires online, taking approximately 30-45 minutes. This included all demographic data and the study's questionnaires. All data collection took place online.

CHAPTER 3

RESULTS

Preliminary Analysis

Tests of difference and relationships (e.g., one-way analysis of variance (ANOVA),

independent sample t-tests and Chi Square tests for categorical variables) were done to determine

if independent variables significantly differed between groups (Caucasian American comparison

group, Asian American aggregated group, then specifically the Chinese-, Korean- and Filipino-

American groups) before proceeding. Tukey's post-hoc analyses were then conducted, as

appropriate, in order to determine the specific differences the Caucasian, Chinese, Korean and

Filipino groups. Table 5 lists the means and standard deviations for the analyzed sample

(Caucasian Americans, Chinese-, Korean- and Filipino-Americans). Please see Appendices J, K,

L and M for means and standard deviations of each group.

Table 5. Participants' Means and Standard Deviations for Study
Variables

Variable	n	M	SD
Age	338	30.98	9.93
BFNE	299	36.12	9.79
SPS	288	15.76	15.22
SIAS	289	27.88	17.83
MEIM1 (ethnic identity search)	286	13.52	3.41
MEIM2 (ethnic identity belonging)	284	20.89	4.54
AVS	251	134.47	24.43
SL-ASIA (behavior)	164	66.41	12.36

Age

An independent samples t-test was conducted to examine whether there was a significant difference between Asian Americans (aggregated group) and the comparison group of Caucasian Americans in relation to age. The test revealed a statistically significant difference between Asian Americans and Caucasian Americans ($t = 2.60$, $df = 180.97$, $p = .010$). Caucasian Americans ($M = 33.13$, $SD = 10.97$) in this sample were significantly older (by approximately 3 years) than the Asian American population ($M = 29.97$, $SD = 9.26$).

In a one-way ANOVA, it was found that Caucasian Americans in this sample were significantly older than the Korean-American group (Caucasian-Korean mean difference = 5.16, $p = .01$) and there was a trend of Caucasian Americans being older than Chinese-Americans (see Table 8). However, there were no significant differences between the Asian American groups and there were no significant differences in each group by gender (e.g., no significant differences on age between Korean American men and women).

In a correlation matrix of independent variables (MEIM factor 1 and 2, AVS and SL-ASIA), age was only significantly correlated with endorsement of Asian values (AVS: $r = -.158$, $p = .012$).

Immigration Status

A Chi Square test was performed to determine if there was a significant difference between the Asian American versus Caucasian American groups in terms of immigration status. The difference was statistically significant ($x^2(3) = 39.40$, $p = .000$). Please see Table 6 for percentages of each immigration category. Overall, Asian Americans were more heterogeneous than Caucasian Americans in terms of immigration status.

Table 6. Percentages and Frequencies: Immigration Categories for Caucasian Americans and Asian Americans

	Immigration Status			
	Born in US	Immigrated Before Age 12	Immigrated Between Ages 13-18	Immigrated After Age 18
Caucasian American				
N	97	0	2	2
%	96.0	0.0	2	2
Asian American				
N	142	42	10	30
%	63.4	18.8	4.5	13.4

A one-way ANOVA was performed to explore whether there were significant differences in age (continuous variable) for the immigration status groups. This test did not indicate a statistically significant difference in age (continuous variable) for whether one was born in the U.S. or immigrated at a later time ($F(3, 321) = 1.52$, $p = .210$). This was also found when a Chi Square test was performed to determine if there was a significant difference on immigration status compared to the age cohorts (e.g., 18-29 year olds as a group, 30-39 year old group), ($x^2(15) = 23.32$, $p = .078$).

Next, immigration status was analyzed with ethnicity. A Chi Square test was performed to determine if there was a significant difference within the Asian American groups in terms of immigration status. The difference was statistically significant ($x^2(6) = 21.86$, $p = .001$). Please see Table 7 for percentages of each immigration category. Overall, in this sample, Chinese-Americans are more likely than Korean- or Filipino Americans to be born in the U.S. and less likely to have immigrated before age 12. All groups had relatively low percentages of

immigration between ages 13-18 and the three groups seemed more similar in immigrating after

the age of 18.

Table 7. Percentages and Frequencies: Immigration Categories for Chinese-, Korean- and
Filipino-American Participants

	Immigration Status			
	Born in U.S.	Immigrated Before Age 12	Immigrated Between Ages 13-18	Immigrated After Age 18
Chinese-American				
n	85	10	5	15
%	73.9	8.7	4.5	13.0
Korean-American				
n	29	15	0	9
%	54.7	28.3	.0	17.0
Filipino-American				
n	28	16	5	6
%	50.9	29.1	9.1	10.9

Gender

A Chi Square test was performed to determine if males and females were distributed

differently in the Asian American versus Caucasian American groups. The test failed to indicate

a significant difference.

A Chi Square test was performed to determine if males and females were distributed

differently between the Asian American groups. The test failed to indicate a significant

difference ($x^2(2) = 0.94$, $p = .625$).

Multi-Ethnic Identity Measure (MEIM)

An independent samples t-test was conducted to examine whether there was a significant difference between Asian Americans (aggregated group) and the comparison group of Caucasian Americans in terms of ethnic identity (search). The test revealed a statistically significant difference between Asian Americans and Caucasian Americans ($t = -7.46$, $df = 284$, $p = .000$). Caucasian Americans ($M = 11.54$, $SD = 3.05$) in this sample endorsed significantly less ethnic identity (search) than the Asian American population ($M = 14.48$, $SD = 3.15$).

One-way ANOVA analysis revealed the Asian American groups were not significantly different from each other in endorsement of ethnic identity (search) ($F(2, 190) = 0.43$, $p = .652$).

An independent samples t-test was conducted to examine whether there was a significant difference between Asian Americans (aggregated group) and the comparison group of Caucasian Americans in terms of ethnic identity (belonging). The test revealed a statistically significant difference between Asian Americans and Caucasian Americans ($t = -3.20$, $df = 282$, $p = .002$). Caucasian Americans ($M = 19.68$, $SD = 4.18$) in this sample endorsed significantly less ethnic identity (belonging) than the Asian American population ($M = 21.48$, $SD = 4.61$).

Caucasian Americans endorsed feeling significantly less ethnic identity (belonging) than the Chinese- and Filipino-American groups (but not the Korean-American group) (see Table 8). Filipino-Americans endorsed more ethnic identity belonging than Korean-Americans in this sample (see Table 8).

Asian Values Scale (AVS)

An independent samples t-test was conducted to examine whether there was a significant difference between Asian Americans (aggregated group) and the comparison group of Caucasian Americans in terms of endorsement of Asian values. The test revealed a statistically significant

difference between Asian Americans and Caucasian Americans ($t = -7.46$, $df = 284$, $p = .000$).

Caucasian Americans ($M = 11.54$, $SD = 3.05$) in this sample endorsed significantly less ethnic

identity (search) than the Asian American population ($M = 14.48$, $SD = 3.15$).

One-way ANOVA analysis of the AVS scores revealed Caucasian Americans endorsed

significantly less adherence to typically Asian values than Filipino-Americans (see Table 8).

There were no significant differences between the Asian American groups on

endorsement of Asian values ($F(2, 168) = 1.21$, $p = .301$).

<p style="text-align:center">Suinn-Lew Self-Identity Acculturation Scale
(SL-ASIA)</p>

On the SL-ASIA (behavior subscale), only the three Asian American groups were

analyzed, as this scale was not administered to those who did not identify as Asian/Asian

American in the demographics section. There were no significant differences on the SL-ASIA

(behavior subscale) between the three Asian American groups ($F(2, 161) = 0.30$, $p = .738$).

Table 8. Independent Variables' Multiple Mean Differences Between Groups

	Independent Variables							
	Age		MEIM 1 (search)		MEIM 2 (belonging)		AVS	
Groups	*Mean Difference*	*p*	*Mean Difference*	*P*	*Mean Difference*	*p*	*Mean Difference*	*p*
Caucasian – Korean	5.16	.010	-2.90	.000	*	*	*	*
Caucasian – Chinese	3.09	.087	-2.71	.000	-2.00	.010	*	*
Caucasian – Filipino	*	*	-3.29	.000	-3.00	.001	-15.376	.003
Korean – Filipino	*	*	*	*	-2.87	.011	*	*

* No significant mean differences between groups

Hypothesis 1 Analyses

*Asian Americans Will Endorse More Social Anxiety Than
the Comparison Group of Caucasian Americans.*

As hypothesized, Asian Americans (Chinese-, Korean- and Filipino-American

participants) endorsed significantly more anxiety than Caucasian American participants on the

BFNE and SIAS through ANOVA analysis, but did not score significantly higher on the SPS

(Table 9).

Table 9. Comparison of Aggregated Asian Americans and Caucasian Americans on Measures
of Social Anxiety

Measure	Group	*M*	*SD*	95% CI	*F*	*P*
SIAS					11.43	.001*
	Asian American	30.30	18.06	[27.75, 32.85]		
	Caucasian American	22.86	16.34	[19.52, 26.21]		
BFNE					4.96	.027*
	Asian American	36.96	9.78	[35.62, 38.30]		
	Caucasian American	34.26	9.59	[32.28, 36.23]		
SPS					2.71	.101
	Asian American	16.79	15.31	[14.62, 18.96]		
	Caucasian American	13.65	14.91	[10.60, 16.70]		

* = p < .05

A one-way analysis of covariance (ANCOVA) was then conducted in order to examine the effect age may have on responses, given that the Caucasian American sample was significantly older than the Asian American sample. This analysis indicated that when age was controlled for, there were no differences between Caucasian Americans and Asian Americans in fear of negative evaluation (BFNE: $p = .176$), a trend for the anxiety of being observed by others (SPS: $p = .056$) and a significant difference between groups on anxiety in social interactions (SIAS: $p = .009$).

Hypothesis 2 Analyses

Hypothesis 2, part A: *The Three Asian American Subgroups Will Endorse Different Levels of Social Anxiety.*

The three Asian American subgroups did not endorse significantly different levels of social anxiety from each other on any measure of social anxiety (Table 10).

Table 10. ANOVAs for Measures of Social Anxiety for Chinese-, Korean- and Filipino-Americans

Variable and Source	SS	Df	MS	F	P
BFNE					
Between Groups	53.76	2	26.88	.28	.757
Within Groups	19543.93	203	96.28		
SPS					
Between Groups	205.20	2	102.60	.44	.648
Within Groups	45013.14	191	235.67		
SIAS					
Between Groups	980.14	2	490.07	1.51	.223
Within Groups	62286.61	192	324.41		

Each Asian American group was then compared with each other and Caucasian American participants to further explore possible differences. There were significant differences only on the SIAS (Table 11). On the SIAS, Caucasian Americans endorsed significantly less fear of social interaction than Korean- and Chinese-Americans, but not Filipino-Americans (Table 12).

Table 11. Social Anxiety Differences Between Comparison and Chinese-, Korean- and Filipino-Americans

Measure	Group	*M*	*SD*	95% CI	*F*	*P*
SIAS					4.89	.002*
	Caucasian	23.00	16.31	[19.68, 26.32]		
	Chinese	29.97	16.97	[26.65, 33.29]		
	Korean	34.44	20.17	[28.07, 40.80]		
	Filipino	27.46	18.34	[22.25, 32.67]		
BFNE					1.78	.150
	Caucasian	34.29	9.54	[32.33, 36.24]		
	Chinese	36.92	9.51	[35.08, 38.76]		
	Korean	37.80	10.80	[34.51, 41.08]		
	Filipino	36.13	9.57	[33.54, 38.71]		
SPS					1.15	.329
	Caucasian	13.87	14.99	[10.82, 16.93]		
	Chinese	16.11	14.05	[13.29, 18.93]		
	Korean	19.02	15.26	[14.27, 23.78		
	Filipino	15.92	17.48	[11.11, 20.74		

* = p < .05

Table 12. Significant Mean Differences Between Groups on the
SIAS

	SIAS	
Groups	*Mean Difference*	*P*
Caucasian – Chinese	-6.97	.028*
Caucasian – Korean	-11.44	.003*

* = p < .05

Hypothesis 2, part B (Acculturation): *The Three Asian American Groups
Will Endorse Different Levels of Value and Behavior Acculturation
Which Will Then Influence the Endorsement of Social Anxiety.*

The three identified Asian American ethnic groups did not endorse significantly different

levels of value acculturation on the AVS ($F(2, 168) = 1.21$, $p=.301$). In terms of behavioral

enculturation/acculturation, the three groups did not endorse significantly different adherence to

Asian behaviors ($F(2, 161) = 0.30$, $p=.738$).

Hypothesis 2, part C (Gender): *Chinese-, Korean- and Filipino-Americans
Vary in the Importance They Ascribe to Traditional Gender Normative
Roles, Gender and the Interaction of Gender and Ethnicity
May Influence the Endorsement of Social Anxiety.*

Profile plots were done to see if there was an interaction between gender and ethnicity on

the measures of social anxiety (see Figures 2, 3 and 4). Because these plots indicate there is an

interaction between gender and ethnicity, this gender and ethnicity interaction was examined.
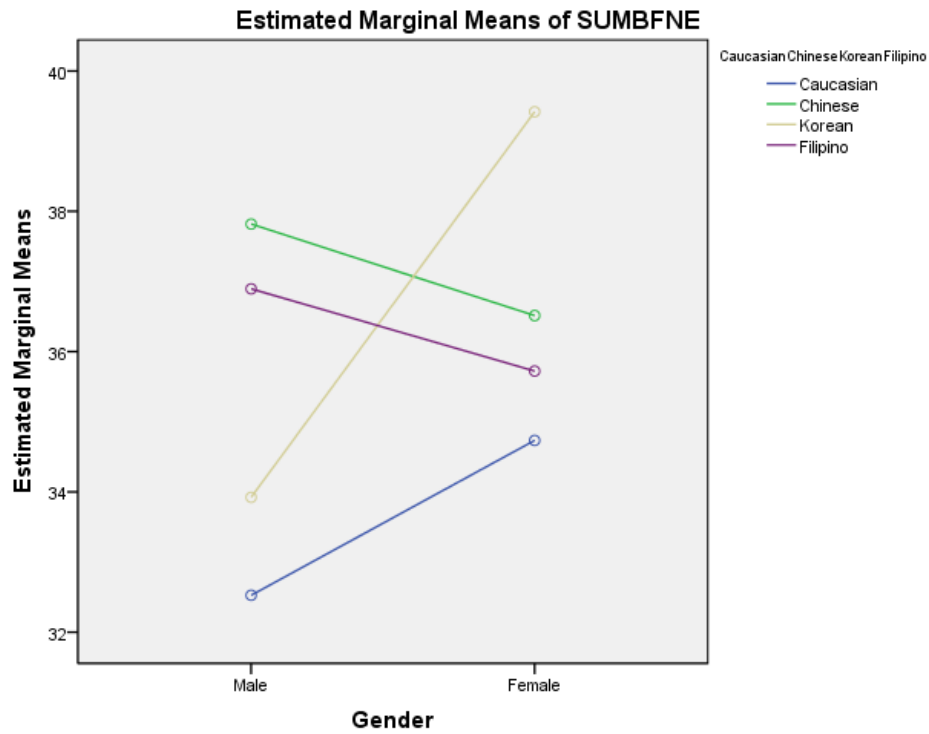
Figure 2. Profile Plot of Interaction Between Gender and Ethnicity: BFNE
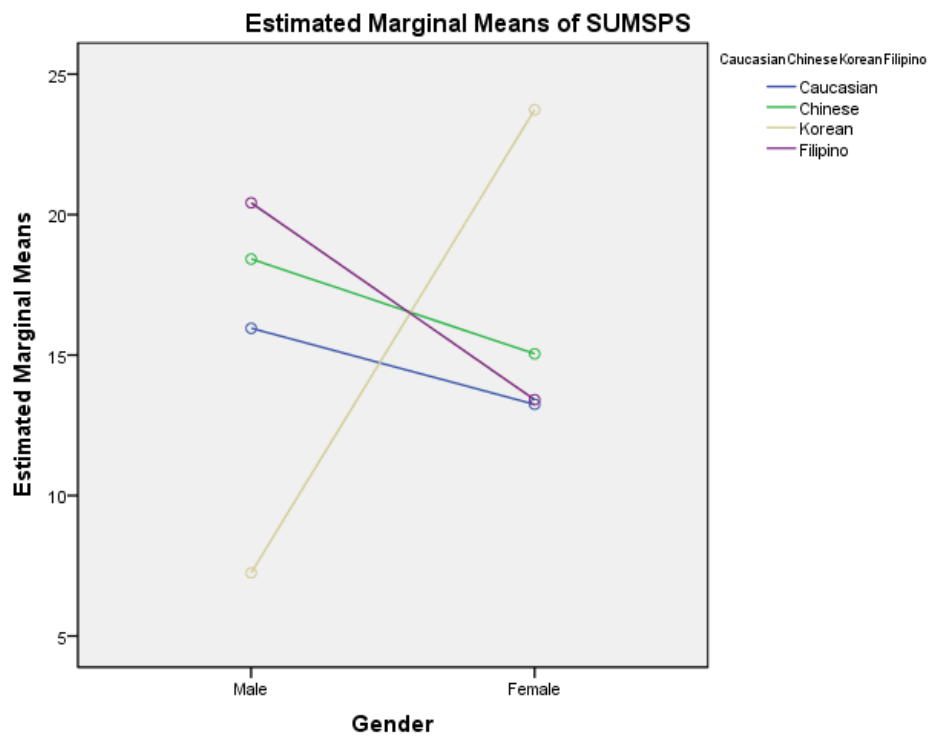
Figure 3. Profile Plot of Interaction Between Gender and Ethnicity: SPS
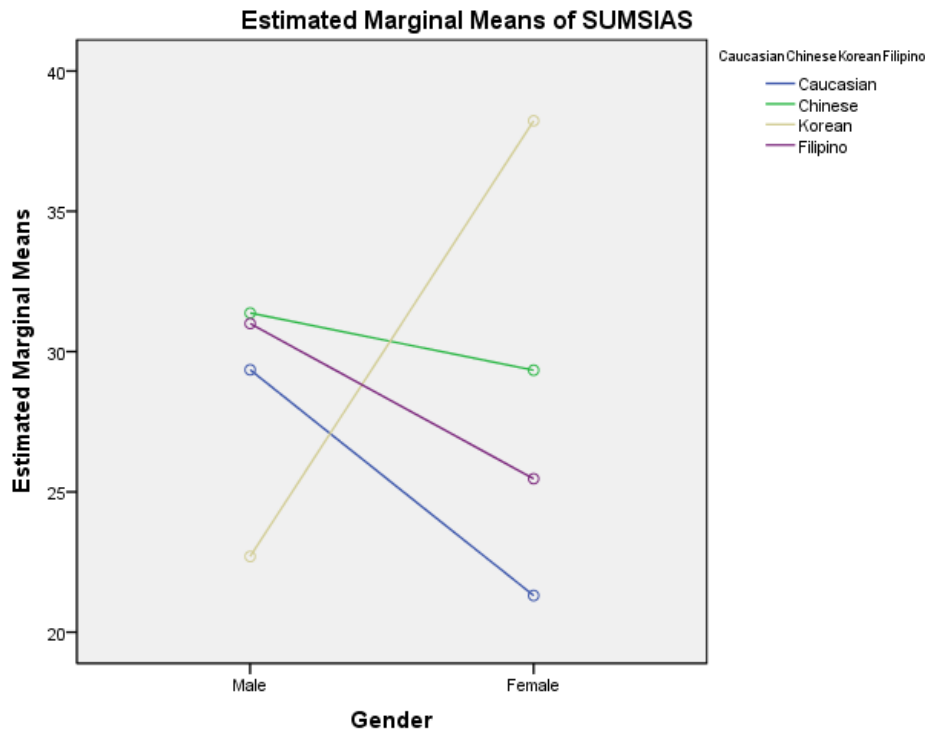
Figure 4. Profile Plot of Interaction Between Gender and Ethnicity: SIAS

First, an ANOVA was conducted to determine if the six different groups (Chinese males, Chinese females, Korean males, Korean females, Filipino males and Filipino females) differed on measures of social anxiety. From the ANOVA, it was determined that the groups were only significantly different on the SPS (see Table 13). Tukey's post-hoc analysis revealed that Korean females endorsed significantly more social anxiety than Korean males (mean difference = 15.847, standard error = 5.08, p = .025) on the SPS. On the SIAS, Korean females showed a trend of endorsing more fear of social interactions than Filipino females (mean difference = 12.063, standard error = 4.461, p = .079) (Appendix N).

Table 13. ANOVA for Gender and Ethnicity Interactions

Variable and Source	SS	Df	MS	F	P
BFNE					

Between Groups	312.48	5	62.50	.65	.663
Within Groups	19285.21	200	96.43		
SPS					
Between Groups	3275.60	5	655.12	2.94	.014*
Within Groups	41942.73	188	223.10		
SIAS					
Between Groups	3097.03	5	619.41	1.95	.089**
Within Groups	60169.72	189	318.36		

* = p < .05

** = p < .10

We then looked at whether there were significant differences among the independent variables for the six subgroups through ANOVA analysis. There were significant differences among the six groups for the MEIM2 (ethnic identity belonging) score ($F(5, 184) = 2.97$, $p = .013$) with Filipino males endorsing significantly more ethnic identity (belonging) than Chinese males and Korean females. For the AVS, there was a trend of groups endorsing different levels of value acculturation ($F(5, 165) = 2.12$, $p = .066$) with Filipino males endorsing more adherence to Asian values than Chinese females (see Appendix O and Appendix P).

Hypothesis 3 Analyses

Chinese-, Korean- and Filipino-Americans' Social Anxiety Will Be
Predicated by Different Variables (Including Behavioral
Acculturation, Value Enculturation, Ethnic
Identity, Immigration Status and Age).

Four hierarchical regressions were conducted: a total Asian American group (aggregated Chinese-Americans, Korean-Americans and Filipino-Americans) regression and three separate

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regressions for each subgroup. Each individual social anxiety score from the three different

measures (BFNE, SPS and SIAS) were evaluated.

For the aggregated Asian American group, the order of the following blocks were as

follows: Block 1: Age; Block 2: Immigration status; Block 3: Gender; Block 4: Ethnicity; Block

5: Gender and Ethnicity interaction; Block 6: MEIM (ethnic identity); Block 7: SLASIA

(behavioral acculturation) and Block 8: AVS (value enculturation).

<p align="center">Aggregated Asian American Group
Regression Analysis</p>

On the BFNE, different variables (such as age, immigration status, and the gender and

ethnicity interaction of being a Korean male) significantly influenced the BFNE score at

different steps (see Table 14). Both age and being a Korean male decreased fear of negative

evaluation while immigrating to the U.S. between ages 13 through 18 increased the endorsement

of fear of negative evaluation. However, all three of these variables did not significantly impact

the BFNE score by the final step in the regression. In the final step, the two significant variables

with the most impact on the BFNE scores were the MEIM2 (ethnic identity belonging) and value

enculturation (AVS), with ethnic identity belonging decreasing fear of negative evaluation and

value enculturation increasing it.

Table 14. Hierarchical Regression Analysis Summary for Prediction of Social Anxiety for the
Aggregated Asian American Group: BFNE

Step and Predictor Variable	B	$SE\ B$	B	R^2	ΔR^2
Step 1:				.05	
Age	-0.28	0.10	-.23		
Step 2:				.09	.04
Age	-0.23	0.11	-.19		

Immigrated Between Ages13-18	6.75	4.00	.14		
Step 3:				.09	.00
Age	-0.23	0.11	-.19		
Immigrated Between Ages13-18	6.79	4.01	.14		
Step 4:				.10	.00
Age	-0.25	0.11	-.20		
Step 5:				.15	.05*
Age	-0.25	0.11	-.21		
Korean Male	-9.53	4.36	-.24		
Step 6:				.23	.08*
Age	-0.21	0.10	-.17		
MEIM2 (ethnic identity belonging)	-0.91	0.27	-.41		
Step 7:				.24	.00
MEIM2 (ethnic identity belonging)	-0.98	0.27	-.44		
Step 8:				.26	.03*
MEIM2 (ethnic identity belonging)	-1.06	0.27	-.47		
AVS	0.07	0.03	.18		

* Change is significant at the *p<.05* level

On the SPS, different variables (such as age, immigration status, being Korean and the gender and ethnicity interaction of being a Korean male) significantly influenced the SPS score (see Table 15). Both age and being a Korean male decreased fear of negative evaluation while immigrating to the U.S. between ages 13 through 18 and being Korean increased the endorsement of social phobia. However, all three of these variables did not significantly impact

the SPS score by the final step in the regression. In the final step, the single significant variable

with the most impact on the SPS scores was the MEIM2 (ethnic identity belonging), which

decreased the SPS score.

Table 15. Hierarchical Regression Analysis Summary for Prediction of Social Anxiety for the Aggregated Asian American Group: SPS

Step and Predictor Variable	B	$SE\ B$	B	R^2	ΔR^2
Step 1:				.03	
Age	-0.35	0.16	-.18		
Step 2:				.07	.03
Immigrated Between Ages13-18	6.75	4.00	.14		
Step 3:				.07	.00
Immigrated Between Ages13-18	13.39	6.36	.18		
Step 4:				.08	.01
Immigrated Between Ages13-18	14.27	6.48	.19		
Step 5:				.15	.08*
Immigrated Between Ages13-18	14.09	6.25	.19		
Korean Ethnicity	9.12	3.66	.26		
Korean Male	-19.23	6.85	-.31		
Step 6:				.20	.05*
Immigrated Between Ages13-18	14.11	6.17	.19		
Korean Ethnicity	8.14	3.68	.23		
Korean Male	-16.11	6.88	-.26		
Step 7:				.22	.02*
Korean Ethnicity	7.31	3.67	.21		

Korean Male	-13.81	6.92	-.22		
MEIM2 (ethnic identity belonging)	-1.04	0.44	-.30		
Step 8:				.23	.01*
MEIM2 (ethnic identity belonging)	-1.13	0.45	-.32		

* Change is significant at the *p<.05* level

On the SIAS, three variables were significant in affecting the SIAS score throughout the steps of the hierarchical regression: age, being a Filipino male and ethnic identity belonging (MEIM2) (see Table 16). Both age and ethnic identity belonging decreased anxiety of social interactions (as measured by the SIAS), while being a Filipino male increased anxiety in social situations.

Table 16. Hierarchical Regression Analysis Summary for Prediction of Social Anxiety for the Aggregated Asian American Group: SIAS

Step and Predictor Variable	B	$SE\ B$	B	R^2	ΔR^2
Step 1:				.07	
Age	-0.65	0.20	-.27		
Step 2:				.08	.01
Age	-0.63	0.21	-.26		
Step 3:				.08	.00
Age	-0.63	0.21	-.26		
Step 4:				.09	.01
Age	-0.61	0.21	-.25		
Step 5:				.15	.05*
Age	-0.66	0.21	-.28		

Step 6:					.27	.13*
Age	-0.56	0.19	-.23			
Filipino Male	17.53	6.97	.30			
MEIM2 (ethnic identity belonging)	-1.69	0.47	-.43			
Step 7:					.29	.02*
Age	-0.51	0.19	-.22			
Filipino Male	18.09	6.92	.31			
MEIM2 (ethnic identity belonging)	-1.88	0.48	-.48			
Step 8:					.29	.00
Age	-0.46	0.20	-.19			
Filipino Male	17.25	6.99	.29			
MEIM2 (ethnic identity belonging)	-1.93	0.48	-.49			

* Change is significant at the *p<.05* level

Next, the Asian groups were analyzed separately. In the hierarchical regressions, the order of the following blocks were as follows: Block 1: Age; Block 2: Immigration status; Block 3: Gender; Block 4: MEIM (ethnic identity); Block 5: SLASIA (behavioral acculturation) and Block 6: AVS (value enculturation).

Chinese-Americans Regression Analysis

On the BFNE, the analysis revealed that for the Chinese-Americans in this sample, immigrating before the age of 12 increased fear of negative evaluation, while ethnic identity belonging (MEIM2) decreased the fear of negative evaluation (see Table 17).

Table 17. Hierarchical Regression Analysis Summary for Prediction of Social Anxiety for the Chinese-American Ethnic Group: BFNE

Step and Predictor Variable	B	$SE\ B$	B	R^2	ΔR^2
Step 1:				.04	
**					
Step 2:				.14	.09
Immigrated Before age 12	12.03	4.99	.35		
Step 3:				.14	.00
Immigrated Before Age 12	12.28	5.13	.36		
Step 4:				.20	.07
Immigrated Before Age 12	12.28	5.13	.36		
MEIM1(ethnic identity search)	1.01	0.49	.31		
MEIM2 (ethnic identity belonging)	-0.81	0.39	-.33		
Step 5:				.21	.01
Immigrated Before Age 12	11.84	5.45	.35		
MEIM2 (ethnic identity belonging)	-0.84	0.39	-.34		
Step 6:				.23	.02
Immigrated Before Age 12	10.99	5.46	.32		
MEIM2 (ethnic identity belonging)	-1.03	0.42	-.42		

** No significant variable at this step.

On the SPS, while age initially seemed to be a significant variable, as other variables were added in, it proved to be no longer significant in predicting social anxiety on the SPS. Ethnic identity belonging (MEIM2) was the single significant variable (see Table 18).

Table 18. Hierarchical Regression Analysis Summary for Prediction of Social Anxiety for the Chinese-American Ethnic Group: SPS

Step and Predictor Variable	B	SE B	B	R^2	ΔR^2
Step 1:				.06	
Age	-0.42	0.21	-.24		
Step 2:				.08	.02
**					
Step 3:				.09	.01
**					
Step 4:				.14	.05
**					
Step 5:				.18	.05
MEIM2 (ethnic identity belonging)	-1.21	0.60	-.34		
Step 6:				.20	.02
MEIM2 (ethnic identity belonging)	-1.50	0.65	-.42		

** No significant variable at this step.

As with the SPS, on the SIAS, age initially decreased endorsement of social anxiety, but as other independent variable are added into the equation, only ethnic identity belonging (MEIM2) significantly impacted the endorsement of anxiety in social interactions (see Table 19).

Table 19. Hierarchical Regression Analysis Summary for Prediction of Social Anxiety for the Chinese-American Ethnic Group: SIAS

Step and Predictor Variable	B	SE B	B	R^2	ΔR^2
Step 1:				.07	

Step and Predictor Variable	B	SE B	β	R^2	ΔR^2
Age	-0.54	0.24	-.27		
Step 2:				.11	.04
**					
Step 3:				.11	.00
**					
Step 4:				.28	.17*
MEIM2 (ethnic identity belonging)	-2.01	0.61	-.51		
Step 5:				.30	.02
MEIM2 (ethnic identity belonging)	-2.09	0.61	-.52		
Step 6:				.30	.00
MEIM2 (ethnic identity belonging)	-2.08	0.66	-.52		

* Change is significant at the *p<.05* level

** No significant variable at this step.

Korean-Americans Regression Analysis

On the BFNE, the analysis revealed that for the Korean-American people in this sample, immigration after the age of 18 and ethnic identity belonging (MEIM2) decreased fear of negative evaluation (see Table 20). Gender initially was a significant factor (with being female increasing fear of negative evaluation) until other variables were added into the equation.

Table 20. Hierarchical Regression Analysis Summary for Prediction of Social Anxiety for the Korean-American Ethnic Group: BFNE

Step and Predictor Variable	B	SE B	β	R^2	ΔR^2
Step 1:				.01	

**					
Step 2:				.09	.08
**					
Step 3:				.22	.13*
Gender	9.15	4.14	.38		
Step 4:				.60	.38*
MEIM2 (ethnic identity belonging)	-1.26	0.48	-.84		
Step 5:				.66	.06
Immigrated After Age 18	-18.88	8.78	-.62		
MEIM2 (ethnic identity belonging)	-1.94	0.46	-.93		
Step 6:				.66	.00
Immigrated After Age 18	-18.71	8.91	-.62		
MEIM2 (ethnic identity belonging)	-1.96	0.47	-.94		

* Change is significant at the *p<.05* level

** No significant variable at this step.

On the SPS, immigration status (born in the U.S., immigration before age 12 and immigration after age 18) initially were significant variables in decreasing social anxiety as measured by the SPS (see Table 21). However, as other variables were added in, only the immigration category of immigration after the age of 18 remained a significant variable in predicting social anxiety on the SPS. Both immigrating after the age of 18 and ethnic identity belonging (MEIM2) decreased social anxiety, while age increased the endorsement of social anxiety.

Table 21. Hierarchical Regression Analysis Summary for Prediction of Social Anxiety for the Korean-American Ethnic Group: SPS

Step and Predictor Variable	B	$SE\ B$	B	R^2	ΔR^2
Step 1:				.01	
**					
Step 2:				.22	.21
Born in the U.S.	-39.02	15.72	-1.24		
Immigrated Before Age 12	-36.07	16.00	-1.01		
Immigrated After Age 18	-45.56	16.42	-1.02		
Step 3:				.37	.15*
Born in the U.S.	-35.88	14.40	-1.14		
Immigrated Before Age 12	-35.43	14.61	-.99		
Immigrated After Age 18	-39.22	15.19	-.88		
Gender	14.47	5.48	.40		
Step 4:				.55	.18*
Born in the U.S.	-33.13	12.76	-1.05		
Immigrated Before Age 12	-34.69	12.97	-.97		
Immigrated After Age 18	-39.34	13.31	-.88		
Gender	12.58	5.04	.35		
Step 5:				.62	.07*
Age	0.86	0.41	.37		
Born in the U.S.	-25.56	12.90	-.81		
Immigrated After Age 18	-51.19	13.63	-1.15		

Step and Predictor Variable	B	SE B	B	R^2	ΔR^2
SL-ASIA (behavioral acculturation)	-0.56	0.26	-.51		
Step 6:				.63	.01
Age	1.15	0.51	.49		
Immigrated After Age 18	-50.75	13.68	-1.14		
MEIM2 (ethnic identity belonging)	-1.52	0.72	-.49		

* Change is significant at the $p \leq .05$ level

** No significant variable at this step.

On the SIAS, immigration after the age of 18 and ethnic identity belonging (MEIM2) both decreased anxiety in social interactions in the final regression step (see Table 22). While behavioral acculturation (SLASIA) was a significant factor in the fifth step, once value enculturation (AVS) was added in it, it no longer retained significance in predicting anxiety in social interactions.

Table 22. Hierarchical Regression Analysis Summary for Prediction of Social Anxiety for the Korean-American Ethnic Group: SIAS

Step and Predictor Variable	B	SE B	B	R^2	ΔR^2
Step 1:				.02	
**					
Step 2:				.10	.08
**					
Step 3:				.16	.06
**					
Step 4:				.55	.39*

Step and Predictor Variable	B	SE B	B	R^2	ΔR^2
MEIM2 (ethnic identity belonging)	-2.93	0.94	-.79		
Step 5:				.64	.08*
Immigrated After Age 18	-44.09	16.84	-.82		
MEIM2 (ethnic identity belonging)	-2.09	0.61	-.52		
SL-ASIA (behavioral acculturation)	-0.76	0.33	-.56		
Step 6:				.64	.00
Immigrated After Age 18	-43.60	17.16	-.81		
MEIM2 (ethnic identity belonging)	-3.37	0.90	-.91		

* Change is significant at the *p<.05* level

** No significant variable at this step.

Filipino-Americans Regression Analysis

On the BFNE, for Filipino-Americans, age was a significant factor until the final step when value acculturation (AVS) was added into the analysis (see Table 23). At this point, there were no significant variables.

Table 23. Hierarchical Regression Analysis Summary for Prediction of Social Anxiety for the Filipino-American Ethnic Group: BFNE

Step and Predictor Variable	*B*	*SE B*	B	R^2	ΔR^2
Step 1:				.19	
Age	-0.46	0.16	-.44		
Step 2:				.26	.06
Age	-0.55	0.20	-.53		
Step 3:				.28	.03
Age	-0.55	0.20	-.53		

Step 4:				.38	.10
Age	-0.46	0.20	-.43		
Step 5:				.38	.00
Age	-0.43	0.21	-.42		
Step 6:				.40	.01
**					

* Change is significant at the *p ≤ .05* level

** No significant variable at this step.

On the SPS, there were no significant variables predicting social anxiety and no significant R^2 change.

Like the BFNE, age was a significant variable in predicting less anxiety in social interactions until the last step in the regression (see table 24). At this point, once all factors were added into the regression, there were no significant variables. Gender was also a significant variable before adding in variables for ethnic identity, behavioral acculturation and value enculturation.

Table 24. Hierarchical Regression Analysis Summary for Prediction of Social Anxiety for the Filipino-American Ethnic Group: SIAS

Step and Predictor Variable	*B*	*SE B*	B	R^2	ΔR^2
Step 1:				.20	
Age	-1.26	0.45	-.44		
Step 2:				.23	.03
Age	-1.20	0.56	-.42		

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Step 3:					.34	.12*
Age		-1.34	0.53	-.47		
Gender		-13.29	5.88	-.35		
Step 4:					.38	.03
Age		-1.26	0.58	-.44		
Step 5:					.38	.00
Age		-1.30	0.59	-.46		
Step 6:					.41	.03
**						

* Change is significant at the *p<.05* level

** No significant variable at this step.

CHAPTER 4

DISCUSSION

Our findings indicate that Asian Americans do report more social anxiety than the comparison group of Caucasian Americans. When the Asian American group was disaggregated, results indicate that Asian Americans (of Chinese, Korean and Filipino descent) report similar levels of social anxiety. However, hierarchical regression analyses indicated that different factors for each group predict social anxiety across the three measures of social anxiety. These findings suggest the importance of examining Asian American groups separately on psychological variables of interest. Studying one group (e.g., Korean-American college students or Chinese-Americans) or a collective group (e.g., multiple Asian American ethnicities) may not be representative of the actual dynamics driving social anxiety for Asian Americans from specific Asian ethnicities.

Hypothesis 1: Differences Between Asian Americans
and Caucasian Americans

Hypothesis 1 proposes Asian Americans will report more social anxiety than the comparison group of Caucasian Americans. Results indicate that on more specific measures of social anxiety (BFNE, SIAS), Asian Americans report more anxiety than Caucasian Americans, and show a trend of endorsing more anxiety than Caucasian Americans on a more general measure of social anxiety (SPS). These results confirm findings from other studies that indicate Asian Americans report higher levels of social anxiety (Abe & Zane, 1990; Hardin & Leong, 2005; Hsu & Alden, 2007; Lee et al., 2006; Okazaki, 1997; Okazaki, 2002; Okazaki et al., 2002; Okazaki & Kallivayalil, 2002; Hong & Woody, 2007; Lin et al., 2001). However, while the Asian American groups report more social anxiety, it is important to note that the term "social anxiety" may not be capturing the Asian American experience. Asian cultures often advocate

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social awareness and sensitivity to guide one's behavior which may be a more functional trait than is thought of in Western culture.

Of note is the difference between the measures and that there is a trend, but not a significant difference on the general measure of social anxiety (SPS) that has two factors: fear of overt evaluation and fear of attracting attention (Carleton et al., 2009). Adding the element of being judged negatively by others or negative attention (BFNE) or the element of increased intimacy inherent in dyads or small groups (SIAS) may lead to more anxiety for only Asian Americans based on the historical and cultural factors discussed in the introduction, such as personal shame (negative judgment by others) leading to the group's shame, as demonstrated by the findings in the previous paragraph. Examining how the different ethnic groups responded on measures of social anxiety compared to socially anxious and community norms (Table 4), it is notable that all three Asian American groups exceeded socially anxious norms. However, while scores were elevated (i.e., higher than the community norms) for the BFNE and the SPS, they did not approach the socially anxious norms. Again, this may be because the SIAS could be capturing interpersonal awareness and sensitivity in more intimate situations rather than capturing actual anxiety or impairment.

Compare question three on the SPS ("I can suddenly become aware of my own voice and of others listening to me.") with the BFNE ("I am frequently afraid of other people noticing my shortcomings."). While the SPS describes a situation that is relatively free of judgment or worry about being judged, the BFNE question introduces more negative emotion (afraid) and obvious worry about one's own worth (shortcomings).

Now compare question 13 on the SPS ("I would get tense if I had to carry a tray across a crowded cafeteria.") with question 13 on the SIAS ("I find it difficult to disagree with another's

point of view."). Again, the SPS describes an ambiguous situation that may be difficult for many people for a variety of reasons including worry about how one may appear to others or attracting attention from others. However, one may also not want to drop a tray and have to pick it up in a crowd. The SIAS describes a more intimate situation that pinpoints one of the anxiety-provoking factors of interacting with others.

From this, we may conclude the Asian Americans may have higher anxiety in situations that may bring shame or cause one to lose face, such as when being negatively evaluated or in more intimate situations (Park et al., 2011, Lau et al., 2009). This is when one is expected to pick up on the subtle cues that guide personal interaction.

However, when age was accounted for in the ANCOVA analysis, it would appear that while Asian Americans are still more anxious in more intimate social interactions, they are equivalent to Caucasian Americans in fearing negative evaluation. It seems that rather than a difference of culture predicting fear of negative evaluation, it is the dynamic of age, as younger people worry and fear others judging them censoriously than those who are older. Korkmaz, Sahin and Usta (2011) speculate that those who are older likely have more of a sense of self and less uncertainty of how others view them, possibly related to life status (i.e., younger people are more likely to be students and in a more evaluative environment, while those who are older are more likely to be in a career with fewer uncertainties and relationships with fewer uncertainties). So while fear of being negatively evaluated may be accounted for by age, it seems from this analysis that anxiety of offending others in intimate situations (SIAS) is affected by culture and anxiety about being observed by others (SPS) tends to be affected by culture, as demonstrated by Asian American groups' reporting of more anxiety than socially anxious norms (Table 4) and significant between-groups difference between Asian and Caucasian Americans.

Thus, it appears that anxiety of being negatively evaluated is more of a universal, broad construct that is, perhaps, more inherent to the human experience, while anxiety in more intimate social situations and anxiety of being observed is more dependent on the culture, norms and rules one is brought up with. In sum, no one likes to be looked at in a negative light, but it appears that for Asian Americans, intimate interactions where one may easily offend or the possibility of offending another person by simple observation is more anxiety provoking. This higher endorsement in situations that can be more judgment-free (interactions and evaluation rather than negative evaluation) perhaps taps into the pro-social cultural awareness and sensitivity for Asians and Asian Americans previously discussed.

Hypothesis 2: Differences Between
Asian American Ethnic Groups

In Hypothesis 2, we proposed that the different Asian ethnic groups would report different levels of social anxiety, as each group has different characteristics and history while still generally ascribing to Confucian ideals. For instance, we hypothesized that Filipino-Americans would score lowest on measures of social anxiety due to their reported value and behavioral biculturalism and The Philippines long history of involvement with the U.S., a unique characteristic not shared by Korean- or Chinese-Americans.

However, the analysis revealed that the three groups did not endorse significantly different levels of social anxiety when compared with each other. This may give speculative evidence that Asian subgroups can be aggregated in terms of social anxiety. However, when each group was compared with the Caucasian American comparison group, there were significant differences between the Caucasian Americans and the Chinese- and Korean-Americans, with Caucasian Americans endorsing significantly less social anxiety than either group on the SIAS. There were no differences between Caucasian Americans and Filipino-

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Americans on any measure. As hypothesized, it seems that Filipino-Americans may actually be more bicultural than either Chinese- or Korean-Americans, based on their lack of significant statistical difference from Caucasian Americans on the SIAS.

This seems to be a mixed finding. While there have been several calls for Asian American ethnic groups to be examined separately, it seems that they actually respond in a similar manner, indicating that the groups can be analyzed more homogenously. However the second finding related to hypothesis 2, is that Caucasian Americans differed from some Asian groups on some measures but not others. In part B of Hypothesis 2, it was hypothesized that the different Asian American groups would have different levels of value and behavioral acculturation. However, the three Asian American groups were not significantly different on the measures of value and behavioral acculturation, meaning they did not endorse significantly different adherence to Asian behaviors or values.

Based on research and historical perspective, these results are actually counter to what was expected. Filipino-Americans were expected to score lower in terms of adherence and belief in Asian values and enactment of Asian behaviors. Filipino-Americans have had the most exposure and history with Western culture based on their colonization experience (David & Okazaki, 2006; Kim et al., 2001; Agbayani-Siewert, 2004; Sanchez & Gaw, 2007). This culture could be considered a more bicultural culture, lending itself to both Asian and Western values and behaviors, more so than Chinese- or Korean-Americans who have had less of an intertwined history and culture. On all measures, even those without significant differences, it is notable that Filipino-Americans score the highest for Asian values and Asian behavior.

Again, this finding seems to indicate that the three Asian American groups are actually more similar than dissimilar and it may be more expedient to examine Asian Americans as a

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group rather than parceling out for nationalities. While several studies have found differences between Asian American groups on such things as: drinking behavior, emotional distress, psychiatric disorders (e.g., Kim et al., 2012; Mereish et. al, 2011; Cheng et al., 2010; Hendershot et al., 2007; Akutsu et al., 2007; Willgerodt & Thompson, 2006), there have been no studies comparing the different Asian American groups on measures of social anxiety. Thus far, it seems that research has been concentrated on comparisons of the Asian Americans as an aggregated group with Caucasian Americans (e.g., Abe & Zane, 1990; Hardin & Leong, 2005; Hsu & Alden, 2007; Lee, Okazaki & Yoo, 2006; Okazaki, 1997; Okazaki, 2002; Okazaki, Liu, Longworth, & Minn, 2002; Okazaki & Kallivayalil, 2002; Hong & Woody, 2007). From the results found in this hypothesis, it may be that because of the cultural similarities these Asian American groups share, such as guarding against strong emotion and paying attention to the nonverbals of communication, there are in fact no perceptible differences with social anxiety, despite differences in other areas.

In part C of the second hypothesis, it was speculated that the interaction of gender and ethnicity may be a variable, due to differing attitudes regarding gender for Chinese-, Korean- and Filipino-Americans. While Chinese culture is still patriarchal, there seems to be more of an attitude change towards gender equality (Okazaki, 1998). Filipino culture also seems to advocate for more gender equality, while still regarding females as caretakers and guardians of the culture (Nadal, 2004; Espiritu, 2001). The gender divide is more significant among Korean-Americans with men being socialized to be the head of the family, to uphold the ideal of the strong, unemotional provider and Korean-American females stuck in the paradox of working outside the home and experiencing more economic prosperity, but still being deferential to males (Hovey et al., 2006; Hurh & Kim, 1990; Cheung et al., 2011; Yoo et al., 2005). Therefore, it was

expected that Korean-Americans would be the most likely group to endorse gender differences, which was found in the analysis. Chinese- and Filipino-American men and women did not report significant differences on the measures used in this study.

When examining the interaction of gender and ethnicity, it was found that Korean females are significantly more socially anxious than Korean males on the SPS and showed a trend of being more anxious than Filipina females. Therefore, it seems that Korean females, more than any other group, experience more social anxiety. However, this may also be due to gender normative roles. Korean males are expected to be more stoic and impassive. To admit distress is to possibly bring shame upon the family or the group. Women, on the other hand, are permitted to show more affective distress (Hurh & Kim, 1990; Gloria et al., 2008; Cheung et al., 2011; Yoo et al., 2005). It is possible that Korean males also experience more proportionate levels of social anxiety, but do not report it because of cultural restrictions, as their female counterparts will.

One element that may be a factor in Korean females reporting more social anxiety is that they feel less ethnic identity (belonging) with their own ethnic group, according to results from this study. It was found that Korean females report significantly less ethnic identity (belonging) than Filipino males, with Filipino males reporting the most ethnic identity (belonging) and Korean females reporting the least among all six groups surveyed. Korean females in this study seem to feel less belonging to their own ethnic group and more social anxiety in American culture, perhaps because they do not have an internal sense of fitting in with either. Previous research has indicated that Korean women have a "double-burden" of upholding traditional values while still assimilating to more Western values, especially in terms of socioeconomic progress (Hurh & Kim, 1990, Cheung et al., 2011; Gloria et al., 2008).

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Hypothesis 3: Variables Impacting Chinese-,
Korean- and Filipino-American Groups

Hypothesis 3 addressed variables that may increase or decrease the report of social anxiety for the three Asian American groups. An overall hierarchical regression was conducted first for the aggregate Asian group for each measure of social anxiety. Across all three measures of social anxiety, ethnic identity (belonging) significantly contributed to less endorsement of social anxiety. As previously found, positive ethnic identity seems to have positive effects for ethnic minorities, such as bolstering ethnic minorities' self esteem (Lee & Yoo, 2004; Lee, 2003), as a protective factor for the effects of racism (Yoo & Lee, 2005, Yip, Gee & Takeuchi, 2008), more well-being (Chae & Foley, 2010; Iwamoto & Liu, 2010), acceptance and positive relationships (Iwamoto & Liu, 2010).

Ethnic identity in this study was further separated into ethnic identity (search), which is more about the behavioral and developmental aspect of ethnic identity, and ethnic identity (belonging), which is the affective aspect of ethnic identity. Ethnic identity (search) was not a significant factor in the prediction of social anxiety for any analysis, while ethnic identity (belonging) was for several analyses. It would appear that when one identifies with and feels a sense of belonging, than what others may think of him/her is less anxiety-inducing as the affective aspect of ethnic identity influences the affective state. Iwamoto and Liu (2010) also found that positive ethnic identity also helped foster more positive relationships and social interactions for Asian Americans. Other studies (e.g. Yoo & Lee, 2005, Yip, Gee & Takeuchi, 2008) have also found positive ethnic identity to buffer against the effects of racism, which is a strongly social issue producing affective distress.

On the BFNE, higher endorsement of Asian values (AVS) significantly increased the endorsement of social anxiety. This enculturation seems to follow other research that indicates

less acculturation means more social anxiety (Sue & Sue, 2003; Okazaki, 1997; Hsu & Alden, 2007; Constantine et al., 2004; Lau et al., 2009). Age was a significant negative predictor until behavioral and value acculturation was added into the equation. This is in line with previous research that found decreased age increases risk for social anxiety (Grant et al., 2005).

On the SPS, once all variables were introduced into the hierarchical regression, only ethnic identity belonging was significant in decreasing levels of social anxiety. However, before value enculturation was added into the equation, Korean ethnicity was a significant predictor increasing social anxiety, while being Korean *and* male predicated less social anxiety. This finding is consistent with the difference between Korean males and females found earlier in this study. Again, this mixed finding may speak to the different socialized roles Korean men and women have (Hovey et al., 2006; Hurh &Kim, 1990; Cheung et al., 2011; Gloria et al., 2008), with women given more permission to report distress (Cheung et al., 2011; Yoo et al., 2005). However, once the value acculturation predictor was added, neither Korean ethnicity nor the gender ethnicity variables were significant predictors.

Time of immigration also was initially a significant predictor of social anxiety for the SPS, more so than age. Until behavioral acculturation was added to the regression in Step 7, Immigration to the U.S. between ages 13 and 18 was significant in predicting more social anxiety. Immigration at this time, when one is seeking out identity and in critical stages of maturation and identity development, seems to cause this sample's participants to worry more about functioning in social situations. However, once behavioral acculturation was taken into account, this variable was no longer significant, indicating that behavioral acculturation is more significant than one's time of immigration in accounting for social anxiety. It is also notable that whether one was born in the U.S. or immigrated at any time in one's life (e.g. as a child,

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adolescent or as an adult) was not a significant factor in the endorsement of social anxiety in any of the analyses, which further indicates that acculturation is more significant for Asian Americans in terms of social anxiety than immigration status.

On the SIAS, age was a significant predictor throughout each step of the regression with increased age predicting less social anxiety. As one ages and matures, social groups usually become less fraught with tension and worry and uncertainty. Dyads become more about long-term commitments rather than short-term dating and social groups become more about who one chooses to be with or at least who one is more familiar with. Therefore, it is expected, especially on this measure, that age would be a significant predictor (Grant et al., 2005; Leu et al., 2008; Breslau et al., 2007).

An unexpected finding was that once all variables were entered into the regression, the ethnicity and gender interaction of being a Filipino male predicted more social anxiety. As discussed earlier, Filipino-American culture (based partly on Filipino culture) is more gender-equal. The Filipino family system is more bilateral and evenly balanced between the mother and father (Rubio & Green, 2011). As women are expected to pass on the culture (Espiritu, 2001), and are given more equal-rights not seen in other East Asian cultures (Nadal, 2004), a Filipino-American man may have the somewhat paradoxical role of being the dominant, patriarchal head of the house, who is also deferential to his wife (Rubio & Green, 2011). This paradox may indicate more social anxiety, as the male normative gender role is not so clearly defined.

This finding may also be because of the reported marginalization of Filipino-Americans. Filipino-Americans are often not counted as an Asian American group, despite being very obviously from East Asia (Sanchez & Gaw, 2007; Nadal, 2004). Being outside of the dominant American culture and also often considered not part of the minority Asian American culture may

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lead to Filipino-American men feeling increased anxiety about intimate social interactions. It is possible that Filipino-American women experience less of this anxiety because of the greater equality they have compared to other Asian minority women (Rubio & Green, 2011; Nadal, 2004).

This finding was reflected in the results of the hierarchical regression for the Filipino-American group. On the SIAS, when gender was introduced into the equation, it was a significant predictor until ethnic identity was introduced. Gender then became a non-significant factor. Age was the only significant predictor until the final step, when no variables were significant in predicting social anxiety on the SIAS for the Filipino-American group. There were no significant predictors at any stage for the SPS. Like the SIAS, age was the only significant predictor for social anxiety on the BFNE with increased age decreasing social anxiety, as found in the hierarchical regression for the total Asian American group. However, age was only significant until the final step with all variables accounted for. Then, like the other two measure of social anxiety, there were no significant predictors.

It appears the current study's model of social anxiety is not a good fit for Filipino-Americans. To this writer's knowledge, no research has been conducted on Filipino-Americans and social anxiety. Given that Filipino-Americans' acculturative experience is different from other Asian American groups (Kim et al., 2001; Agbayani-Siewert, 2004; Nadal, 2004; Willgerodt & Thompson, 2006), and there is more gender equality than with other Asian American groups (Rubio & Green, 2011), it is speculated that factors such as value and behavioral acculturation and gender would *not* be significant for this group. Age, however, seems to be a more universal variable that decreases social anxiety across ethnic groups (Grant et al., 2005) including Filipino-Americans.

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For the Chinese-American and Korean-American groups, however, certain factors were significant predictors for every measure of social anxiety, lending evidence for specific cultural factors unique to each group driving reported social anxiety.

In the Chinese-American group, ethnic identity (belonging) significantly predicted less social anxiety once it was introduced into the regression for the BFNE and was the only significant predictor for the Chinese-American group on the SPS and SIAS. The variable of Immigration before the age of 12 significantly predicted more social anxiety on the BFNE once it was introduced into the hierarchical regression and remained significant throughout each step.

This is somewhat counterintuitive. It could be assumed that immigrants who arrive in the U.S. as adults (versus as children or adolescents) are more likely to have language-use and acquisition difficulties, less likely to develop relationships with those outside of the family unit, and have fewer opportunities for educational and economic achievement (Takeuchi et al., 2007). However, research indicates that immigration as a child (i.e., before age 12) leads to increased risk for mood disorders (Breslau et al., 2007; Portes & Zhou, 1993; Tsai et al., 2000). In a study of Chinese-American young adults, Tsai et al. (2000) found that those who immigrated as children did not have sufficient time to form and internalize a sense of ethnic identity from their native country. Therefore, when these children arrived in the United States, they were outside of the dominant culture and did not have a sense of belonging to their ethnic culture. Further, children who immigrate to the United States also have to deal with anxiety-producing social situations, such as new peer groups, the switch from being in the majority to in the minority, new social customs and mores while still developmentally and emotionally immature (Leu et al., 2008). This stress may then continue into adulthood, impacting how one feels in social situations.

Results from analysis of the Korean-American group also indicate that immigration as an adult (i.e., after the age of 18) results in less social anxiety. Leu et al. (2008) and Breslau et al. (2007) found that adult immigrants were less likely to report affective and anxiety disorder symptoms. We speculate that this may because immigration as an adult is usually a choice made by the individual, rather than a choice made for one (e.g., parents deciding to move with their children). An adult immigrant may be more prepared for the difficulties one may face as an immigrant, such as racism and new social customs (Leu et al., 2008).

Complicating the results of the regression analysis is that other immigration categories (born in the U.S., immigration before age 12) also predicated less social anxiety. While neither of the other two immigration categories remained significant once all factors were added to the regression, having three different immigration categories predicting less social anxiety seems to run counter to what was found with Chinese-Americans when it is theorized that longer exposure to the dominant U.S. culture will mean more ease in social situations (Takeuchi et al., 2007).

Also significant on the SPS for Korean-Americans in this sample was age. Being older predicted more endorsement of social anxiety. This is a surprising finding, given that for the aggregate Asian group, age predicted less social anxiety. This may be because of the Korean cultural value of *haan* (suppressed sorrow/anger). As one ages, it is expected that one may encounter more examples of racism, prejudice and difficulties. Because *haan* seems to advocate suppression rather than unburdening or release of emotions, it may be that as *haan* builds, it leads to more distress as one gets older. Because it is a specific Korean cultural value, this may be why age functions uniquely for Korean-Americans in this sample.

Another finding for Korean-Americans in this sample (especially when compared to Filipino-Americans) is that gender (i.e., being female) predicated more social anxiety on the

BFNE and the SPS (though this factor did not remain significant when other variables were added). In the Filipino-American group, gender predicted less social anxiety, speculated to be because of the greater equality Filipino-American women have compared to other Asian groups. However, there seems to be a greater gender divide among Korean-Americans, especially with females more permitted to express distress (Cheung, Leung & Cheung, 2011; Yoo, Goh & Yoon, 2005). Therefore, women may experience and also report more social anxiety than men in the Korean-American group.

The Korean-American group was also the only group where behavioral acculturation contributed to predicting social anxiety on the SPS and the SIAS. This did not remain a significant factor once value acculturation was added to the regression. However, it seems that behavioral acculturation, as hypothesized, moderates social anxiety for only the Korean-American group.

R^2 Considerations

Within this study, it is important to examine the R^2 values for each group's regressions. The variables for the Chinese-American group only accounted for 23% (BFNE, $R^2 = .23$), 20% (SPS, $R^2 = .20$) and 30% (SIAS, $R^2 = .30$) of the variance. Therefore, at least 70% of the model is still unexplained. In the Filipino-American group, 38% of the variance is explained by the single factor of age on the BFNE ($R^2 = .38$) and the SIAS ($R^2 = .38$), with approximately 60% of the model still unexplained. However, with the Korean-American group, about 65% of the variance is accounted for by the independent variables in the model (BFNE, $R^2 = .66$, SPS, $R^2 = .63$, SIAS, $R^2 = .64$). For Korean-Americans, it would seem that factors such as age, immigration status, gender, ethnic identity, behavioral and value acculturation have more explanatory power in predicting social anxiety.

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The differences between each group indicate that there are, in fact, significant variations between each group and Asian American ethnic subgroups should be examined separately rather than aggregated. This study, in fact, elucidated that, while preliminary ANOVA analysis indicated no differences in the reporting of social anxiety across the three groups and seemed to initially provide evidence for Asian American ethnic group aggregation, the regression analysis indicated very different variables at work for each ethnic group. This would likely not be present if the groups were, in fact, similar enough to be combined as a homogenous Asian American group or to have one group (such as Korean-Americans) representative of the larger group. The dichotomous results regarding age between Korean-Americans and Filipino-Americans illustrate this point. Age functions differently in the reporting of social anxiety for these two groups. Only attention to, and examination of each group reveals this relationship.

<u>Limitations and Future Directions</u>

We acknowledge several limitations in this study.

First, acculturation was measured using the SL-ASIA and the AVS which are set along a single continuum rather measuring acculturation as a multidimensional construct (Chen & Danish, 2010). A commonly accepted multidimensional model is Berry's (1980) model of acculturation, where the individual can be: 1) low on acculturation to the dominant culture and yet not enculturated to one's ethnic culture (marginalization), 2) high on enculturation to one's native culture, but low on acculturation to the host culture (separation), 3) high acculturation to the host culture and low enculturation to the native culture (assimilation), and 5) high on acculturation and enculturation, leading to integration and possibly biculturalism (Ruzek et al., 2011). The SL-ASIA, on the other hand, only measures whether one is high on typically Asian behaviors and low on typically Western behaviors or low on typically Asian behaviors and high

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on typically Western behaviors. It is possible, especially for a bicultural individual to be high on both Asian and Western behaviors.

However, both the AVS and the SL-ASIA were used due to their wide usage in Asian American samples, validity and utility with Asian Americans by measuring specific aspects of Asian American behaviors and values. There are also few multidimensional measures of acculturation for Asian Americans. Chung, Kim and Abreu's (2007) Asian American Multidimensional Acculturation Scale (AAMAS) follows Berry's model and a person can be high on acculturation and enculturation for true biculturalism. However, this scale is not as widely used as the SL-ASIA in research with Asian Americans. At the time of writing, Chung et al.'s AAMAS has been cited 15 times. When this study was originally conceived, there were three articles that used the AAMAS with Asian Americans.

A second limitation of this study is the low variance accounted for within each of the Asian ethnic groups' regressions. While the Korean-American group was highest, 35% of the variance was still unaccounted for, indicating that there are other variables significantly impacting Asian Americans social anxiety. While not measured in this study, Asian Americans' interdependent self-construal has been found to be significant in predicting social anxiety (Hong & Woody, 2007; Norasakkunkit & Kalick, 2002; Norasakkunkit & Kalick, 2009; Shea & Yeh, 2008). It may be constructive to include self-construal in order to examine whether this will add to the model and account for more of the variance.

Further, measures of self-anxiety may misrepresent actual distress and subjective well-being among Asian Americans. As discussed, attentiveness and interpretation of subtle signs and signals in social interactions is often prized and taught among Asian American cultures. So having some awareness and perhaps anxiety about social interaction is a functional development

rather than a sign of distress (Ho & Lau, 2011). Norasakkunkit and Kalick (2009) found that Japanese participants reported more distress on measures of social anxiety, but reported high emotional well-being. Asian Americans may be overly pathologized for a beneficial cultural trait.

A third limitation of this study was recruitment. While G*Power analysis indicated that our sample size was sufficient to detect medium effect sizes, the Korean- and Filipino-American groups had a relatively small number of participants. As stated, recruitment occurred online and it took years in order to recruit enough participants, despite active recruitment by this researcher. Some responses this researcher received by email revealed some suspicion regarding reasons for recruitment. One participant responded with anger that this research originally hyphenated "Asian Americans" as this devalued Asian Americans status as a major racial group. While it seems logical after the fact, Asian American values of respect for people of status, obedience to authority figures and elevation of academic achievement (Uba, 1994) would seem to guard against responding to an anonymous online survey asking about personal distress.

When this researcher attempted to directly contact Asian American church leaders or groups in order to speak directly with possible participants, there was overall rejection. This may be because to disclose distress is to possibly bring shame and admit vulnerabilities and lose face. This may also be why several studies rely on national databases and college participant pools. There is an external reason and an established academic and prestige factor which may be enough to generate disclosure of personal information.

A fourth limitation of this study is the age and immigration demographics of the participants. The majority of the participants were under the age of 40 which was consistent across racial and ethnic groups (see Table 1). Further, the majority of this study's participants

were born in the United States and were under the age of 30, which also applied across the three different Asian American groups (see Table 2). Therefore, the results of this study may be limited to young adult Asian Americans who were born in the United States. Further study may be warranted to examine how older Asian Americans who immigrated as adolescents or adults deal with social anxiety.

A fifth limitation of this study were areas not surveyed, such as adoption status, generational status and differences within the Chinese-American group (i.e., mainland China compared to Taiwan and Hong Kong). Since the Korean War in 1950, children have been adopted from Asia into the United States. The U.S. State Department lists China and South Korea as among the top three countries for transnational adoption. This study did not survey adoption status. Because the acculturative experience may be very different for an Asian American adopted into a racially different family, it would likely be useful to survey this in the future.

Also, generational status was not analyzed. The majority of the Asian American participants (90%) were either born in an Asian country or country other than the U.S. (first generation) or born in the U.S. with either parent born in an Asian country or country other than the U.S. (second generation). Six Chinese-Americans, 2 Korean-Americans and 2 Filipino-Americans were third generation (self and both parents born in the U.S., at least one grandparent born in an Asian country or other foreign country). Like immigration and age, there was not a great deal of variability in this group in terms of generational status. Further study may be warranted, as a person who has significant, long-term antecedents in this country such as being established in the United States for several generations, experience social interactions differently than a person who is more recently directly exposed to American culture.

Finally, this study did not differentiate between community of origin within the Chinese-American subgroup. Leung and Chen (2009) discuss the differences in attitudes, culture and background in Chinese communities spread across Asian (e.g., Taiwan, Hong Kong). For instance, people from Taiwan will often identify themselves as Taiwanese, as a way of separating themselves from mainland China and in Taiwan there seems to be more acceptance of social justice than there is in mainland China (Leung & Chen, 2009). Therefore, it may be fruitful for future studies to examine community of origin within the Chinese-American subgroup even further. As this study disaggregated a group usually thought of as more similar (i.e., Asian Americans) to understand possible differences based on culture, a finer examination of Chinese-Americans may also point to differences that will inform counseling.

Despite the limitations of this study, it is adding to the literature on Asian Americans' mental health and distress regarding social anxiety. Examining the differences and similarities between three Asian American groups has illustrated the important differences speculated at in the literature. The implication for clinical practice from the results of the current study is for specificity in treatment of Asian Americans. Help-seeking may be reduced when cultural differences are not recognized and explored (Kim, Sherman & Taylor, 2008). While it is always important to be culturally sensitive, it may also be important to keep in mind that there may be unique cultural values and experiences for Asian American cultures. What is significant and meaningful for one group (such as gender differences with Korean Americans) may function in a completely different way for another group (such as more gender equality with Filipino-Americans).

APPENDIX A

CORRELATIONS OF ACCULTURATION MEASURES

		MEIM 1 (ethnic identity search)	MEIM 2 (ethnic identity belonging)	AVS	SL-ASIA (behavior)
MEIM 1 (ethnic identity search)	Pearson Correlation	1	.648[**]	.110	-.233[**]
	Sig. (2-tailed)		.000	.050	.001
	N	364	357	316	205
MEIM 2 (ethnic identity belonging)	Pearson Correlation	.648[**]	1	.168[**]	-.369[**]
	Sig. (2-tailed)	.000		.003	.000
	N	357	361	311	201
AVS	Pearson Correlation	.110	.168[**]	1	-.188[*]
	Sig. (2-tailed)	.050	.003		.010
	N	316	311	319	187
SL-ASIA (behavior)	Pearson Correlation	-.233[**]	-.369[**]	-.188[*]	1
	Sig. (2-tailed)	.001	.000	.010	
	N	205	201	187	208

APPENDIX B

SUINN-LEW ACCULTURATION SELF-IDENTITY SCALE

(SL-ASIA)

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

1. What language can you speak?
    1. Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
    2. Mostly Asian, some English
    3. Asian and English about equally well (bilingual)
    4. Mostly English, some Asian
    5. Only English

2. What language do you prefer?
    1. Asian only (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
    2. Mostly Asian, some English
    3. Asian and English about equally well (bilingual)
    4. Mostly English, some Asian
    5. Only English

3. How do you identify yourself?
    1. Oriental
    2. Asian
    3. Asian-American
    4. Chinese-American, Japanese-American, Korean-American, etc.
    5. American

4. Which identification does (did) your mother use?
    1. Oriental
    2. Asian
    3. Asian-American
    4. Chinese-American, Japanese-American, Korean-American, etc.
    5. American

5. Which identification does (did) your father use?
    1. Oriental
    2. Asian
    3. Asian-American
    4. Chinese-American, Japanese-American, Korean-American, etc.
    5. American

6. What was the ethnic origin of the friends and peers you had, as a child up to age 6?
    1. Almost exclusively Asians, Asian-Americans, Orientals

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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

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

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

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

10. What is your music preference?
1. Only Asian music (for example, Chinese, Japanese, Korean, Vietnamese, etc.)
2. Mostly Asian
3. Equally Asian and English
4. Mostly English
5. English only

11. What is your movie preference?
1. Asian-language movies only
2. Asian-language movies mostly
3. Equally Asian/English English-language movies
4. Mostly English-language movies only
5. English-language movies only

12. What generation are you? (circle the generation that best applies to you:)
1. 1st Generation = I was born in Asia or country other than U.S.
2. 2nd Generation = I was born in U.S., either parent was born in Asia or country other than U.S.
3. 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.

4. 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.
5. 5th Generation = I was born in U.S., both parents were born in U.S., and all grandparents also born in U.S.

13. Where were you raised?
1. In Asia only
2. Mostly in Asia, some in U.S.
3. Equally in Asia and U.S.
4. Mostly in U.S., some in Asia
5. In U.S. only

14. What contact have you had with Asia?
1. Raised one year or more in Asia
2. Lived for less than one year in Asia
3. Occasional visits to Asia
4. Occasional communications (letters, phone calls, etc.) with people in Asia
5. No exposure or communications with people in Asia

15. What is your food preference at home?
1. Exclusively Asian food
2. Mostly Asian food, some American
3. About equally Asian and American
4. Mostly American food
5. Exclusively American food

16. What is your food preference in restaurants?
1. Exclusively Asian food
2. Mostly Asian food, some American
3. About equally Asian and American
4. Mostly American food
5. Exclusively American food

17. Do you:
1. Read only an Asian language?
2. Read an Asian language better than English?
3. Read both Asian and English equally well?
4. Read English better than an Asian language?
5. Read only English?

18. Do you:
1. Write only an Asian language?
2. Write an Asian language better than English?
3. Write both Asian and English equally well?
4. Write English better than an Asian language?
5. 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?
     1. Extremely proud
     2. Moderately proud
     3. Little pride
     4. No pride but do not feel negative toward group
     5. No pride but do feel negative toward group

20. How would you rate yourself?
     1. Very Asian
     2. Mostly Asian
     3. Bicultural
     4. Mostly Westernized
     5. Very Westernized

21. Do you participate in Asian occasions, holidays, traditions, etc.?
     1. Nearly all
     2. Most of them
     3. Some of them
     4. A few of them
     5. None at all

22. Rate yourself on how much you believe in Asian values (e.g., about marriage, families, education, work):

   1   2   3   4   5
  (do not   (strongly believe
  believe)   in Asian values)

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

   1   2   3   4   5
  (do not   (strongly believe
  believe)   in Western values)

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

   1   2   3   4   5
  (do not   (fit very well)
   fit in)

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

   1   2   3   4   5
  (do not   (fit very well)
   fit in)

26. There are many different ways in which people think of themselves. Which ONE of the following most closely describes how you view yourself?

1. I consider myself basically an Asian person (e.g., Chinese, Japanese, Korean, Vietnamese, etc.). Even though I live and work in America, I still view myself basically as an Asian person.
2. I consider myself basically as an American. Even though I have an Asian background and characteristics, I still view myself basically as an American.
3. I consider myself as an Asian-American, although deep down I always know I am an Asian.
4. I consider myself as an Asian-American, although deep down, I view myself as an American first.
5. I consider myself as an Asian-American. I have both Asian and American characteristics, and I view myself as a blend of both.

APPENDIX C

ASIAN VALUES SCALE (AVS)

<u>Directions</u>: Use the scale below to indicate the extent to which you agree with the value expressed in each statement.

1 = Strongly Disagree
2 = Moderately Disagree
3 = Mildly Disagree
4 = Neither Agree nor Disagree
5 = Mildly Agree
6 = Moderately Agree
7 = Strongly Agree

	Strongly Disagree			Neither Agree nor Disagree		Strongly Agree	
1. One should not deviate from familial and social norms	1	2	3	4	5	6	7
2. Following familial and social expectations is important	1	2	3	4	5	6	7
3. One need not follow one's family's and the society's norms	1	2	3	4	5	6	7
4. One need not conform to one's family's and the society's expectations	1	2	3	4	5	6	7
5. The worst thing one can do is bring disgrace to one's family reputation	1	2	3	4	5	6	7
6. When one receives a gift, one should reciprocate with a gift of equal or greater value	1	2	3	4	5	6	7
7. One need not follow the role expectations (gender, family hierarchy) of one's family	1	2	3	4	5	6	7
8. Family's reputation is not the primary social concern	1	2	3	4	5	6	7
9. Occupational failure does not bring shame to the family	1	2	3	4	5	6	7
10. Educational failure does not bring shame to the family	1	2	3	4	5	6	7
11. One need not achieve academically to make one's parents proud	1	2	3	4	5	6	7
12. The ability to control one's emotions is a sign of strength	1	2	3	4	5	6	7
13. Parental love should be implicitly understood and not openly expressed	1	2	3	4	5	6	7

14. One should have sufficient inner resources to resolve emotional problems	1	2	3	4	5	6	7
15. One should think about one's group before oneself	1	2	3	4	5	6	7
16. One should consider the needs of others before considering one's own needs	1	2	3	4	5	6	7
17. One's achievements should be viewed as family's achievements	1	2	3	4	5	6	7
18. Modesty is an important quality for a person	1	2	3	4	5	6	7
19. One should not be boastful	1	2	3	4	5	6	7
20. One should be humble and modest	1	2	3	4	5	6	7
21. One's family need not be the main source of trust and dependence	1	2	3	4	5	6	7
22. Children need not take care of their parents when the parents become unable to take care of themselves	1	2	3	4	5	6	7
23. Children should not place their parents in retirement homes	1	2	3	4	5	6	7
24. Elders may not have more wisdom than younger persons	1	2	3	4	5	6	7
25. Educational and career achievements need not be one's top priority	1	2	3	4	5	6	7
26. One need not be able to resolve psychological problems on one's own	1	2	3	4	5	6	7
27. One need not control one's expression of emotions	1	2	3	4	5	6	7
28. One need not focus all energies on one's studies	1	2	3	4	5	6	7
29. One need not minimize or depreciate one's own achievements	1	2	3	4	5	6	7
30. One need not remain reserved and tranquil	1	2	3	4	5	6	7
31. One should avoid bringing displeasure to one's ancestors	1	2	3	4	5	6	7
32. One should be able to question a person in an authority position	1	2	3	4	5	6	7
33. One should be discouraged from talking about one's accomplishments	1	2	3	4	5	6	7
34. One should not make waves	1	2	3	4	5	6	7

35. One should not inconvenience others	1	2	3	4	5	6	7
36. Younger persons should be able to confront their elders	1	2	3	4	5	6	7

APPENDIX D

MULTIGROUP ETHNIC IDENTITY MEASURE (MEIM)

In this country, people come from many different countries and cultures, and there are many different words to describe the different backgrounds or <u>ethnic groups</u> that people come from. Some examples of the names of ethnic groups are Hispanic or Latino, Black or African American, Asian American, Chinese, Filipino, American Indian, Mexican American, Caucasian or White, Italian American, and many others. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in: In terms of ethnic group, I consider myself to be _____

Use the numbers below to indicate how much you agree or disagree with each statement.

(4) Strongly agree   (3) Agree   (2) Disagree   (1) Strongly disagree

1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.

2. I am active in organizations or social groups that include mostly members of my own ethnic group.

3. I have a clear sense of my ethnic background and what it means for me.

4. [other] I like meeting and getting to know people from ethnic groups other than my own.

5. I think a lot about how my life will be affected by my ethnic group membership.

6.   [other] I often spend time with people from ethnic groups other than my own.

7. I am happy that I am a member of the group I belong to.

8. [other] I sometimes feel it would be better if different ethnic groups didn't try to mix together. **[reversed]**

9. I have a strong sense of belonging to my own ethnic group.

10. [other] I enjoy being around people from ethnic groups other than my own

11. I understand pretty well what my ethnic group membership means to me.

12. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.

13. I have a lot of pride in my ethnic group.

14. [other] I don't try to become friends with people from other ethnic groups. **[reversed]**

15. I participate in cultural practices of my own group, such as special food, music, or customs.

16. [other] I am involved in activities with people from other ethnic groups.

17. I feel a strong attachment towards my own ethnic group.

18. I feel good about my cultural or ethnic background.

19. My ethnicity is
    (1) Asian or Asian American, including Chinese, Japanese, and others
    (2) Black or African American
    (3) Hispanic or Latino, including Mexican American, Central American, and others
    (4) White, Caucasian, Anglo, European American; not Hispanic
    (5) American Indian/Native American
    (6) Mixed; Parents are from two different groups
    (7) Other (write in): _____

20. My father's ethnicity is (use numbers above)

21. My mother's ethnicity is (use numbers above)

APPENDIX E

BRIEF FEAR OF NEGATIVE EVALUATION (BFNE)

Read each of the following statements carefully and indicate how characteristic it is of you according to the following scale:

1 = Not at all characteristic of me
2 = Slightly characteristic of me
3 = Moderately characteristic of me
4 = Very characteristic of me
5 = Extremely characteristic of me

1. I worry about what other people will think of me even when I know it doesn't make any difference.

2. I am unconcerned even if I know people are forming an unfavorable impression of me.

3. I am frequently afraid of other people noticing my shortcomings.

4. I rarely worry about what kind of impression I am making on someone.

5. I am afraid others will not approve of me.

6. I am afraid that people will find fault with me.

7. Other people's opinions of me do not bother me.

8. When I am talking to someone, I worry about what they may be thinking about me.

9. I am usually worried about what kind of impression I make.

10. If I know someone is judging me, it has little effect on me.

11. Sometimes I think I am too concerned with what other people think of me.

12. I often worry that I will say or do the wrong things.

APPENDIX F

SOCIAL INTERACTION ANXIETY SCALE (SIAS)

For each question, please indicate the degree to which you feel the statement is characteristic or true of year. The rating scale is as follows:

<div style="margin-left: 2em">
0 = Not at all characteristic or true of me
1 = Slightly characteristic or true of me
2 = Moderately characteristic or true of me
3 = Very characteristic or true of me
4 = Extremely characteristic or true of me
</div>

1. I get nervous if I have to speak with someone in authority (teacher, boss, etc.).

2. I have difficulty making eye contact with others.

3. I become tense if I have to talk about myself or my feelings.

4. I find difficulty mixing comfortably with the people I work with.

5. I find it easy to make friends of my own age. (**reversed**)

6. I tense-up if I meet an acquaintance on the street.

7. When mixing socially, I am uncomfortable.

8. I feel tense if I am alone with just one person.

9. I am at ease meeting people at parties, etc. (**reversed**)

10. I have difficulty talking with other people.

11. I find it easy to think of things to talk about. (**reversed**)

12. I worry about expressing myself in case I appear awkward.

13. I find it difficult to disagree with another's point of view.

14. I have difficulty talking to an attractive person of the opposite sex.

15. I find myself worrying that I won't know what to say in social situations.

16. I am nervous mixing with people I don't know well.

17. I feel I'll say something embarrassing when talking.

18. When mixing in a group, I find myself worrying I will be ignored.

19. I am tense mixing in a group.

20. I am unsure whether to greet someone I know only slightly.

SOCIAL PHOBIA SCALE (SPS)

For each question, please indicate the degree to which you feel the statement is characteristic or true of year. The rating scale is as follows:

0 = Not at all characteristic or true of me
1 = Slightly characteristic or true of me
2 = Moderately characteristic or true of me
3 = Very characteristic or true of me
4 = Extremely characteristic or true of me

1. I become anxious if I have to write in front of other people.

2. I become self-conscious when using public toilets.

3. I can suddenly become aware of my own voice and of others listening to me.

4. I get nervous that people are staring at me as I walk down the street.

5. I fear I may blush when I am with others.

6. I feel self-conscious if I have to enter a room where others are already seated.

7. I worry about shaking or trembling when I'm watched by other people.

8. I would get tense if I had to sit facing other people on a bus or a train.

9. I get panicky that others might see me faint or be sick or ill.

10. I would find it difficult to drink something if in a group of people.

11. It would make me feel self-conscious to eat in front of a stranger in a restaurant.

12. I am worried people will think my behavior odd.

13. I would get tense if I had to carry a tray across a crowded cafeteria.

14. I worry I'll lose control of myself in front of other people.

15. I worry I might do something to attract the attention of other people.

16. When in an elevator, I am tense if people look at me.

17. I can fee conspicuous standing in a line.

18. I can get tense when I speak in front of other people.

19. I worry my head will shake or nod in front of others.

20. I feel awkward and tense if I know people are watching me.

APPENDIX H

ADVERTISEMENT FOR PARTICIPATION

I am looking for adults 18 years and older to fill out a short series of questionnaires online (http://www.surveymonkey.com/s.aspx?sm=2_2fS9j_2fPdPQmwAeLRwMYetA_3d_3d) in order to examine how culture and ethnicity affects social anxiety. It should take you between 30-45 minutes and you will be entered into a lottery for a $60 gift certificate from the store of your choice (Target, Amazon.com, Sephora, Best Buy). All adults (18 years and older) are very welcome to participate! If you have any questions or would like further information, please contact the principal investigator of this study at SocialAnxietyandEthnicity@gmail.com

APPENDIX I

INFORMED CONSENT

Dear Prospective Research Participant:

The purpose of this study is to better understand anxiety in social situations and how this relates to one's ethnicity and culture. There are no anticipated risks in this project. If you do become distressed and are in crisis for any reason while participating in this study, please contact someone who can help you, go to your nearest emergency room or call 1-800-273-TALK to speak with a volunteer crisis counselor.

What this project will involve is approximately 30-45 minutes of your time to complete a series of questionnaires. By participating, you will be entered into a lottery drawing for a $60 gift certificate from your store of choice (Target, Amazon.com, Best Buy or Sephora). Winner will be selected after all information has been collected, which is anticipated to be no later than October 2009. Only the lottery winners will be notified, though you can email me at ss9836a@gmail.com at any time to check on the status of the lottery. There will be at least 600 participants with each participant having at least three chances to win a gift certificate. If you begin to answer and then decide you no longer wish to participate, your decision will be honored without question, your chances to win the lottery will not be affected, and in no way will you be penalized.

All data will be stored confidentially by participant number and results will be reported by group aggregate data. Your information will remain anonymous.

If you have any questions about this study, please do not hesitate to contact me by email at ss9836a@gmail.com. If you have any dissatisfaction with this experiment or its conduct, please contact the Psychology Department's Human Subjects Committee and the University's Institutional Review Board.

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Thank you for your participation,

Charlene Suwan
Principal Investigator
American University

Your Name. Typing in your name here will
serve as your electronic signature and indicate
you have given informed consent to participate
in this study.

Please enter the best way to reach you if you
have won the lottery (phone number, email,
address).

APPENDIX J

AGGREGATED ASIAN AMERICAN SAMPLE'S MEANS AND

STANDARD DEVIATIONS FOR STUDY VARIABLES

Variable	*N*	*M*	*SD*
Age	230	29.95	9.24
BFNE	205	36.88	9.77
SPS	193	16.83	15.31
SIAS	194	30.35	18.13
MEIM1 (ethnic identity search)	192	14.46	3.17
MEIM2 (ethnic identity belonging)	189	21.46	4.62
AVS	170	138.14	25.03
SL-ASIA (behavior)	162	66.38	12.39

APPENDIX K

CHINESE-AMERICANS' MEANS AND STANDARD

DEVIATIONS FOR STUDY VARIABLES

Variable	N	M	SD
Age	119	30.08	9.83
BFNE	106	37.20	9.42
SPS	98	16.43	14.13
SIAS	103	30.17	16.92
MEIM1 (ethnic identity search)	100	14.40	3.02
MEIM2 (ethnic identity belonging)	97	21.54	4.01
AVS	85	135.88	24.15
SL-ASIA (behavior)	86	66.48	11.93

APPENDIX L

KOREAN-AMERICANS' MEANS AND STANDARD

DEVIATIONS FOR STUDY VARIABLES

Variable	N	M	SD
Age	54	27.98	6.56
BFNE	45	37.42	10.96
SPS	43	18.67	15.25
SIAS	42	34.00	20.12
MEIM1 (ethnic identity search)	43	14.26	3.21
MEIM2 (ethnic identity belonging)	43	19.98	5.81
AVS	40	136.43	26.70
SL-ASIA (behavior)	36	65.17	14.99

APPENDIX M

FILIPINO-AMERICANS' MEANS AND STANDARD

DEVIATIONS FOR STUDY VARIABLES

Variable	N	M	SD
Age	58	31.64	9.90
BFNE	55	36.13	9.57
SPS	53	15.92	17.48
SIAS	50	27.46	18.34
MEIM1 (ethnic identity search)	50	14.82	3.40
MEIM2 (ethnic identity belonging)	50	22.68	4.25
AVS	46	142.78	25.64
SL-ASIA (behavior)	42	67.36	10.86

APPENDIX N

TUKEY'S POST-HOC TEST ON GENDER

AND ETHNICITY DIFFERENCES

Variable	(I) Ethnicity Gender	(J) Ethnicity Gender	Mean Difference (I-J)	*SD*	*p*
SPS	Korean Female	Korean Male	15.85	5.08	.025
SIAS	Korean Female	Filipino Female	12.06	4.46	.079

* = p < .05

** = p < .10

APPENDIX O

ANOVA FOR INDEPENDENT VARIABLES: GENDER

AND ETHNICITY INTERACTION

		Sum of Squares	Df	Mean Square	*F*	*P*
MEIM1	Between Groups	60.73	5	12.15	1.228	.298
(search)	Within Groups	1849.41	187	9.89		
	Total	1910.15	192			
MEIM2	Between Groups	300.18	5	60.04	2.973	.013*
(belonging)	Within Groups	3715.28	184	20.19		
	Total	4015.45	189			
AVS	Between Groups	6512.81	5	1302.56	2.120	.066*
						*
	Within Groups	101385.10	165	614.46		
	Total	107897.91	170			
SL-ASIA	Between Groups	161.95	5	32.39	.207	.959
(behavior)	Within Groups	24719.86	158	156.46		
	Total	24881.81	163			
Age	Between Groups	446.16	5	89.23	1.047	.391
	Within Groups	19183.77	225	85.26		
	Total	19629.93	230			

* = p < .05

** = p < .10

APPENDIX P

TUKEY'S POST-HOC TESTS FOR INDEPENDENT VARIABLES:

GENDER AND ETHNICITY INTERACTION

Dependent Variable	(I) Gender Ethnicity	(J) Gender Ethnicity	Mean Difference (I-J)	SE	p	95% Confidence Interval	
						Lower Bound	Upper Bound
MEIM2	Filipino Male	Chinese Male	3.90	1.37	.056	-.06	7.85
(belonging)					**		
		Korean Female	3.94	1.35	.045	.05	7.82
					*		
AVS	Filipino Male	Chinese Female	21.00	6.98	.035	.89	41.12
					*		

* = p < .05

** = p < .10

REFERENCES

Abe, J.S., & Zane, N.W.S. (1990). Psychological maladjustment among Asian and White American college students: Controlling for confounds. *Journal of Counseling Psychology, 37,* 437-444.

Abe-Kim, J., Takeuchi, D. & Hwang, W. (2002). Predictors of help-seeking for emotional distress among Chinese-Americans: Family matters. *Journal of Consulting and Clinical Psychology, 70*(5), 1186-1190.

Agbayani-Siewert, P. (2004). Assumptions of Asian American similarity: The case of Filipino and Chinese American students. *Social Work, 49* (1), 39-52.

Akutsu, P.D., Castillo, E.D., & Snowden, L.R. (2007). Differential referral patterns to ethnic-specific and mainstream health programs for four Asian American groups. *American Journal of Orthopsychiatry, 77*(1), 95-103.

American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., rev.) Washington, DC: American Psychiatric Association.

Anthony, M.M., Orsillo, S.M., & Roember, L. (2001). *Practitioner's Guide to Empirically Based Measures of Anxiety.* New York, NY: Kluwer Academic.

Asnaani, A., Richey, A., Dimaite, R., Hinton, D.E., & Hofmann, S.G. (2010). A cross-ethnic comparison of lifetime prevalence rates of anxiety disorders. *The Journal of Nervous and Mental Disease, 198* (8)*,* 551-555.

Baker, A.M., Soto, J.A., Perez, C.R., & Lee, E.A. (2012, February 13). Acculturative status and psychological well-being in an Asian American sample. *Asian American Journal of Psychology.* Advance online publication. doi: 10.1037/a0026842

Barry, D.T., Bernard, M.J., & Beitel, M. (2006). Gender, sex-role ideology, and self-esteem among East Asian immigrants in the United States. *The Journal of Nervous and Mental Disease, 194*(9), 708-711.

Berry, J.W. (1980). Acculturation as varieties of adaptation. In A.M. Padilla (Ed.), *Acculturation: Theory, models and some new findings* (pp. 9-25). Boulder, CO: Westview Press.

Breslau, J., Aguilar-Gaxiola, S., Borges, G., Kendler, K.S., Su, M., & Kessler, R.C. (2007). Risk for psychiatric disorder among immigrants and their U.S. born descendants: Evidence from the National Comorbidity Survey – replication. *Journal of Nervous & Mental Disease, 195*(3), 189-195.

Brown, E.J., Turovsky, J., Heimberg, R.G., Juster, H.R., Brown, T.A., & Barlow, D.H. (1997). Validation of the Social Interaction Anxiety Scale and the Social Phobia Scale across the anxiety disorders. *Psychological Assessment, 9*(1), 21-27.

Carleton, R.N., Collimore, K.C., Asmundson, G.J.G., McCabe, R.E., Rowa, K., & Antony, M.M. (2009). Refining and validating the Social Interaction Anxiety Scale and the Social Phobia Scale. *Depression and Anxiety, 26*, E71-E81.

Chae, M.H., & Foley, P.F. (2010). Relationship of ethnic identity, acculturation and psychological well-being among Chinese, Japanese and Korean Americans. *Journal of Counseling and Development, 88*, 466-476.

Chen, J.C., & Danish, S.J. (2010). Acculturation, distress disclosure, and emotional self-disclosure within Asian populations. *Asian American Journal of Psychology, 1*(3), 200-211.

Cheng, J.K.Y., Fancher, T.L., Ratanasen, M., Conner, K.R., Duberstein, P.R., Sue, S., & Takeuchi, D. (2010). Lifetime suicidal ideation and suicide attempts in Asian Americans. *Asian American Journal of Psychology, 1*(1), 18-30.

Chung, R.H.G. (2001). Gender, ethnicity, and acculturation in intergenerational conflict of Asian American college students. *Cultural Diversity and Ethnic Minority Psychology, 7*(4), 376-386.

Chung, R.H.G., Kim, B.S.K., & Abreu, J.M. (2004). Asian American Multidimensional Acculturation Scale: Development, factor analysis, reliability, and validity. *Cultural Diversity and Ethnic Minority Psychology, 10*(1), 66-80.

Constantine, M., Okazaki, S., & Utsey, S.O. (2004). Self-concealment, social self-efficacy, acculturative stress, and depression in African, Asian, and Latin American international college students. *American Journal of Orthopsychiatry, 74* (3), 230-241.

David, E.J.R. (2008). A colonial mentality model of depression for Filipino-Americans. *Cultural Diversity and Ethnic Minority Psychology, 14*(2), 118-127.

David, E.J.R., & Okazaki, S. (2006). Colonial mentality: A review and recommendation for Filipino American psychology. *Cultural Diversity and Ethnic Minority Psychology, 12*(1), 1-16.

Dyal, J.A., & Chan, C. (1985). Stress and distress: A study of Hong Kong Chinese and Euro-Canadian students. *Journal of Cross Cultural Psychology, 16*, 447-466.

Espiritu, Y.L. (2001). "We don't sleep around like White girls do": Family, culture and gender in Filipina American lives. *Signs, 26*(2), 415-440.

Gloria, A.M., Castellanos, J., Park, Y.S., & Kim, D. (2008). Adherence to Asian cultural values and cultural fit in Korean American undergraduates' help-seeking attitudes. *Journal of Counseling and Development*, *86*, 419-428.

Grant, B.F., Hasin, D.S., Blanco, C., Stinson, F.S., Chou, S.P., Goldstein, R.B., Dawson, D.A., Smith, S., Saha, T.D., & Huang, B. (2005). The epidemiology of social anxiety disorder in the United States: Results from the national epidemiologic survey on alcohol and

related conditions. *Journal of Clinical Psychiatry, 66*(11), 1351-1361.

Hardin, E.E., & Leong, F.T.L. (2005). Optimism and pessimism as mediators of the relations between self-discrepancies and distress among Asian and European Americans. *Journal of Counseling Psychology, 52* (1), 25-35.

Heidenreich, T., Schermella-Engel, K, Schramm, E., Hoffman, S.G., & Stangier, U. (2011). The factor structure of the Social Interaction Anxiety Scale and the Social Phobia Scale. *Journal of Anxiety Disorders, 25*, 579-583.

Hendershot, C. S., Dillworth, T.M., Neighbors, C., & George W.H. (2008). Differential effects of acculturation on drinking behavior in Chinese-and Korean-American college students. *Journal of Studies on Alcohol and Drugs, 69*, 121-128.

Hong, J.J., & Woody, S.R. (2007). Cultural mediators of self-reported social anxiety. *Behaviour and Research Therapy, 45*, 1779-1789.

Hovey, J.D., Kim, S.E., & Seligman, L.D. (2006). The influence of cultural values, ethnic identity and language use on the mental health of Korean American college students. *The Journal of Psychology, 140*(5), 499-511.

Hsu, L., & Alden, L. (2007). Social anxiety in Chinese- and European-heritage students: The effect of assessment format and judgments of impairment. *Behavior Therapy, 38*, 120-131.

Hwang, W., & Myers, H.F. (2007). Major depression in Chinese Americans: The roles of stress, vulnerability and acculturation. *Social Psychiatry and Psychiatric Epidemiology, 42*, 189-197.

Inglehart, R., Basanez, M., & Mareno, A. (1998). *Human values and beliefs: A cross-cultural sourcebook*. Ann Arbor: University of Michigan Press.

Iwamoto, D.K., & Liu, W.M. (2011). The impact of racial identity, ethnic identity, Asian values and race-related stress on Asian Americans and Asian international college students' psychological well-being. *Journal of Counseling Psychology, 57*(1), 79-91.

Jang, Y., Chiriboga, D.A., & Okazaki, O. (2009). Attitudes towards mental health services: Age-group differences in Korean-American adults. *Aging Mental Health, 13*(1), 127-134.

Javier, J.R., Lahiff, M., Ferrer, R.R., & Huffman, L.C. (2010). Examining depressive symptoms and the use of counseling in the past year among Filipino and Non-Hispanic White adolescents in California. *Journal of Developmental Behavioral Pediatrics, 31*, 295-303.

Kim, B.S.L., Atkinson, D.R., & Yang, P.H. (1999). The Asian Value Scale: Development, factor analysis, validation and reliability. *Journal of Counseling Psychology, 46*(3), 342-352.

Kim, B.K.K., & Omizo, M.M. (2010). Behavioral enculturation and acculturation, psychological

functioning, and help-seeking attitudes among Asian American adolescents. *Asian American Journal of Psychology, 1*(3), 175-185.

Kim, B.S.K., Yang, P.H., Atkinson, D.R., Wolfe, M.M., & Hong, S. (2001). Cultural value similarities and differences among Asian-American ethnic groups. *Cultural Diversity and Ethnic Minority Psychology, 7*(4), 343-361.

Kim, G., Chiriboga, D.A., Bryant, A., Huang, C., Crowther, M., & Ma, G.X. (2012). Self-rated mental health among Asian American adults: Association with psychiatric disorders. *Asian American Journal of Mental Health, 3*(1), 44-52.

Kim, H.S., Sherman, D.K., & Taylor, S.E. (2008). Culture and social support. *American Psychologist, 63*(6), 518-526.

Kim, I.J., Kim, L.I.C., & Kelly, J.G. (2006). Developing cultural competence in working with Korean immigrant families. *Journal of Community Psychology, 34*(2), 149-165.

Kim, W., & Keefe, R.H. (2010). Barriers to healthcare among Asian Americans. *Social Work in Public Health, 25,* 286-295.

Kirmayer, L. J. (1991). The place of culture in psychiatric nosology: Taijin kyofusho and DSM-III-R. *The Journal of Nervous and Mental Disease, 179*(1), 19-28.

Kwan, C.M.L., Chun, K.M., & Chesla, C.A. (2011). Cultural norms shaping research group interviews with Chinese American immigrants. *Asian American Journal of Psychology, 2*(2), 115-127.

Kuo, W. (1984). Prevalence of depression among Asian-Americans. *Journal of Nervous and Mental Disease, 172*(8), 449-457.

Korkmaz, O., Sahin, C., & Usta, E. (2011). The relationship between interaction and audience anxiety levels and internet addiction of adults. *Contemporary Educational Technology, 2*(3), 200-212.

LaFramboise, T., Coleman, H.L.K., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin, 114*, 395-412.

Lai, E.Y.P., & Arquelles, D. (1998). *The new face of Asian Pacific American: Numbers, diversity and change in the 21st century.* Berkeley, CA: UCLA Asian American Studies Center Press.

Lau, A.S., Fung, J., Wang, S., & Kang, S. (2009). Explaining elevated social anxiety among Asian Americans: Emotional attunement and a cultural double bind. *Cultural Diversity and Ethnic Minority Psychology, 15* (1), 77-85.

Leary, M.R. (1983). A brief version of the Fear of Negative Evaluation Scale. *Personality and Social Psychology Bulletin, 9*(3), 371-375.

Lee, R.M. (2003). Do ethnic identity and other-group orientation protect against discrimination for Asian Americans? *Journal of Counseling Psychology, 50*(2), 133-141.

Lee, M.R., Okazaki, S., & Yoo, H.C. (2006). Frequency and intensity of social anxiety in Asian Americans and European Americans. *Cultural Diversity and Ethnic Minority Psychology, 12*(2), 291-305.

Lee, R.M., Falbo, T., Doh, H.S., & Park, S.Y. (2001). The Korean diasporic experience: Measuring ethnic identity in the United States and China. *Cultural Diversity and Ethnic Minority Psychology, 7*(3), 207-216.

Lee, R.M., & Yoo, H.C. (2004). Structure and measurement of ethnic identity for Asian American college students. *Journal of Counseling Psychology, 51*(2), 263-269.

Leu, J., Yen, I.H., Gansky, S.A., Walton, E., Adler, E., & Takeuchi, D.T. (2008). The association between subjective social status and mental health among Asian immigrants: Investigating the influence of age at immigration. *Social Science & Medicine, 66*(5), 1152-1164.

Leung, S.A. & Cheung, P. (2009). Indigenous, Multicultural, and Cross-Cultural Considerations Counseling Psychology in Chinese Communities in Asia. *The Counseling Psychologist, 37*(7), 944-966.

Lin, M.C., Endler, N.S., & Kocovski, N.L. (2001). State and trait anxiety: A cross-cultural comparison of Chinese and Caucasian students in Canada. *Current Psychology, 20*(1), 95-111.

Mak, W.W.S., & Zane, N.W.S. (2004). The phenomenon of somatization among community Chinese Americans. *Social Psychiatry and Psychiatric Epidemiology, 39*, 967-974.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review, 98*, 224-253.

Mattick, R.P., & Clark, J.C. (1998). Development and validation of measures of social phobia scrutiny fear and social interaction anxiety. *Behaviour Research and Therapy, 36*(4), 455-470.

McLean, C.P, Asnaani, A., Litz, B.T., & Hofmann, S.G. (2011). Gender differences in anxiety disorders: Prevalence, course of illness, comorbidity and burden of illness. *Journal of Psychiatric Research, 45*, 1027-135.

Mereish, E.H., Liu, M.M., & Helms, J.E. (2011, October 24). Effects of discrimination on Chinese, Pilipino, and Vietnamese Americans' mental and physical health. *Asian American Journal of Psychology.* Advance online publication. doi: 10.1037/a0025876

Nadal, K.L. (2004). Pilipino American identity development model. *Journal of Multicultural Counseling and Development, 32*, 45-62.

Norasakkunkit, V., & Kalick, S.M. (2002). Culture, ethnicity and emotional distress measures: The role of self-construal and self-enhancement. *Journal of Cross-Cultural Psychology, 33*(1), 56-70.

Norasakkunkit, V., & Kalick, S.M. (2009). Experimentally detecting how cultural differences on social anxiety measures misrepresent cultural difference in emotional well-being. *Journal of Happiness Studies, 10*, 313-327.

Oh, Y., Koeske, G.F., & Sales, E. (2002). Acculturation, stress, and depressive symptoms among Korean immigrants in the United States. *The Journal of Social Psychology, 142*, 511-526.

Okazaki, S. (1997). Sources of ethnic differences between Asian American and White American college students on measures of depression and social anxiety. *Journal of Abnormal Psychology, 106*(1), 52-60.

Okazaki, S. (1998). Teaching gender issues in Asian American psychology: A pedagogical framework. *Psychology of Women Quarterly*, *22*, 33-52.

Okazaki, S. (2000). Asian American and White American differences on affective distress symptoms: Do symptom reports differ across reporting methods? *Journal of Cross-Culture Psychology, 31*(5), 603-62

Okazaki, S. (2002). Self-other agreement on affective distress scales in Asian Americans and White Americans. *Journal of Counseling Psychology, 49*(4), 428-437.

Okazaki, S., & Kallivayalil, D. (2002). Cultural norms and subjective disability as predictors of symptom reports among Asian Americans and White Americans. *Journal of Cross Cultural Psychology, 35*(5), 482-491.

Okazaki, S.; Liu, J. F., Longworth, S. L., & Minn, J. Y. (2002). Asian American-White American differences in expressions of social anxiety: A replication and extension. *Cultural Diversity and Ethnic Minority Psychology, 8*(3), 234-247.

Park, I.J.K; Sulaiman, C.; Schwartz, S.J.; Kim, S.Y.; Ham, L.S.; Zamboanga, & Byron, L. (2011). Self-construals and social anxiety among Asian American college students: Testing emotion suppression as a mediator. *Asian American Journal of Psychology, 2*(1), 39-50.

Phinney, J.S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin, 108*, 499-514.

Phinney, J.S. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with adolescents and young adults from diverse groups. *Journal of Adolescent Research, 7*, 156-176.

Phinney, J.S., & Ong, A.D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*(3), 271-281.

Portes, A., & Zhou, M. (1993). The new second generation: Segmented assimilation and its variants. *Annals of the American Academy of Political and Social Science, 530*, 74-96.

Rodebaugh, T.L., Woods, C.M., Thissen, D.M., Heimberg, R.G., Chambless, D.L., & Rapee, R.M. (2004). More information from fewer questions: The factor structure and item properties of the Original and Brief Fear of Negative Evaluation Scale. *Psychological Assessment, 15*(2), 169-181.

Rubio, R.J., & Green, R. (2011). Filipino men's roles and their correlates: Development of the Filipino Adherence to Masculinity Scale. *Culture, Society & Masculinities, 3*(2), 77-102.

Ruzek, N.A., Nguyen, D.Q., & Herzog, D.C. (2011). Acculturation, enculturation, psychological distress and help-seeking preferences among Asian American college students. *Asian American Journal of Psychology, 2*(3), 181-196.

Sanchez, F., & Gaw, A. (2007). Mental health care of Filipino Americans. *Psychiatric Services, 58*(6), 810-815.

Shea, M., & Yeh, C.J. (2008). Asian American students' cultural values, stigma and relational self-construal: Correlates of attitudes towards professional help seeking. *Journal of Mental Health Counseling, 30*(2), 157-172.

Shen B., & Takeuchi, D.T. (2001). A structural model of acculturation and mental health status among Chinese Americans. *American Journal of Community Psychology, 29*(3), 387-418.

Shin, H., Han, H., & Kim, M.T. (2007). Predictors of psychological well-being amongst Korean immigrants to the United States: A structured interview. *International Journal of Nursing Studies, 44*, 415-426.

Shin, H., Song, H., Kim, J., & Probst, J.C. (2005). Insurance, acculturation and health services utilization among Korean-Americans. *Journal of Immigrant Health, 7*(2), 65-74.

Smith, T.B., & Silva, L. (2011). Ethnic identity and personal well-being of people of color: A meta-analysis. *Journal of Counseling Psychology, 58*(1), 42-60.

Sodowsky, G.R., Kwan, K.K., & Pannu, R. (1995). Ethnic identity of Asians in the United States. In J.G. Ponterotto, J.M. Casas, L.A. Suzuki, & C.M. Alexander (Eds.), *Handbook of multicultural counseling* (123-154). Thousand Oaks, CA: Sage.

Stephan, W. G., & Stephan, C. W. (1989). Antecedents of intergroup anxiety in Asian Americans and Hispanic Americans. *International Journal of Intercultural Relations, 13*, 203-219.

Sue, W. S., & Sue, D. (2003). *Counseling the culturally diverse: Theory and practice* (4th ed.). New York, NY: John Wiley & Sons.

Suinn, R.M., Ahuna, C., & Khoo, G. (1992). The Suinn-Lew Asian Self-Identity Acculturation

Scale: Concurrent and factorial validation. *Educational and Psychological Measurement, 52,* 1047-1046.

Suinn, R.M., Rickard-Figueroa, K., Lew, S., & Vigil, P. (1987). The Suinn-Lew Asian Self-Identity Acculturation Scale: An initial report. *Educational & Psychological Measurement, 47*, 401-407.

Szapocznik, J., Scopetta, M.A., Kurtines, W., & Arandale, M.A. (1978). Theory and measurement of acculturation. *Interamerican Journal of Psychology, 12*, 113-120.

Takeuchi, D.T., Zane, N., Hong, S., Chae, D.H., Gong, F., Gee, G.C., Walton, E., Sue, S., & Alegria, M. (2007). Immigration-related factors and mental disorders among Asian Americans. *American Journal of Public Health, 97*(1), 84-90.

Tang, T.N., & Dion, K.L. (1999). Gender and acculturation in relation to traditionalism: Perceptions of self and parents among Chinese students. *Sex Roles, 41,* 17-29.

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

Tsai, J.L., Ying, Y., & Lee, P.A. (2000). The meaning of "Being Chinese" and "Being American": Variation among Chinese American young adults. *Journal of Cross-Cultural Psychology, 31*(3), 302-332.

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

U.S. Census Bureau. (2010). *Asian/Pacific Heritage Month: May 2010. Census 2010 brief.* Retrieved from http://factfinder.census.gov.

U.S. Department of State. (2012). *Intercountry Adoption.* Retrieved from http://adoption.state.gov/about_us/statistics.php.

Watson, D., & Friend, R. (1969). Measurement of social-evaluative anxiety. *Journal of Consulting and Clinical Psychology, 33,* 448-457.

Weeks, J.W., Heimberg, R.G., Fresco, D.M., Hart, T.A., Turk, C.L., Schneier, F.R., & Leibowitz, M.R. (2005). Empirical validation and psychometric evaluation of the Brief Fear of Negative Evaluation Scale in patients with Social Anxiety Disorder. *Psychological Assessment, 17*(2), 179-190.

Willgerodt, M.A., & Thompson, E.A. (2006). Ethnic and generational influences on emotional distress and risk behaviors among Chinese and Filipino American adolescents. *Research in Nursing & Health, 29*, 311-324.

Wolf, D. (1997). Family secrets: Transnational struggles among children of Filipino immigrants. *Sociological Perspectives, 40*(3), 457-482.

Yeh, C. J. (2003). Age, acculturation, cultural adjustment, and mental health symptoms of Chinese, Korean and Japanese immigrant youths. *Cultural Diversity and Ethnic Minority Psychology, 9*(1), 34-48.

Yip, T., Gee, G.C., & Takeuchi, D.T. (2008). Racial discrimination and psychological distress: The impact of ethnic identity and age among immigrant and United States-born Asian adults. *Developmental Psychology, 44*(3), 787-800

Yoo, H.C., & Lee, R.M. (2005). Ethnic identity and approach-type coping as moderators of the racial discrimination/well-being relation in Asian Americans. *Journal of Counseling Psychology, 52*(4), 497-506.

Yoo, S., Goh, M., & Yoon, E. (2005). Psychological and cultural influences on Koreans' help-seeking attitudes. *Journal of Mental Health Counseling, 27*(3), 266-281.

Xie, D. & Leong, F.T.L. (2008). A cross-cultural study of anxiety among Chinese and Caucasian American university students. *Journal of Multicultural Counseling and Development, 36*, 52-63.