

DEVELOPMENT AND INITIAL VALIDATION OF THE
ETHNIC MINORITY SOCIAL SELF-EFFICACY
SCALE—ASIAN AMERICAN VERSION

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University of Missouri-Kansas City, 2013

ABSTRACT

Asian Americans are reportedly one of the largest growing racial/ethnic minority groups in the United States and have been found to experience a significant amount of interpersonal difficulties (Leong & Okazaki, 2009; Zane & Song, 2007). This study further explored Asian Americans' social experiences and aimed to operationalize Asian American self-efficacy during social interactions with White individuals. The Ethnic Minority Social Self-Efficacy—Asian American Version (EMSSE-AA) was developed to assess Asian Americans' perceived ability to initiate, maintain, and exert efforts to interact with White individuals on a day-to-day basis. Two phases of data collection were used to develop the EMSSE-AA and further assess the scale's psychometric properties. A preliminary study was conducted to generate items and examine the content and process validity of the EMSSE-AA items. The primary study was a quantitative nonexperimental descriptive design and utilized convenience and snowball sampling methods in both on-line and hard-copy survey formats.

Research hypotheses were supported through a series of factor analyses and tests of internal consistency, convergent validity, and discriminant validity using two samples randomly derived from the total 512 sample (Study 1, $n = 298$; Study 2, $n = 214$). Findings yielded a two-

factor structure, including the Asian American Social Engagement subscale (AASE; 14 items) explaining 46.88% of variance in Study 1 and 48.37% of variance in Study 2. The second factor, the Asian American Social Inhibition subscale (AASI; 8 items) explained 10.44% of variance in Study 1 and 8% of variance in Study 2. A total of 57.33% (Study 1) and 56.37% (Study 2) of variance were accounted for by the entire scale. Evidence for internal consistency of EMSSE-AA test items was reflected in Cronbach's alphas ranging from .88 to .96 for both subscales across Sample 1 and Sample 2. Overall findings provide evidence for the construct validity of the EMSSE-AA and measures of acculturation to mainstream culture, ethnic identity, social self-efficacy, social anxiety, and social desirability. Results support the initial assessment of the scale's psychometric properties. Limitations of the current study, implications for future research, and directions for application of findings for counseling psychology are provided.

APPROVAL PAGE

The faculty listed below, appointed by the Dean of the School of Education, have examined the dissertation titled “Development and Initial Validation of the Ethnic Minority Social Self-Efficacy Scale—Asian American Version” presented by Young Sohn Song, candidate for the Doctor of Philosophy degree, and certify in their opinion it is worthy of acceptance.

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CHAPTER 1

INTRODUCTION

Asian Americans are reportedly one of the largest growing racial/ethnic minority groups in the United States and represent a diverse group of individuals of Far East, Southeast Asia, and Indian subcontinent decent (United States Census Bureau, 2010). Historical, social, and political movements have influenced much of today's common perceptions of Asian Americans as an adjusted and "model-minority" group in comparison to other racial/ethnic minority groups. These perceptions have displaced societal barriers that are commonly experienced by minorities, minimizing challenges faced by Asian Americans (Leong & Okazaki, 2009; Suzuki, 2002). Contrary to this, research has indicated that Asian Americans tend to experience difficulty in interpersonal effectiveness (Zane & Song, 2007). They are viewed as quiet, verbally inhibited, and nonassertive during interpersonal interactions (Zane, Sue, Hu, & Kwon, 1991; Zane & Song, 2007), which may interfere with skills needed to effectively interact with other persons in the United States. Additionally, comparative studies between Asian American and Caucasian American college students have shown that Asian Americans experience higher levels of social anxiety, report significantly more interpersonal difficulties including greater apprehension in social settings, and more social anxiety in situations that require assertiveness (Sue, Ino, & Sue, 1983; Sue, Sue, Hu, & Kwon, 1991; Zane & Song, 2007).

Rationale for Scale

Scholars have made attempts to reconstruct the traditional paradigms of psychological study by emphasizing both the comparative and contextual approaches to understanding psychosocial aspects of minority groups including, but not limited to, racial/ethnic minorities.

For instance, multicultural theories advise helping professionals to have an advanced understanding and awareness of White privilege, an expression of power and social dominance of White European-Americans over racial/ethnic minorities through the attainment of unearned immunities and benefits (McIntosh, 1998). However, little attention has been paid to understanding how racial/ethnic minorities perceive and socially maneuver interactions with White individuals. A more developed perspective of how racial/ethnic minorities deal with these experiences would not only further enhance multicultural theories, but also provide a better account of how a particular minority group manages such societal conditions. In other words, research has not clearly identified how peoples of a specific racial/minority group perceive White Americans while managing personal efficacy beliefs during these social interactions.

To address this gap, the proposed study aims to develop a scale that will assess Asian Americans' perceived social self-efficacy when in contact with White individuals. The Ethnic Minority Social Self-Efficacy Scale—Asian American Version (EMSSE-AA) will be developed to operationalize Asian Americans social self-efficacy beliefs during day-to-day contact with White individuals and assessed for its reliability and validity.

Foundation of Scale

Self-efficacy is a person's belief about his/her ability to exercise control over life events (Bandura, 1986). This construct is derived from Bandura's social cognitive theory, and it is proposed to be a significant proponent of one's capacity to learn and perform specific tasks (Bandura, 1986). Individuals are active agents and have the capacity to influence their own experiences and development and perform in such a manner to obtain desired outcomes (Bandura, 1986; Bandura 1993; Bandura 1997). Bandura referred to this

as human agency. This includes belief systems and self-regulatory abilities that enable individuals to have an active role in their environment (Bandura, 1986; Bandura, 1993).

Social self-efficacy, a type of self-efficacy, is defined as an individual's perceived ability to engage in social interactional tasks necessary to initiate and maintain interpersonal relationships (Capara et al., 2010; Liang & Prince, 2008). Social self-efficacy beliefs arguably help individuals overcome social and contextual challenges and develop a sense of personal control and self-worth that enhances their mastery of social experiences (Capara et al., 2010; Liang & Prince, 2008). Social self-efficacy beliefs are significantly positively associated with expressing caring, assertiveness, and self-esteem (Hermann & Betz, 2006).

Furthermore, self-efficacy is said to influence outcomes through various psychological processes including cognitive, motivational, affective, and selective processes (Bandura, 1989; Bandura, 1992; Bandura, 1997; Bandura, 2001). *Cognitive processes* refer to thought patterns that may aid or hinder individuals (Bandura, 1989). Individuals with a high sense of efficacy visualize success that in turn provides a positive frame for goal setting and achievement attainment (Bandura, 1989). However, individuals who perceive themselves inefficacious will likely think they are failures and dwell on their poor performances (Bandura, 1989). *Motivational processes* involve how much effort one places on performing a task and persistence during a task even in the face of obstacles (Bandura, 1989). Individuals with stronger beliefs in their abilities will likely be more persistent in their efforts, whereas individuals who doubt their abilities will likely abort their efforts (Bandura, 1989). *Affective processes* involve emotional reactions that influence outcomes both directly and indirectly by changing the nature and course of thinking (Bandura, 1989). Individuals who believe they can exercise control over potential threats do not develop

apprehensive cognitions nor feel perturbed by them (Bandura, 1989). In contrast, individuals who cannot manage potential threats may experience high levels of stress and anxiety, which may constrain and/or impair their functioning (Bandura, 1989). Lastly, *selective processes* enable individuals to create optimal environments to enhance their performance and effectively exercise control over their environment (Bandura, 1989). Taken together, these four psychological processes are integral in the development of social self-efficacy beliefs and influences outcomes (Bandura, 1989). Thus, these psychological processes will be used as a theoretical framework to develop the EMSSE-AA items.

Measures of Bicultural and Cross-Racial Self-Efficacy. Currently, no measure observes Asian Americans' perceived social self-efficacy during contact with White individuals. However, a handful of instruments have attempted to observe constructs similar to the EMSSE-AA. For instance, Briones and colleagues (2009) developed the cultural self-efficacy scale for adolescents. This scale measured socio-cultural adaptation of sojourners and their cross-cultural interactions with native individuals. Additionally, David and colleagues (2009) created a bicultural self-efficacy scale that measured bicultural individuals in the United States and their efficacy in relation to their management of social interactions with individuals from varying cultural groups. Lastly, Liang and Prince (2008) developed a cross-racial self-efficacy instrument that was designed to measure self-efficacy beliefs about individuals' ability to understand and interact with culturally diverse groups.

The aforementioned scales were found to measure unique aspects of personal efficacy and the manner in which self-efficacy influences social interactional tasks with individuals of different cultural and racial groups. These studies not only substantiate the need to understand how minority individuals (of cultural/racial groups) manage their self-efficacy

during interpersonal transactions with majority persons, but these measures also identify how the association between efficacy and social interactions influence overall well-being and cultural adjustment. Results from these studies have identified significant positive correlations between high levels of cultural self-efficacy with greater cultural contact and perception of cultural enrichment, higher academic expectations, and greater preference for integrating with others (Briones et al., 2009). Bicultural self-efficacy was significantly positively associated with life satisfaction, general self-efficacy, and higher levels of racial/ethnic identity (David et al., 2009) and significantly negatively associated with negative aspects of cultural adjustment (David et al., 2009).

However, limitations of these studies/measures reflect that (a) these instruments include mixed samples of varying cultural and racial/ethnic groups and the social interactions measured were not unique to the interpersonal transactions between racial/ethnic minorities and White individuals and (b) these studies failed to address cultural values held by cultural and racial/ethnic individuals and their implications on self-efficacy during cross-cultural/racial transactions, and (c) the authors failed to address how the development of the scales were theoretically driven and whether or not the resulting factor structure accurately reflected Bandura's theory of self-efficacy. Provided these limitations, these measures would not be appropriate to use in assessing Asian American perceived social self-efficacy in interactions with White individuals. Hence, the EMSSE-AA measure is needed and would further improve upon current knowledge of cross-cultural and racial interactions.

Scale Development and Validation

In developing the EMSSE-AA, recommendations from DeVellis (2003) were utilized to develop the initial EMSSE-AA scale items. DeVellis (2003) identified an 8-step process

to operationalize the construct of interest. The process entails evaluation of the construct according to literature and creation of items. Items should reflect the scale's purpose. The initial EMSSE-AA should have more items and redundancy in items to ensure that the construct was adequately reflected. Further, recommendations for the format, structure, and development of scale were also used to strengthen the scale's properties and utility (DeVellis, 2003). Validation measures are needed to assess the construct validity of the instrument (DeVellis, 2003). Convergent validity will be assessed through observed relationships between the EMSSE-AA and measures of social self-efficacy, acculturation, ethnic identity, and social anxiety. Additionally, discriminant validity will be assessed through the observed relationship between the EMSSE-AA and a measure of social desirability.

The acculturative process of Asian Americans' attitudes, values, and identities has been studied as a result of their contact to both Asian and American cultures and adaptive experiences to American culture. The definition of acculturation is the adaptation to dominant U.S. cultural norms. Studies have established the relationship between self-efficacy and levels of cultural adjustment/acculturation (Briones et al., 2009; Hecanova-Alampay et al., 2002; Piontkowski et al. 2002; Tsang 2001). Specifically, Kim and Omizo (2005) found significant positive correlations between self-efficacy and levels of acculturation among an Asian American college student sample. This provides evidence to suggest that Asian American social self-efficacy is positively associated with higher levels of acculturation and cultural adjustment.

Studies have also observed the relationship between ethnic identity, one's awareness of self with respect to others' perceptions, and aspects of Asian American interpersonal transactions (Alvarez & Helms, 2001; David et al., 2009; Kim-Ju & Liem, 2003). Distinct

from acculturation, which is the degree to which one had adapted to a culture, ethnic identity models are used to understand how one feels part of a group based on one's perception of shared characteristics and cultural heritage. Hence, ethnic identity is an essential facet of Asian American psychosocial functioning and should be observed in relation to Asian American social self-efficacy when in contact with White individuals. Moreover, David and colleagues found significant positive relationships between bicultural self-efficacy, general self-efficacy, and racial/ethnic identity among a sample of 164-bicultural college students, of which 106 self-identified as Asian American. Subsequently, social self-efficacy can be argued to be involved in the process and development of acculturation and ethnic identity. For this reason, I expect to find positive correlations between the EMSSE-AA measure and Asian American acculturation and ethnic identity.

Social anxiety, which refers to fears relating to social interactions, is highly endorsed by Asian Americans relative to their Caucasian American counterparts (Okazaki, 1997, Okazaki, 2002, Ho & Lau 2011; Hsu et al., 2012). Research has attempted to explain Asian American social experiences, as a result of consistent findings in comparative literature between Asian American and Caucasian Americans. Social self-efficacy has been found to significantly negatively correlate with social anxiety among Asian American adults (Hsu et al., 2012). Moreover, literature has addressed the tandem relationship between the two constructs. Specifically, research argues Asian Americans' uncertainty about social behavioral norms in a predominately White dominant society likely accounts for high levels of social anxiety through a diminished sense of self-efficacy (Hsu et al., 2012). This further suggests that the two constructs are similar, and a significant negative correlation between EMSSE-AA and social anxiety would be found.

Moreover, social desirability is commonly thought of as the tendency to project favorable images of one's self (Crowne & Marlowe, 1960). This construct has been used to refer to a characteristic of test items (i.e., their scale position on a social desirability scale), but it has also been used to assess for construct validity of self-efficacy measures. For instance, David and colleagues (2009) used the Marlowe-Crowne Social Desirability Scale (MCSD) to test the discriminant validity of the Bicultural Self-Efficacy Scale (BSES). Results yielded small to moderate correlations between the MCSD and BSES. This would suggest that EMSSE-AA is likely unrelated to social desirability. The researcher expects to find a positive correlation between the EMSSE-AA and social desirability with a moderate to small magnitude.

The Present Study

Altogether, this study proposes to address a gap in literature that has yet to identify specific features of cultural adjustment for Asian Americans with respect to their psychosocial experiences during day-to-day contact with White individuals. The main focus of this study is to develop a reliable and valid measure of Asian American perceived social self-efficacy during interpersonal contact with White individuals. For the current study, the researcher defines Asian American perceived social self-efficacy as one's perceived ability to initiate and maintain interactions with White individuals on a day-to-day basis (Bandura, 1986, Capara et al., 2010, Liang & Prince, 2008; Smith & Betz, 2000). Bandura's theory of personal self-efficacy will be used as a guiding theoretical framework to generate items for the EMSSE-AA instrument. Dimensions of social self-efficacy will also be derived from semi-structured interviews with Asian Americans regarding their self-efficacy beliefs during interactions with White individuals.

In sum, the current study aims to explore the factor structure of the EMSSE-AA, assess the dimensionality of the scale, and further substantiate the stability of the scale and factors across two samples. The psychometric properties, including test reliability and validity, of the EMSSE-AA will be assessed. In terms of validity, various aspects of the EMSSE-AA content, process, and construct validity will be examined to determine the appropriateness and utility of the scale.

CHAPTER 2

REVIEW OF LITERATURE

A theoretical and empirically-based framework outlining Asian Americans' perceived social self-efficacy in relation to White individuals is needed to develop the Ethnic Minority Social Self-Efficacy Scale for Asian Americans (EMSSE-AA). As such, the following will review Bandura's social cognitive theory, the construct of self-efficacy, and self-efficacy instruments that measure constructs similar to the EMSSE-AA (e.g., bicultural self-efficacy, cross-racial self-efficacy scales). Literature on Asian American psychosocial experiences in the United States, including Asian cultural values and their influence on social relatedness and functioning, will be discussed. Asian American perceived social self-efficacy will then be defined in reflection of literature review. Lastly, the development and examination of the EMSSE-AA's psychometric properties will be presented.

Social Cognitive Theory

The construct social self-efficacy is derived from social learning theory and Bandura's social cognitive theory. This comprehensive theory analyzes the role of cognitive, self-regulatory, self-reflective, and vicarious processes along with psychosocial functioning of human motivation and action—social cognitive theory. Bandura recognized that cognitive processes mediated social learning and are emergent activities that influence behavior (Bandura, 1986). Individuals can mentally conceive unique experiences and different novel responses, and they can choose to execute any one of them (Bandura, 1986).

Central to this theory is triadic reciprocal causation/determinism. The products of various factors such as personal (e.g., cognitive, affective, and biological), environmental, and behavioral interact with one another and influence individual behavior (Bandura, 1986).

Moreover, these factors operate as interacting determinants influencing one another bidirectionally (Bandura, 1986). Some factors may be stronger than others and reciprocal influences of these factors may not occur simultaneously

Social cognitive theory also emphasizes the importance of human agency. The core features of agency embody belief systems and self-regulatory capabilities that enable individuals to have an active role in their self-development and exert control over factors listed in the triadic reciprocal model (Bandura, 1993; Bandura, 1989). Individuals are active agents and have the capacity to influence their own experiences and development. Individuals can perform in ways to obtain desired outcomes. Bandura posed that self-generated acts lie at the core of the casual processes within the model (Bandura, 1989). People can affect change in themselves and in their surroundings (Bandura, 1989). Individuals make contributions to their own motivation and action within the system of triadic reciprocal causation. According to this model, the self influences the selection and construction of external environmental determinants. The impact of most determinants on human motivation, affect, and behavior is heavily mediated through the self processes (Bandura, 1989).

Self-Efficacy and Psychological Processes. According to Bandura, a person's belief about his/her ability to exercise control over life events is the most important mechanism of human agency (Bandura, 1986). Self-efficacy is defined as one's perceived belief in initiating and successfully executing courses of action for specific goals (Bandura, 1989; Bandura, 1986). These are beliefs one has about his/her capacity to learn and/or perform specific tasks that directly affect behavior. Bandura (1986) posed that self-efficacy is constructed on the basis of information provided by four main sources; mastery experiences

(personal performance and accomplishments), vicarious experiences (observation of other's people performance attainments), social persuasion (support or lack of support received from significant others for engaging in particular activities), and physiological and affective states (physical and emotional reactions to personal experiences). Self-efficacy beliefs also influence thought patterns that may aid or hinder the individual. For instance, self-efficacy beliefs may affect goal setting through self-appraisals (Bandura, 1986). The stronger the individual's perceived self-efficacy, the higher goals the individual may set for his/herself (Bandura, 1986). Further, studies found higher levels of self-efficacy predicted successful goal attainment (Kim & Omizo, 2005) and enhanced interpersonal skills (Gist, Stevens, & Bavetta, 1991).

Social Self-Efficacy. Social self-efficacy, a domain of self-efficacy, has been derived and applied to specific areas of psychological study to best understand Asian Americans' social experiences with White individuals (Hsu et al., 2012; Liang & Prince, 2008). Bandura (1997) posed that individuals can exhibit differing levels of efficacy beliefs in various life domains to the extent that individuals form beliefs about what they achieve and the likely consequences of their actions. Perceived social self-efficacy provides a framework in understanding individual's perceived capacity to engage in social interactional tasks necessary to initiate and maintain interpersonal relationships (Capara et al., 2010; Liang & Prince, 2008). Social self-efficacy has been argued to be a powerful determinant of behavioral change because self-efficacy expectancy determines the initial decision to perform a behavior, the effort spent, and persistence in the face of difficulties. In sum, development of an Asian American social self-efficacy scale observing interpersonal contact between Asian Americans and White individuals would tap into the social self-efficacy beliefs

developed to initiate, maintain, and work through challenges presented through social transactions.

Studies have found that high social self-efficacy helps individuals overcome social and contextual challenges and in turn, develop a sense of personal control. Having high social self-efficacy also instills a sense of personal efficacy and self-worth, which can promote a mastery of social experiences (Capara et al., 2010). For instance, researchers found significant negative correlations between social self-efficacy and shyness, social anxiety, loneliness, and depression (Wei, Russell, & Zakalik, 2005) and with adjustment problems using indicators of acculturative stress and depressive symptomology among an international student sample (Constantine, Okazaki, & Utsey, 2004). Herman and Betz (2006) found social self-efficacy to be significantly positively correlated with expressiveness (expressive caring, sensitive qualities), instrumentality (characteristics of independence, mastery, self-reliance, and assertiveness) and self-esteem. Social self-efficacy was also found to be significantly negatively associated with depression and loneliness (Herman & Betz, 2006).

Taken together, these studies identify the associations between social self-efficacy and facets of psychological well-being (Constantine et al., 2004; Herman & Betz, 2006; Wei et al., 2005). The aforementioned studies also provide evidence to implicate that higher levels of social self-efficacy among Asian Americans may assist in developing a personal sense of control over social interactions (Capara et al., 2010), be associated with higher levels of esteem (Herman & Betz, 2006), and be varying indicators of positive interpersonal expressiveness (Herman & Betz, 2006). However, it should be noted that these studies did not use predominately Asian samples. For instance, Wei and her colleagues (2005) observed

the effects of social self-efficacy on the relationship between attachment and symptoms of depression among 308 freshmen at a large Midwestern university. Of those participants, only 7 self-identified as being Asian American (Wei et al., 2005). Additionally, 136 of 320 international students were from Asian countries in Constantine and colleagues' (2004) study, and about 49 participants of 696 undergraduate students were reportedly of Asian American/Pacific Islander descent in Herman and Betz's (2006) study. Nonetheless, development of the EMSSE-AA would further clarify how a specific domain of social functioning among Asian Americans influence facets of psychosocial well-being and better account for the relationships between social self-efficacy and psychological outcomes.

Relevant Measures of Self-Efficacy

The current study aims to construct a scale that measures perceived social self-efficacy among Asian Americans during social contact with White individuals. In my review of instruments addressing self-efficacy during cross-racial contact, no scale measuring this specific aspect of Asian American social self-efficacy was found. That said, five measures of self-efficacy were found to assess personal self-efficacy beliefs in relation to social experiences of racial/ethnic minority groups. However, after a thorough review of these instruments, only four measures were found to be relevant to the current study and closely related to the EMSSE-AA. Moreover, there appears to be a general consensus that self-efficacy is especially important in cross-cultural interactions (Bandura, 2006; Briones et al., 2009; Fan & Mak, 1998). In consideration of this, explicit review of these scales is necessary to determine how the proposed EMSSE-AA instrument will further advance the field's understanding of Asian American perceived self-efficacy during social contact with White individuals. The following section will provide details about these four scales that

were most relevant to the present study and arguments for why development of the EMSSE-AA is needed. (For an overview of these five instruments in regard to their composition, samples used, and psychometric properties, see Table 1.)

Table 1
Relevant Measures of Self-Efficacy.

Scale	Scale Composition	Sample	Factor Analysis	Internal Consistency
<i>General Social Self-Efficacy Scales</i>				
PSSE	25-items 5-point Likert type response (1 = no confidence at all to 5 = complete confidence)	354 undergraduate students (90 males; 264 females) 76% Caucasian American, 2.8% Asian American	Maximum likelihood factor analysis; one factor (eigenvalue of 10.17) 40.70% of variance explained	Coefficient alpha = .94 Test-retest reliability over 3- week interval $r = .86$ males; $r = .80$ females)
PSSE Chinese	25-items 5-point Likert type response (1 = no confidence at all to 5 = complete confidence)	372 Chinese undergraduate students at a large university in east coast China 173 Chinese undergraduate students in east coast China	Confirmatory factor analysis; one latent factor Mean standard loadings of .56	Coefficient alpha ranges = .65 to .93
<i>Cultural Self-Efficacy</i>				
CSES-A	25-items 5-point Likert type scale (ranging from 1 = can not do at all to 5 = certain can do)	929 adolescent students between the ages of 12 – 18 years	Confirmatory factor analysis; 5 – factor solution 58.96% of variance explained	Cronbach's alpha = .95
<i>Bicultural Self-Efficacy</i>				
BSES	26-items 9-point Likert type scale (ranging from 1 = strongly disagree, 5 = neutral, 9 = strongly agree)	268 ethnic minority undergraduate students	Principal-axis factor analysis; 6 – factor solution 37.10% of variance explained	Coefficient alphas reported for subscales: Social groundedness = .91, Communication ability = .79, Positive attitudes towards groups = .89, Knowledge of cultural beliefs and values = .80, Role repertoire = .69, and Bicultural beliefs = .77
<i>Cross-Racial Self-Efficacy</i>				
CRSE	8-items 5-point Likert type scale (ranging from 1 = a major weakness to 5 = a major strength)	Longitudinal data where initial survey responses consisted of 2,911 first-year college student respondents, including 67.5% European American, 13.1% Asian American, 10% African American, 4.7% Latino/a, 0.2% indigenous peoples, 0.4% foreign, and 4.0% unknown. Second phase including 879 college students.	Goodness of model fit was observed: CFI = .99, RMSEA = .02, $\chi^2(11, N = 879) = 16.23, p = .133$	Internal consistency reported for Time 1 was $r = .77$ and Time 2 was $r = .80$

Note. PSSE = Perceived Social Self-Efficacy Scale (Smith and Betz, 2000). PSSE-Chinese = Perceived Social Self-Efficacy Chinese versions (Fan et al., 2010). CSES-A = Cultural Self-Efficacy Scale for Adolescents (Briones et al., 2009). BSES = Bicultural Self-Efficacy Scale (Constantine, Okkazki, and Utsey, 2004). CRSE = Cross Racial Self-Efficacy Scale (Liang & Prince, 2008)

General Social Self-Efficacy Scales. Several existing measures have been designed to assess perceived social self-efficacy. Smith and Betz (2000) developed the most commonly used social self-efficacy measures named the Scale of Perceived Social Self-Efficacy (PSSE). It measures self-efficacy expectations in relation to six domains of social functioning including making friends, pursuing romantic relationships, social assertiveness, performance in public situations, groups or parties, and giving or receiving help. Authors of the PSSE defined social self-efficacy as one's confidence in his/her ability to engage in social transactional tasks necessary to initiate and maintain relationships. Items from the scale include "Start a conversation with someone you don't know very well", "Express your feelings to someone", and "Keep up your side of the conversation". The scale uses a confidence-rating continuum with 1 being "no confidence at all" and 5 being "complete confidence." Findings from the study indicated significant positive correlations between high social self-efficacy with social confidence and significant negative correlations with shyness, which was defined as anxious self-preoccupation/social anxiety and behavioral inhibition when in the presence of others (Smith & Betz, 2000).

Factor analysis of the PSSE indicated a single general factor structure, with an eigenvalue of 10.17 and with 40.70% of the variance explained. Loadings of the 25 scale items also ranged from .55 to .72. However, no theoretical or empirical support was provided for the development of the six domains included in the PSSE. The authors reported choosing to address the six domains because they wished to cover these specific aspects of social functioning. The EMSSE-AA, however, is specific to Asian American and White American social contact and this domain of functioning is particular to Asian Americans' perceived self-efficacy beliefs in initiating and successfully maintaining social contact.

Furthermore, Bandura's theory of the personal self-efficacy and the psychological processes, including cognitive, motivational, affective, and selective, related to self-efficacy beliefs provides a more thorough framework in understanding Asian American self-efficacy during their interactions with White individuals. Provided this, development of the EMSSE-AA in relation to these psychological processes may better account for the multidimensional aspects of the Asian American perceived social self-efficacy.

Furthermore, Fan and colleagues (2010) validated the PSSE among a Chinese adult population to understand Chinese adults' social interaction within the university and work setting. In a series of two studies that included undergraduate students in the People's Republic of China, the study assessed the psychometric properties of the translated items. The PSSE-Chinese was analyzed using a confirmatory factor analysis, and a single factor was found to be consistent with PSSE. Findings reported moderate positive correlations between the PSSE-Chinese with personal and collective self-esteem and general self-efficacy. Additionally, the PSSE-Chinese scores predicted participants' reported social adjustment. The standardized factor loadings ranged from .46 to .64, with a mean loading of .54, and acceptable convergent and discriminant validities were found (Fan et al., 2010). Findings from this study provide empirical evidence to support the cross-cultural validity of the PSSE and the construct social self-efficacy among the Chinese adult population. However, results from the study, again, do not imply that the PSSE is an appropriate measure of Asian American social self-efficacy in regard to social contact with White individuals. This also suggests that the PSSE-Chinese version is not an appropriate measure for construct of interest, and the EMSSE-AA would be a better measure of Asian American social self-efficacy during social contact with White individuals. That said, the PSSE would be useful

to observe the construct validity of the EMSSE-AA because these two scales measure similar aspects of personal self-efficacy beliefs. The EMSSE-AA is specific to Asian American minority experiences with social interactions with White individuals and the PSSE assesses general efficacy in various social situations. Therefore, the PSSE will be used to assess the convergent validity of the EMSSE-AA instrument.

Cultural Self-Efficacy. Briones and colleagues (2009) developed a 25-item cultural self-efficacy scale for adolescents (CSES-A). They hypothesized that individuals with high levels of cross-cultural self-efficacy may be more likely to succeed in their interaction, expect positive experiences (cognitive process), may be less likely to feel anxious in cross-cultural interactions, feel more satisfaction when establishing new relationships with people from different cultural groups (affective process), may feel more prone to have cross-cultural contacts and enjoy its benefits (motivational process), and may choose to have contact despite differences in communication and ambiguity (selection process) when compared to those with low self-efficacy. Moreover, authors argued that the socio-cultural adaptation of sojourners was related to self-efficacy in cross-cultural interactions (Briones et al., 2009; Tsang, 2001). Research reported that individuals who feel confident in managing their efficacy are more likely to seek new cultural experiences and experience reduced levels of uncertainty in future cross-cultural interactions (Tsang, 2001). Also, international students' general and social self-efficacy was found to be significantly positively correlated to their adaptation to a new culture and was significantly negatively correlated with their stress levels (Hechanova-Alampay et al., 2002).

Briones and colleagues developed the CSES-A and defined cultural self-efficacy as a set of behaviors and congruent attitudes that allow the individual to function effectively in

intercultural situations. The study's sample included 926 students between the ages of 12 and 18 years in Spain. Sample items from the measure include "Speaking to people from a different culture, I can realize what I know about that culture", "If I lived in a different culture, I would be able to make new friends", and "Approaching a different culture, I can understand the art of a different culture". Results yielded a five-factor solution explaining 58.96% of the variance. The factors were self-efficacy in mixing satisfactorily with other cultures, self-efficacy in understanding other ways of life, self-efficacy in coping with homesickness and separation, self-efficacy in processing information about other cultures, and self-efficacy in learning and understanding a foreign language. Briones et al. also reported significant positive correlations between levels of CSES-A with cultural contact and perception of cultural enrichment, higher academic expectations, and greater preference in integrating with others.

Altogether, review of the CSES-A instrument is important because the study's findings further implicate the effects of cultural interaction on individual functioning and the benefits of increasing cross-cultural contact. However, the CSES-A is specific to cultural self-efficacy in regard to interacting with individuals of different cultures and adjusting to a foreign culture. The CSES-A and its items would not be adequate in observing Asian Americans' social self-efficacy in regard to interpersonal contact with White individuals in the American culture. Thus, development of the EMSSE-AA would better define and account for Asian American social self-efficacy and functioning in a mainstream White society.

Bicultural Self-Efficacy. David, Okazaki, and Saw (2009) developed the Bicultural Self-Efficacy Scale (BSES) to understand bicultural individuals' perceived ability to function

competently in two cultures. Using LaFramboise et al.'s model of bicultural competency (2009), researchers proposed that bicultural individuals must learn to negotiate and be accountable to two sets of cultural groups or "audiences." They argue that these individuals would consistently face challenges in attempting to meet the demands of the two cultural groups. The individual would also experience difficulties managing social interactions with varying cultural groups (e.g., perceived discrimination). In a series of three studies, the samples included undergraduate college students of varying racial/ethnic backgrounds, namely Asian Americans, African Americans, Latino/a Americans, and Multicultural/ "other" Americans. The BSES was found to have adequate psychometric properties and a factor structure of six dimensions reflective of the bicultural competency proposed by LaFramboise et al. (1993). Bicultural competence includes (a) knowledge of cultural beliefs and values of both cultures, (b) positive attitudes towards both groups, (c) bicultural efficacy, or belief that one can live in a satisfying manner in both cultures without jeopardizing one's cultural identity, (d) communicate effectively in both cultures, (e) role repertoire, or exhibit a range of culturally appropriate behaviors, and (f) sense of groundedness, the extent to which the individual has established social networks in both cultures (LaFramboise et al., 1993). Items from the scale included "I can count on both mainstream Americans and people from the same heritage culture as myself", "I can communicate my ideas effectively to both mainstream Americans and people from the same heritage culture as myself", "I have generally positive feelings about both my heritage culture and mainstream American culture", "I am knowledgeable about the history of both mainstream America and my cultural group", "An individual can alter his/her behavior to fit a particular social context", and "It is acceptable for an individual from my heritage culture to participate in two different cultures".

One major limitation of this measure is that it does not recognize the unique experiences related to specific racial/ethnic groups' experiences in the United States. This measure assumes that the two cultural groups in which the individual is involved in are equal in significance and nature. Meaning that, for Asian Americans, the two cultural groups may not share characteristics that are comparable (e.g., culture of family heritage opposed to a more predominate cultural group). The proposed EMSSE-AA instrument will specifically identify the manner in which members of particular cultural group, Asian Americans, develop personal self-efficacy. The BSES neglects to address the unique cultural experience of particular racial/ethnic minority groups and assumes that self-efficacy beliefs are similar for all racial/ethnic minorities (e.g., African American, Hispanic American).

Cross-Racial Self-Efficacy. In 2008, Liang and Prince developed the cross-racial self-efficacy (CRSE) scale. The instrument was designed to measure cross-racial self-efficacy, which is an individual's belief in his/her ability to understand and interact with culturally diverse groups. The authors hypothesized that those individuals who have engaged in cross-racial interactions (CRI) will likely increase their CRSE and that a relationship between cross-racial mastery experiences and cross-racial self-efficacy exists. Items were administered at two times (e.g., during a six-week period in their second year) to a total of 879 undergraduate college students. An exploratory factor analysis yielded eight items that demonstrated adequate psychometric properties. The participants were asked to rate themselves on the eight items using a 5-point Likert type response scale. Items reflected areas of cross-racial self-efficacy such as one's "Ability to work cooperatively with diverse people," "Racial and cultural awareness," and "Knowledge of other cultures". Reliability coefficient alphas of .77 and .80 were reported, for time one and two respectively. Findings

also reported effect sizes between .00 to .01, which suggest that little to no variance was accounted for by the items.

Findings suggested that items developed for the CRSE scale were not adequate, as reflected by the reported by the small effect sizes. Moreover, CRSE items seem broad and appear to only tap into areas of cross-racial self-efficacy for the general college student population. Items are not specific to varying types of cross-racial interactions, nor do items reflect the processes involved in the development of self-efficacy posed by Bandura (1989). Additionally, researchers failed to address racial/ethnic minority cross-racial experiences with White individuals. Theoretical consideration of the varying psychosocial experiences of racial/ethnic minority interactions with White individuals should be noted and better integrated in the development of CSES items. The proposed EMSSE-AA instrument would better account for cross-racial self-efficacy beliefs between Asian Americans and White individuals. The EMSSE-AA is proposed to address the unique cultural experiences of Asian Americans in the United States and further explain self-efficacy beliefs in interpersonal functioning with White individuals.

Taken together, these measures reflect current trends in literature that have attempted to operationalize social functioning and self-efficacy of individuals from varying cultural groups (Briones et al., 2009; David et al., 2009; Fan et al., 2010; Fan & Mak, 1998; Liang & Prince, 2008). Review of measures suggests that self-efficacy is pertinent to interpersonal functioning between individuals of different cultural groups (Briones et al., 2009; David et al., 2009; Liang & Prince, 2008). Findings also suggest that self-efficacy is associated with increased cross-cultural contact, feelings of ease when interacting with individuals of host culture (Fan & Mak, 1998), and greater preference to integrate with culturally diverse

individuals (Briones et al., 2009). Additionally, it appears that self-efficacy beliefs were significantly positively associated with levels of life satisfaction, bicultural identity integration, collective self-esteem, ethnic identity development, academic self-efficacy, and general self-efficacy and negatively associated with higher levels of depressive symptomology (David et al., 2009). Conclusively, review of the aforementioned measures suggests that observation of racial/ethnic minority personal self-efficacy is critical in understanding interpersonal/cross-cultural interactions and individual well-being. Thus, development of the EMSSE-AA is arguably needed to further improve upon the aforementioned studies to observe a specific context of social functioning among Asian Americans and their minority experiences with White individuals.

The current study will improve upon the aforementioned scales by (a) exclusively observing Asian American self-efficacy in social interactions and developing a scale consisting of only Asian Americans, (b) address a specific domain of social self-efficacy that in turn provides a more in depth understanding of Asian American social interaction with White individuals in the United States, (c) utilize Bandura's theoretical framework in development of the scale and provide justification for the factor structure of the proposed scale, and (d) specifically understand how aspects of one's awareness as a minority are associated with personal efficacy in social situations.

Asian Americans in the United States

Bandura (2006) recommended that it is first necessary to develop a conceptual understanding of the selected domain of functioning to specify which aspects of personal efficacy are being measured. Following Bandura's recommendation and in conjunction with the limitations of current cultural and cross-cultural efficacy scales, the sections following

will provide a literature review of Asian American psychosocial functioning and explore how societal perceptions may have influenced the development of Asian American social self-efficacy in the United States.

According to the 2010 United States Census, Asian Americans represent approximately 4.8% of the United States population and the largest growing racial group in the United States (United States Census Bureau, 2010), where a significant proportion reportedly reside in west and east coast regions of the United States (Leong et al., 2007). The term *Asian American* applies to members of over 25 groups that have been classified as a single group because of their common ethnic origins in Asia and the Pacific Islands, similar appearance, and shared cultural values (Uba, 1994). This includes individuals of Asian descent from varying countries in the Far East, Southeast Asia, and Indian subcontinent decent (United States Census Bureau, 2009). *Asian American* is currently a term designated for individuals who reside in the United States (and Canada) of full or part-Asian decent (Uba, 1994). Moreover, Asian American psychology has for the most part focused on the notion of *Asian American* as a cultural group opposed to a racial group, as reported the United States Census Bureau (Leong et al., 2007).

Much of today's common perceptions of Asian Americans are attributed to various historical and social movements. Leong and Okazaki (2009) argue that historical knowledge of immigration legislation that has targeted Asian groups provides a fundamental understanding of Asian American experiences. As early as 1854, there exist reports of legal discrimination and denial of various Asian immigrants' rights (Leong & Okazaki, 2009). Each Asian group that entered the United States was originally welcomed and contracted for labor, but later rejected because American employers sought cheaper labor. Historical

reports have noted that the entry of Asian cheap laborers caused American workers to rebel and local, state, and federal level political forces began putting into effect the exclusion of Asian populations (Leong & Okazaki, 2009).

In 1882, Congress passed the Chinese Exclusion Act that suspended the immigration of Chinese laborers for 10 years and declared them ineligible for citizenship (Leong & Okazaki, 2009). The act was later made permanent in 1904 (Leong & Okazaki, 2009). Anti-Asian sentiments greatly limited the rights of Asians already in the United States. Local and state laws also prevented Asians from owning businesses and Asian children from entering public schools with other children (Leong & Okazaki, 2009). The law also restricted the entry of all Asian groups by 1934 (Leong & Okazaki, 2009). During World War II, direct actions were taken towards Japanese Americans during the forced relocation and internment by the United States government in 1942 (Leong & Okazaki, 2009). Regardless of their citizenship status, all individuals of Japanese ancestry were interned in War Relocation Camps for approximately four years.

After the war, the United States began modifying the restrictive policies on Asian immigration and naturalization. Laws were enforced to limit immigration and ensure that the ethnic composition of the United States was not tarnished (Leong & Okazaki, 2009). Immigration later resumed after World War II with the arrival of women from China, Japan, and Korea who married American soldiers (Chan, 1991). Then, following the Vietnam conflict and fall of Saigon, the United States admitted large numbers of refugees from Southeast Asia including Vietnam, Laos, and Cambodia in the 1970s (Leong & Okazaki 2009).

Around this time, the media and Americans began developing a stereotype of Asian Americans as well-adjusted, hard-working, successful, and high academic achievers (Leong & Okazaki, 2009). In 1966, the *New York Times* published an article titled “Success Story, Japanese American Style”. In that same year, *US News and World Report* also released an early articulation of the model minority myth stating “at a time when it is being proposed that hundreds of billions be spend to uplift Negroes and other minorities, the nation’s 300,000 Chinese Americans are moving ahead of their own with no help from anyone” (Peterson 1966, p. 73; as cited in Lee, 1996, p. 6). This label of being the model minority was commonly used to brand Asian Americans as higher achieving when compared to other ethnic/racial groups (Suzuki, 2002). With the rise of social justice and demands for African American and Hispanic American rights, it is likely that the model minority myth was also used to discredit others’ rights and their movement for equality (Suzuki, 2002).

Stereotypes of Asian Americans and Effects. American societal perceptions of Asians have evolved in time due to varying changes from domestic labor/workforce trends to international affairs. These events have led to the development of assumptions, stereotypes, and prejudices towards Asian peoples. Today, aggregate statistics support that the model minority image of Asian Americans betrays the variability within this population (Leong & Okazaki, 2009). Stereotypes lead to misconceptions justifying the exclusion of Asian communities in the distribution of assistance programs and slight the achievements of Asian American individuals (Leong & Okazaki, 2009). Consequently, Asian Americans may be placed in categories to which they do not belong simply because little is known about their culture and/or historical and societal pressures.

Literature has also paid close attention to how Asian Americans are received in the American culture and how Asian Americans manage discrimination and racism in various forms (e.g., microaggressions). For instance, Sue and colleagues (2007) identified eight themes related to experiences of discrimination for Asian Americans including “alien in own land, ascription of intelligence, exoticization of Asian women, invalidation of interethnic differences, denial of racial reality, pathologizing of cultural values/communication styles, second class citizenship, and invisibility” (p. 72). Literature has also implicated that Asian Americans are often misperceived as foreigners from abroad, perpetuating stereotypes and ideals that *Americans* are always White (Sue et al., 2007). Their race and ethnicity are confused and mistaken by the general public, and they must manage stressors associated with their family immigrant status (Cheryan & Tsai, 2007; as cited in Iwamoto & Liu, 2010). In effect, research has found racial discrimination to significantly correlate with higher levels of anxiety (Cassidy et al., 2004), depression (Cassidy et al., 2004), suicidal ideation (Hwang & Goto, 2008), and overall psychological stress (Lee & Ahn, 2011).

Additionally, in a meta-analytic review of racial discrimination and Asian mental health from 22 different peer-review journal articles through January 2010, Lee and Ahn (2011) found significant relationships between racial discrimination and mental health among Asian Americans ($r = .23$). Results indicated that individual resources, including personal strengths, personality, social support, cultural identity, and coping strategies were significantly related to racial discrimination. These findings implicate that personal adjustments in coping with discriminatory acts and individual identity as an Asian American minority in the United States influence the development of personal efficacy. These beliefs are likely necessary in combating challenging encounters with White individuals (Bandura,

1986). Thus, the EMSSE-AA would be useful in identifying how self-efficacy beliefs influence the process by which Asian Americans internalize racism and discrimination and outcomes of daily contact with White individuals.

Asian American Psychosocial Functioning and Self-Efficacy. A majority of Asian Americans have lived in the United States for two or three family generations (Kin, Ng, & Ahn, 2005). Consequently they are influenced by cultural values, beliefs, and worldviews that greatly affect the way they engage with others in social settings (Kim, Atkinson, & Yang, 1999). Specifically, research findings have indicated that Asian Americans endorse cultural values including conformity to norms, emotional self-control, family recognition, collectivism, humility, and filial piety (Kim, Atkinson, & Yang, 1999). These values are consistent with studies that have found Asian Americans to primarily endorse collectivistic or interdependent self-construals, in contrast to White Americans who tend to possess individualistic or independent self-construals (Markus & Kitayama, 1991; Triandis, 1989). In developing the EMSSE-AA, it is critical to understand Asian American cultural values and the manner in which cultural factors influence interpersonal functioning with White individuals. The following literature review will discuss the effects of Asian American values on interpersonal functioning and its impact on Asian American social self-efficacy beliefs during social contact with White individuals.

Triandis (1989) outlined theoretical links to aspects of the self, including private, public, and collective, that vary in different cultures. Individuals from an individualistic culture tend to stress independence and self-reliance (Markus & Kitayama, 1991; Triandis, 1989). In contrast individuals in collectivistic cultures give priority to group goals (Markus & Kitayama, 1991; Triandis, 1989). Markus and Kitayama (1991) also described what is

known as the two divergent construals of the self, including interdependent and independent views. They argued that Asian Americans primarily endorse interdependent self-construals in contrast to independent self-construals endorsed by White Americans (Markus & Kitayama, 1991). The significant difference between the two construals is how one defines the self-and-other relation. Others and the surrounding context are important in both construals. However, for the interdependent self, others are included within the boundaries of the self because relations with others are the defining features of the self (Markus & Kitayama, 1991). With an independent construal of self, on the other hand, others are less implicated in one's current self-identity (Markus & Kitayama, 1991). These construals have been shown to influence many fundamental aspects of Asian American social functioning (Mak, Law, & Teng, 2011).

Additionally, scholars have provided compelling support that many Asian Americans experience difficulties in interpersonal effectiveness (Zane & Song, 2007). For instance, Asian Americans have been documented to experience issues surrounding interpersonal effectiveness in social relations relative to White individuals (Sue, Ino, & Sue, 1983; Zane & Song, 2007). Researchers have noted that Asian Americans tend to be quiet, verbally inhibited, nonassertive, and compliant (Zane & Song, 2007). Asian Americans report social deficits and problems including greater social anxiety and more apprehension during social encounters when compared to their Caucasian American counterparts (Sue, Ino, & Sue, 1983), more social anxiety in situations that require assertiveness (Zane, Sue, Hu, & Kwon, 1991), discomfort in situations that require interpersonal fluency (Callao, 1973), and lowered mental health, over conformity, and feelings of inadequacy (Sue, Zane, & Sue, 1985).

These findings suggest that Asian Americans experience higher levels of social anxiety and report more interpersonal difficulties when compared to Caucasian American samples (Sue, Ino, & Sue, 1983; Zane & Song, 2007). In turn, Asian Americans may display a lack of social skills needed to make advancements during initial contact with White individuals. Lack of requisite skills likely affects their interpersonal functioning with White Americans, which may also produce challenges in the development of self-efficacy beliefs. Development of the EMSSE-AA would further advance research observing how self-efficacy is associated with facets of social functioning among Asian Americans, in light of the literature that has pointed to Asian Americans, at times, exhibiting interpersonal skills that reflect personal threat and anxiety (Sue, Ino, & Sue, 1983; Zane & Song, 2007). A more accurate understanding of how Asian Americans engage with White individuals, in relation to their self-efficacy beliefs, would help the profession acknowledge the psychological processes involved in engaging and enhancing self-efficacy beliefs toward optimal responses between Asian American and White individual interactions.

Ethnic Minority Social Self-Efficacy—Asian American Version

The current study aims to operationalize the latent variable—Asian American perceived social self-efficacy in daily social contact with White individuals by developing a self-report scale assessing this variable. DeVellis's (2003) steps for scale construction and methods of analyzing the scale validity and reliability will be used. An 8-step process was identified as methods to develop the EMSSE-AA (DeVellis, 2003). This process includes (a) determine clearly what it is you want to measure, (b) generate an item pool, (d) determine the format for measurement, (d) have the initial item pool reviewed by experts, (e) consider the

inclusion of validation items, (f) administer items to a representative sample, (g) evaluate the items, and (h) optimize scale length.

During the initial stages of scale development, the researcher must have a clear idea of what he/she wishes to study and how the measure in development may be used (DeVellis, 2003). The researcher will need to have a strong theoretical framework for the study so that items may be appropriately developed and coincide with the desired factors under consideration (DeVellis, 2003). The researcher should also generate an item pool that reflects the scale's purpose, maintain a certain degree of redundancy, and include a large number of items (DeVellis, 2003). Scale items should be readable, relatively short, and only ask one question at a time (DeVellis, 2003). Response to items can also include options such as Likert scaling and semantic differential responses (DeVellis, 2003). DeVellis (2003) also recommended inclusion of other validation items, such as social desirability items, to assess the validity of the scale items. In reflection of these steps, the following sections will provide a definition of Asian American social self-efficacy in regard to interpersonal contact with White individuals and summarize the theoretical/empirical relationships of constructs posed to best assess the psychometric properties of the EMSSE-AA instrument.

Definition of Asian American Perceived Social Self-Efficacy. There exists a general consensus that personal self-efficacy in cross-group contact consists of several characteristics relevant to the EMSSE-AA. Based on the information gathered from research studies, these characteristics include (a) the belief that an individual may exercise control over social interactions (Bandura, 1986, Bandura, 1997), (b) perception surrounding one's capacity and/or confidence to engage in social interactional tasks, which require one to initiate social contact and wish to maintain some form of relationship (Capara et al., 2010;

Liang & Prince, 2008; Smith & Betz, 2000), (c) perceived expectations which may or may not encourage the initial decision to interact and spend effort to continue the interaction in the face of difficulties or posed challenges (Bandura 1986, Bandura, 1997, Liang & Prince, 2008; Smith & Betz, 2000), and (d) perception of one's ability to interact with others that will influence the outcome of the interaction (Bandura, 1986; Bandura, 1997; Kim & Omizo, 2005; Gist, Stevens, & Bavetta, 1991). Therefore, Asian American perceived social self-efficacy in relation to social contact with White individuals is one's perceived ability to initiate, maintain, and continue to spend effort in his/her interaction with White individuals on a day-to-day basis.

According to Bandura's theory, self-efficacy comprises psychological processes including cognitive, motivational, affective, and selective process (Bandura, 1986). In developing the EMSSE-AA, it is important to identify features of self-efficacy and the processes involved because literature has supported a multidimensional structure of self-efficacy scales (Briones et al., 2009; Fan & Mak, 1998; Smith & Betz, 2000). DeVellis (2003) also argued that theory will provide clarity to what the scale is measuring and the level of specificity in which the construct is being measured. It is necessary to reflect upon Bandura's theory of self-efficacy and identify underlying characteristics associated with Asian American perceived social self-efficacy in relation to contact to White individuals.

Cognitive Processes. Specifically, Bandura theorized that self-efficacy beliefs involve thought patterns that may aid or hinder individuals (Bandura, 1989). Behaviors are regulated by cognized goals, and personal goals are influenced by self-appraisals of one's capabilities (Bandura, 1989). A major function of thinking is to enable individuals to predict the occurrence of events and create means in exercising control over such events (Bandura,

1989). This requires the processing of multidimensional information that may include uncertainties, in which individuals must draw on their knowledge to generate hypotheses and further test their judgments (Bandura, 1989). Additionally, people's perception of their efficacy will influence outcomes (Bandura, 1989). As such, individuals who have a high sense of efficacy visualize successful scenarios that provide a positive guide for performance, whereas individuals who perceive themselves as inefficacious will likely visualize failure and dwell on performing poorly (Bandura, 1989).

Motivational Processes. Self-efficacy is also determined by motivation, which is how much effort the individual will exert when performing a task and how long they choose to persevere in the face of obstacles while performing the task (Bandura, 1989). The stronger their belief in their abilities, the more persistent are their efforts (Bandura, 1989). For instance, when individuals are exposed to difficulties, individuals may doubt their capabilities and/or abort their attempts and quickly settle for mediocre solutions (Bandura, 1989). In contrast, individuals who have a strong belief in their capabilities will exert greater effort to master the challenge (Bandura, 1989). Literature suggests that individuals must have a robust sense of personal efficacy to sustain their efforts to succeed (Bandura, 1986). Self-doubt will naturally arise when faced with difficult challenges, but more importantly, is it the speed in which individuals recover from their perceived efficacy from difficulties and negative self-appraisals (Bandura, 1989). Some individuals will quickly recover, but others will lose faith in their abilities (Bandura, 1989), thus suggesting that the level of resiliency towards difficult challenges and setbacks is important in how efficacy influence performance outcomes.

Affective Processes. Self-efficacy is also influenced by stress and affect when experiencing threatening or taxing situations (Bandura, 1989). Emotional reactions may affect outcomes both directly and indirectly by altering the nature and course of thinking (Bandura, 1989). Individuals who believe they can exercise control over potential threats do not develop apprehensive cognitions nor feel perturbed by them (Bandura, 1989). In comparison, individuals who believe they cannot manage potential threats experience high levels of stress and anxiety, and they tend to dwell on their coping deficiencies and view their environment as hostile (Bandura, 1989). They may create more distress for themselves and constrain and impair their functioning (Bandura, 1989). Moreover, Bandura argues that individuals avoid potentially threatening situations, not because they are overwhelmed with anxiety, but because they perceive they are unable to cope with situations they believe are risky (Bandura, 1989).

Selective Processes. The aforementioned efficacy-related psychological processes, including cognitive, motivational, and affective, enable people to create optimal environments to enhance performance quality and effectively exercise control over their environment (Bandura, 1989). That said, the selection and construction of one's environment also affects personal efficacy (Bandura, 1989). Individuals will avoid activities and situations they believe exceed their coping abilities, and they undertake challenging activities and select social environments they perceive they are capable of handling (Bandura, 1989). Furthermore, selected environments may also promote certain competencies, values, and interests in relation to the development of one's self-efficacy (Bandura, 1989).

In summary, the aforementioned psychological processes are integral in the development of personal efficacy and the manner in which efficacy influence outcomes

(Bandura, 1989). The current study aims to use Bandura's theory to develop the EMSSE-AA (DeVellis, 2003). The EMSSE-AA will reflect the psychological processes (e.g., cognitive, motivational) involved in the development of personal self-efficacy when measuring social aspects of cross-racial contact between Asian American and White individuals. For the list of scale items, please see Appendix A and B.

Instrument Reliability and Validity. Examining individual's responses to the EMSSE-AA and its relationship with other constructs and variables can provide evidence to substantiate psychometric properties of the scale, including reliability and validity (Gall, Gall, & Borg, 2007; Heppner, Wampold, Kivlighan, 2008). Operationalization of the construct is likely to be inadequate if psychometric properties are poor, and the opposite is also true (Gall et al., 2007; Heppner et al., 2008).

Reliability concerns the degree to which measures are free from measurement error. According to classical test theory, reliability of a test also refers to the degree to which measurement error is absent from the scores yielded by the test (Gall et al., 2007). It is also the variance in scores that is due to the true difference among individuals. However, some of the variance in the obtained score are due to factors other than differences in the true score (Gall et al., 2007). This may be due to measurement error, which is the difference between an individual's true score on a test and the scores he/she actually obtained on the test when the test is administered over a variety of conditions (Gall et al., 2007). Theoretically, a true score will never be obtained (Gall et al., 2007). The researcher may be able to estimate the true score and measurement error in the computation of the reliability coefficient (where 1 is a perfect reliability of the test score). Internal consistency, which is a type of test reliability, estimates the test score reliability by examining the individual items of the test (Gall et al.,

2007). For this method, the Cronbach's alpha coefficient can be used to assess the reliability of test items (Gall et al., 2007). Scores of .70 or higher are sufficiently reliable for research purposes (Gall et al., 2007).

Furthermore, evidence of validity ascertains that a scale is measuring the concept intended (Gall et al., 2007). When there is ambiguity about a construct, a confound exists and the measure may not be representative of its intended constructs (Heppner et al., 2008). Construct validity, which is how well the independent variable represents the construct being measured (Gall et al., 2007), includes convergent and discriminant validity. Establishing construct validity involves the evaluation of measures against each other (Gall et al., 2007; Heppner et al., 2008). A set of variables presumed to measure the same construct provides evidence for convergent validity if their intercorrelations are at least moderate in magnitude (Heppner et al., 2008). Furthermore, variables presumed to measure different constructs provides evidence of discriminant validity if their intercorrelations are not too high (Heppner et al., 2008). Content validity concerns whether test items are representative of the domain they are supposed measure (Gall et al., 2007; Heppner et al., 2008). Expert opinion is the basis for establishing that the item content is representative of the construct (Gall et al., 2007; Heppner et al., 2008). Chapter 3 will discuss specific methods used to explore content validity and measures used to assess for evidence of convergent and discriminant validity of the EMSSE-AA.

Construct Validity. Following the development of EMSSE-AA scale, assessment of the scale's relationships with validation measures is needed for evidence of construct validity (DeVellis, 2003). This method will provide support for claims of validity or provide clues as to why the items within the scale do not perform as anticipated (DeVellis, 2003). As

previously mentioned the PSSE will be used to assess the convergent validity of the EMSSE-AA by observing the association between personal self-efficacy in social situations and self-efficacy in regard to one's minority status and social contact with White individuals.

Construct validity of the EMSSE-AA will be examined through relationships with acculturation, ethnic identity, social self-efficacy, social anxiety, and social desirability. The following section will outline theoretical and empirical rationale for using these constructs in assessment of the EMSSE-AA's construct validity.

Acculturation. When discussing the psychosocial experiences of Asian Americans, it is necessary to understand the manner in which Asian Americans are socialized to change and maintain their respective cultures. In 1980, Berry and colleagues developed a two-continua model of acculturation where one continuum represents *contact to participation*, the extent to which people become involved with another cultural group, and the second continuum that represents *cultural maintenance*, the extent that cultural identity and characteristics are considered important and maintained. Berry and his colleagues (1980) also theorized four acculturation statuses. These were attitudes based on a combination of high and low levels of acculturation and enculturation including *marginalization*, *separation*, *assimilation*, and *integration*. *Marginalization* refers to when an individual who has no interest in maintaining and/or acquiring proficiency in any culture, including the dominant and indigenous culture. Marginalization may be the most problematic of the four statuses because Asian Americans in this status will tend to reject both sets of norms. *Separation* occurs when the individual does not absorb cultural norms of the dominant culture and continues to maintain proficiency in his/her culture of origin. Individuals in this status are

strongly enculturated and not acculturated. Asian Americans in this status typically maintain Asian cultural norms, but have no interest in adhering to mainstream U.S. cultural norms.

Assimilation occurs when the individual absorbs the dominant cultural group while rejecting their indigenous culture. Individuals are highly acculturated, but not enculturated. Asian Americans in this category maintain cultural norms in the American culture but have no interest in adhering cultural ties with their Asian culture. *Integration*, also known as the bicultural status, occurs when individuals are said to be proficient in both the culture of the dominant group and their indigenous culture. They are highly acculturated and enculturated. They are assumed to be functional in both cultures and able to reconcile conflicts that arise between the two cultural systems. Integration (or bicultural) status has been argued to be psychologically healthiest for Asian Americans because, in theory, they can function effectively in both indigenous and dominant cultures and may exhibit increased cognitive functioning and better mental health (LaFromboise, Coleman, & Gerton, 1993). Further, bicultural competence has been coined as a process where individuals are able to successfully meet the demands of two distinct cultures (LaFromboise et al., 1993). Thus, for Asian Americans, the process of acculturation is the adaptation of U.S. cultural norms and enculturation is becoming socialized into and maintaining the norms of the Asian culture.

In 2005, Kim and Omizo examined 156 Asian American college students' behavioral acculturation to U.S. norms and behavioral enculturation to Asian cultural norms and their relationship to ratings on measures including cognitive flexibility, general self-efficacy, collective self-esteem, acculturative stress, and attitudes toward help-seeking. They argued that cognitive flexibility was a critical component of biculturalism, referring to one's ability and willingness to be flexible and adapt to any situation. For bicultural individuals, this skill

reflects how well individuals cope with and reconcile potential conflicts as they maneuver through varying cultural systems. Kim and Omizo (2005) reasoned that bicultural individuals would have higher levels of self-efficacy because they must maneuver through two different cultures successfully when compared to European Americans. Participants in the study were college students attending a West Coast university between the ages of 18-24 and mostly of Chinese ethnic backgrounds (48.7%). Findings provided partial support for the authors' hypotheses, however results indicated that Asian American adherence to European American values was positively associated with cognitive flexibility and general self-efficacy, accounting for 21% to 11% of the variance, respectively. Results suggested that Asian Americans who adhere strongly to European American values perceived themselves as having the capacity to cope with novel situations and having the competency to deal effectively with the demands of these situations.

Altogether these findings suggest that Asian Americans' general self-efficacy was associated with adherence to European American cultural values and with bicultural competence as described by LaFromboise et al. (1993). It seems that general self-efficacy beliefs are interrelated with cultural values and experiences related to Asian Americans' bicultural identity. In this regard, Asian American experiences in the United States as a minority group impacts their self-efficacy.

Although there exists a limited number of empirical studies found to observe Asian American self-efficacy and acculturation, taken together, this study in addition to empirical findings reported from Constantine and colleagues (2004) and David and colleagues (2009) substantiate the significant positive relationship between self-efficacy and levels of acculturation. This indicates that acculturation levels are associated with Asian American

social self-efficacy. Asian Americans' perceived abilities to initiate social contact with White individuals in the United States influences their acculturation processes. Thus, EMSSE-AA would likely positively correlate with Asian American acculturation to the U.S. mainstream culture.

Ethnic Identity Development. Asian ethnic identity reflects the degree in which individuals view themselves as members of an Asian cultural group and incorporate Asian cultural values and practices into their self-concept (Cheryan & Tsai, 2007; Phinney, 1996). It also includes the practice and maintenance of ethnic group behaviors, knowledge and awareness of cultural beliefs, and traditions of one's ethnic group (Iwamoto & Liu, 2010). Phinney and colleagues (1994) identified four ways minority youth deal with ethnicity including *assimilation*, trying to adopt the majority culture's norms and standards while rejecting those of their own group, *marginality*, living within the majority culture but feeling estranged and out casted, *separation*, associating with only members of their own culture and rejecting the majority, and *biculturalism*, maintaining ties to both majority and minority cultures.

Literature currently argues that ethnic identity is a dynamic concept that depends on one's immediate environment (social cues) and defined within a larger system of power (Cheryan & Tsai, 2007). Kim-Ju and Liem (2003) further examined the influence of ethnic identity group status in the American society (i.e., dominant/European American versus minority/Asian American ethnic group) and observed the extent to which individuals become aware of their ethnic differences in social situations. Participants consisted of 82 individuals, including 58 Asian Americans and 24 European Americans. Using a quasi-experimental design, college student participants were posed with vignettes where they were likely to

encounter few, some, or many peers from their ethnic group (e.g., cafeteria, classroom, and dormitory). They found that when imagining interaction with a group of White American strangers, Asian ethnic identity was more salient for Asian Americans when compared to their imagined interaction with a group of ethnically diverse strangers.

Also, Asian ethnic identity was more salient when Asian Americans imagined they were interacting with strangers of their same race when compared to interacting with a group of ethnically diverse strangers, but the same was not true for White Americans (Kim-Ju & Liem, 2003). Research implies that Asian American identities may be heightened when exposed to random social contact with White Americans. White Americans may not perceive a more heightened sense of ethnic identity when randomly interacting with other White individuals because this experience is common and not thought of along ethnic domains (Cheryan & Tsai, 2007). It appears that Asian American identities are not fixed, but instead fluid and process-driven. Individuals' ethnic identities vary as a function of the social context (Cheryan & Tsai, 2007; Kim-Ju & Liem, 2003). A person's identification with ethnicity may be relatively stable (during a particular stage of development; Cheryan & Tsai, 2007; Kim-Ju & Liem, 2003). Moreover, aspects of social identity are a conscious feature of self-awareness that can vary according to immediate circumstances (Kim-Ju & Liem, 2003).

David, Okazaki, and Sue (2009) found significant positive relationships between bicultural self-efficacy, general self-efficacy, and ethnic identity, as measured by the Multidimensional Ethnic Identity Measure (MEIM). The sample consisted of 164 bicultural undergraduate students enrolled in an introductory psychology course from a large Midwestern university. Approximately 66 respondents were born outside of the United States, and the rest of the sample was born in the United States. Their average age was 19.2 years,

and 106 of the participants identified themselves as Asian Americans. A limitation exists in this study, as the sample consisted of a mixed racial group and findings are not generalizable. Nonetheless, results from the study provide empirical support for the relationship between personal self-efficacy beliefs and ethnic identity where a significant majority of the sample consisted of Asian Americans.

There exists limited empirical evidence supporting the relationship between Asian American social self-efficacy during social contact with White individuals and their sense of ethnic identity. In spite of this, literature suggests that individuals with higher levels of ethnic identity (e.g., biculturalism) would endorse an increased awareness of self, enabling the individual to possibly move towards integrating his/her Asian and American identity (David et al., 2009). The individual would also work towards ethnic identity achievement, according to Phinney (1990) and gain an appreciation for his/her ethnicity and resolution of conflicts with the dominant group. Thus, individuals would likely feel empowered and confident in maneuvering through regular social contact with White individuals. Review of varying ethnic identity models further suggest that at higher levels of ethnic identity, individuals are committed towards social change and appreciation of both the self and other, respectively. Theoretically, it appears that this higher end of ethnic identity would converge with Asian American perceived social self-efficacy.

Social Anxiety. Social anxiety is defined as fears relating to social interaction. Asian Americans have notably been found to endorse higher levels of social anxiety when compared to their European American counterparts, with medium effect sizes (Okazaki, 1997, Okazaki, 2002, Ho and Lau 2011; Hsu et al., 2012). As such, studies have attempted to explore reasons for high levels of social anxiety experienced by Asian Americans and the

relationship between social anxiety and self-efficacy. Hsu and colleagues (2012) observed East Asian's socialization in Canada and identified social anxiety and social self-efficacy as components of social behaviors that affected the socialization process. They referred to social anxiety as a function of one's social standards in conjunction with social self-efficacy beliefs. Higher levels of social anxiety were arguably due to tensions that arise from navigating cultural conflicts and lower social self-efficacy beliefs. Hsu and colleagues (2012) conducted a comparative study observing social anxiety among individuals of East Asian-heritage (EAH) and Western-heritage (WH). The EAH sample consisted of 280 participants and the WH sample consisted of 180 participants, from a Vancouver university college sample between the ages of 17 and 30 years.

Social anxiety was operationalized using the Social Phobia and Anxiety Inventory (SPAI). The SPAI measures the frequency of affective, cognitive, somatic, and behavioral symptoms of social anxiety. The Interpersonal Competency Questionnaire (ICQ) includes three subscales measuring one's ability to initiate contact (Initiation subscale), to turn down unreasonable requests (Negative Assertion), and sharing personal thoughts (Disclosure subscale). The ICQ subscales were used to operationalize social self-efficacy beliefs. Results yielded significant negative relationships between of social anxiety and social self-efficacy subscales. Initiation social self-efficacy was found to partially mediate the relationship between cultural group (e.g., EAH, WH) and social anxiety. In other words, initiation social self-efficacy partially mediated higher scores of social anxiety among EAH. Findings suggest a theoretical relationship between social anxiety and social self-efficacy and a correlation between the EMSSE-AA and measures of social anxiety is likely. Thus,

evidence for convergent validity would be found in the relationship between EMSSE-AA and a measure of social anxiety.

Social Desirability. Social desirability refers to the need for social approval or acceptance. This need results in the human tendency to present oneself in the best possible light, which may entail individuals giving or selecting responses they perceive to be most socially acceptable (Crowne & Marlowe, 1960). Social desirability bias is also typically observed when studying the validity of self-report questionnaires (DeVellis, 2003; Reynolds, 1982). A low correlation between a social desirability measure and focal measure suggests that results are not biased in a socially desirable manner (Reynold, 1982). If a high correlation is found, the focal measure can be modified in order to minimize socially desirable responses or statistical procedures can be used to employ control for social desirability bias (Reynold, 1982).

Furthermore, the construct social desirability has been used to observe the discriminant validity of self-efficacy measures. Namely, David and colleagues (2009) used the Marlowe-Crowne Social Desirability Scale (MCSD) to test the discriminant validity of the BSES. Results from the study indicated small intercorrelations between the MCSD and BSES subscales including Social Groundedness, Communication Ability, Positive Attitudes Toward Both Groups, Knowledge of Cultural Beliefs and Values, Role Repertoire, and Bicultural Beliefs. These findings suggest that social desirability is a construct that is not related to Asian American self-efficacy during social contact with White individuals, and theoretically, it appears that these two constructs are unrelated.

The Present Study

The literature review up until this point has discussed aspects of Asian American perceived self-efficacy during social contact with White individuals and identified the need for an instrument assessing this aspect of Asian American psychosocial functioning. Despite the profession's recognition of cultural diversity, little attention has been paid to understanding how ethnic minorities develop social self-efficacy beliefs in mainstream American society. Moreover, current instruments that have attempted to observe this aspect of personal self-efficacy are not specific to Asian American social experiences in the United States and would not be appropriate to use. Hence, there is need for a reliable and valid measure of Asian American perceived social self-efficacy during interpersonal contact with White individuals. The purpose of the current study is to address this gap in literature, and develop such a measure. Based on this literature review, items will be generated for the EMSSE-AA. Items will then be piloted interviewing Asian American adults. The items will also go through an extensive review from an expert panel consisting of psychologists who could attest to the content validity of the items according to the construct of interest (DeVellis, 2003). In terms of validity analyses, the current study will examine the extent to which the scale converges with similar constructs including higher levels of ethnic identity, acculturation, and social self-efficacy. Lower levels of social anxiety will converge with the scale, and the relationship between the scale will show an unrelated relationship with social desirability bias.

The current study will address the following goals and hypotheses based on the literature review:

Goal 1. Explore the factor structure of the newly developed EMSSE-AA.

Hypothesis 1: The EMSSE-AA scale will reflect a multidimensional factor structure.

Goal 2. Provide evidence of reliability for the EMSSE-AA.

Hypothesis 2: Internal consistency of EMSSE-AA items will be reflected in reliability of test item scores with a Cronbach's alpha of .70 or above.

Goal 3. Provide evidence of construct validity, through tests of convergent validity of the EMSSE-AA.

Hypothesis 3: The relationship between ethnic identity and EMSSE-AA will reflect a positive moderate to large correlation.

Hypothesis 4: The relationship between acculturation to the mainstream culture and EMSSE-AA will reflect a positive moderate to large correlation.

Hypothesis 5: The relationship between social self-efficacy and EMSSE-AA will reflect a positive moderate to large correlation.

Hypothesis 6: The relationship between social anxiety and EMSSE-AA will reflect a negative moderate to large correlation.

Goal 4. Provide evidence of construct validity, through tests of discriminant validity of the EMSSE-AA.

Hypothesis 7: The relationship between social desirability and EMSSE-AA will reflect a correlation that is small in magnitude.

CHAPTER 3

METHOD

Target Sample

The focus of this study was to develop and validate the EMSSE-AA. As such, the target population for the current study was Asian American adults in the United States. The term *Asian American* applies to members of over 25 groups that have been classified as a single group because of their common ethnic origins in Asia and the Pacific Islands, similar appearance, and shared cultural values (Uba, 1994). This includes individuals of Asian descent from varying countries in the Far East, Southeast Asian and Indian subcontinents. *Asian American* is a term designated for individuals who reside in the United States (and those in Canada) of full or part-Asian descent (Uba, 1994), and Asian American psychology has for the most part focused on the notion of *Asian American* as a cultural group opposed to a racial group (Leong et al., 2007).

As of 2012, approximately 5.6% of the United States total population consists of Asian Americans (United States Census Bureau, 2010). Within this group, a majority of individuals identify as Chinese (21.9%), Indian (19.8%), Filipino (17.8%), Vietnamese (10.8%; United States Census Bureau, 2010). Other Asian ethnicity groups included Korean (9.9%), Japanese (5.3%), Hmong (1.7%), and Taiwanese (1.4%; United States Bureau, 2010). Approximately 20.9% of Asian American adults identify as *Other Asian* that include mix of two or more Asian ethnicities and/or mixed with another race (United States Census Bureau, 2010). Census statistics have provided evidence to suggest that a relatively high proportion of Asian Americans are marrying outside of their ethnicity, suggesting that the *Other Asian* demographic category consists of a growing body of Asian American adults in

the United States (United States Census Bureau, 2010). Moreover, with regard to the geographic distribution of the Asian American population, a majority of individuals reside in the West (22%; United States Census Bureau, 2010). Approximately 22% reside in the South, 20% in the Northeast, and 12% in the Midwest regions of the United States.

A total of 512 participants completed the study. Individual cases were screened to ensure criteria for the study was met (e.g., Asian American adults between the ages of 18 through 30). Validity items were also checked for accuracy of reports. Data were then aggregated and imputed into the Statistical Package for Social Sciences (IBM SPSS Statistics Version 20). For hypothesis testing purposes, Sample 1 and Sample 2 were extracted from the 512 total sample to assess the EMSSE-AA factor structure and stability of the factor structure across two samples. Sample 1 consisted of 60% of cases ($n = 298$) that were randomly selected from the total data set. Sample 2 included the remaining 40% of cases ($n = 214$). The following will include descriptive statistics of Sample 1 and Sample 2. Moreover, review of demographic data between samples suggests no significant differences between Sample 1 and Sample 2.

Sample 1. The participants' age ranged from 18 to 34 years ($M = 23.60$, $SD = 3.67$). Sixty-one percent of the participants were women ($n = 180$), 39% were men ($n = 117$), and 0.3% was transgender ($n = 1$). With regard to ethnicity, 35.9 % participants self-identified as Chinese ($n = 107$), 15.8% Filipino ($n = 47$), 13.1% Vietnamese ($n = 39$), 8.4% Korean ($n = 25$), 4.7% Taiwanese ($n = 14$), 3% Japanese ($n = 9$), 2.7% Hmong ($n = 8$), 1% Cambodian ($n = 3$), 0.9% Indonesian ($n = 3$), 0.7% Laos ($n = 2$), 0.3% Indian ($n = 1$) and 0.3% Thai ($n = 1$). A total of 12.2% participants identified with the Other/Biracial category ($n = 38$). This category included individuals of mixed ethnicities such as Chinese/Caucasian.

Approximately 66.8% were born in the United States ($n = 199$) and 32.5% were not born in the United States ($n = 53$). Of the 32.5% of individuals not born in the United States, data indicated that these individuals lived in the United States for an average of 16.5 years ($SD = 8.17$, range from 3 to 33 years).

A total of 89.9% of participants noted that their father was not born in the United States ($n = 268$), and 10.1% of participants' fathers were born in the United States ($n = 30$). Of these individuals, 92.3% of the fathers were Asian/Asian American ($n = 275$), 4.7% White/Caucasian ($n = 14$), 1.3% Mixed with parents from two different ethnic groups ($n = 4$), 0.7% Hispanic/Latino ($n = 2$), and 0.3% Black/African American ($n = 1$). Approximately, 3.4% of participants identified their father's ethnicity as Other ($n = 10$). About 0.7% of participants did not identify their father's ethnicity ($n = 2$). Regarding participants' mothers, 92.3% of participants' mothers were not born in the United States ($n = 275$), and 7.7% of participants' mothers were born in the United States ($n = 23$). Ninety-six percent of the participants' mothers were Asian/Asian American ($n = 286$), 2.3% White/Caucasian ($n = 7$), 1% Mixed with parents from two different ethnic groups ($n = 3$), and 0.3% Hispanic/Latino ($n = 1$). Approximately, 3.7% of participants identified their mother's ethnicity as Other ($n = 11$). One individual did not identify his/her mother's ethnicity (0.3%).

With regard to education, 44% of participants reported their highest level of education obtained was a Bachelors degree ($n = 131$), 34.6% some college education, with no degree ($n = 103$), 7.7% Master's degree ($n = 23$), 6.4% high school diploma ($n = 19$), 3.7% Associate's degree ($n = 11$), 2.7% Doctorate degree ($n = 8$), and 1% a professional degree ($n = 3$). Data on participants' occupation was organized according to the United States Department of Labor Occupational Outlook Handbook (U.S. Bureau of Labor Statistics,

2012). Approximately 39.6% of participants were undergraduate students ($n = 118$) and 12.1% were graduate students ($n = 36$). Results indicated an endorsement of various occupational types, ranging from Business and Finance (8.4%, $n = 25$), Education, Training, and Library (4.7%, $n = 14$), Healthcare (4.4%, $n = 13$), Computer and Information Technology (3.4%, $n = 10$), Management (2.7%, $n = 8$), Sales (2.7%, $n = 8$), Architecture and Engineering (2.3%, $n = 7$), and Life, Physical, and Social Sciences (2%, $n = 6$). About 4.4% of participants were unemployed ($n = 13$).

Demographic data on participants' religious affiliations included 23.2% Catholic ($n = 69$), 20.8% Buddhist ($n = 62$), 20.8% Christian ($n = 62$), 14.1% Agnostic ($n = 42$), 12.8% Atheist ($n = 38$), 1% Muslim ($n = 3$), 0.3% Shaman ($n = 1$), 0.3% Shinto ($n = 1$), and 0.3% Mormon ($n = 1$). About 2.2% indicated Other ($n = 6$), which included mixed religious affiliations such as Buddhist/Catholic. Results also reflected that 38.6% of participants were from the Southern regions of the United States ($n = 115$), 34.6% from the Western regions ($n = 103$), 17.8% were from the Northeastern regions ($n = 50$), and 8.1% were from the Midwestern regions ($n = 24$).

Sample 2. The participants' age ranged from 18 to 34 years ($M = 23.64$, $SD = 3.49$). Sixty-two percent of the participants were women ($n = 132$) and 38.3% were men ($n = 82$). With regard to ethnicity, 39.7% of participants self-identified as Chinese ($n = 85$), 9.8% Vietnamese ($n = 21$), 8.9% Korean ($n = 19$), 7.9% Filipino ($n = 17$), 6.5% Taiwanese ($n = 14$), 4.2% Japanese ($n = 9$), 3.7% Hmong ($n = 8$), and 0.9% Cambodian ($n = 2$). About 19% of participants identified with the Other and/or Biracial category ($n = 40$). This category included individuals of mixed ethnicities such as Chinese/Vietnamese. Approximately 67.8% were born in the United States ($n = 145$) and 32.2% were not born in the United States

($n = 69$). Of the 32.2% of individuals not born in the United States, data indicated that these individuals lived in the United States for an average of 16.23 years ($SD = 7.95$, range from 5 to 30 years).

A total of 84.6% of participants noted that their father was not born in the United States ($n = 181$), and 15% of participants' fathers were born in the United States ($n = 32$). Of these individuals, 87.4% of the fathers were Asian/Asian American ($n = 187$), 8.9% White/Caucasian ($n = 19$), 1.4% Mixed with parents from two different ethnic groups ($n = 3$), and 1.4% Black/African American ($n = 3$). About 2.8% identified their father's ethnicity as other ($n = 6$). About 0.9% of participants did not identify their father's ethnicity ($n = 2$). Regarding participants' mothers, 91.6% of participants' mothers were not born in the United States ($n = 196$), and 7.9% of participants' mothers were born in the United States ($n = 17$). One individual did not identify if his/her mother was born in the United States (0.5%). About ninety-six percent of the participants' mothers were Asian/Asian American ($n = 206$), 2.3% White/Caucasian ($n = 5$) and 0.9% Mixed with parents from two different ethnic groups ($n = 2$). Approximately, 2.8% of participants identified their mother's ethnicity as Other ($n = 6$). One individual did not identify his/her mother's ethnicity (0.3%).

With regard to education, 43.5% of participants reported their highest level of education obtained was a Bachelors degree ($n = 93$), 36.4% some college education, with no degree ($n = 78$), 10.3% Master's degree ($n = 22$), 6.5% high school diploma ($n = 14$), 1.9% Associate's degree ($n = 4$), and 1.4% Doctorate degree ($n = 3$). Data on participants' occupation was organized according the United States Department of Labor Occupational Outlook Handbook (U.S. Bureau of Labor Statistics, 2012). Approximately 37.4% of participants were undergraduate students ($n = 80$) and 9.8% were graduate students ($n = 21$).

Results indicated an endorsement of various occupational types, ranging from Business and Finance (8.4%, $n = 18$), Education, Training, and Library (6.5%, $n = 14$), Personal Care and Service (4.2%, $n = 9$), Healthcare (3.7%, $n = 8$), and Office and Administration Support (3.3%, $n = 7$). Approximately 3.3% were unemployed ($n = 7$).

Demographic data on participants' religious affiliations included 24.3% Christian ($n = 52$), 18.2% Catholic ($n = 39$), 17.8% Buddhist ($n = 38$), 17.3% Agnostic ($n = 37$), 12.1% Atheist ($n = 26$), and 1.9% Muslim ($n = 4$). About 6.1% of participants indicated Other religious affiliation ($n = 13$), which included mixed religious affiliations such as Buddhist/Catholic.

Results also reflected that 38.3% of participants were from the Southern regions of the United States ($n = 82$), 34.6% from the Western regions ($n = 74$), 18.7% were from the Northwestern regions ($n = 40$), and 7% were from the Midwestern regions ($n = 15$).

Instrumentation

For development of EMSSE-AA items and assessment of psychometric properties, see the Procedures and Item Development portion of this chapter. Survey items can be found in Appendix C.

Asian American Social Self-Efficacy. The Ethnic Minority Social Self-Efficacy Scale—Asian American (EMSSE-AA) is a self-report measure developed based on the literature review presented in Chapter Two. It is intended to measure Asian Americans' perceived social self-efficacy during day-to-day contact with White individuals. An ordered-category format, where there exist at least three options of response choices in a natural order including a neutral option, will be utilized for responses to items (McDonald, 1999). The EMSSE-AA uses a 5-point Likert-type response scale ranging from 1 = *Never characteristic*

or true of me, 3 = *Sometimes characteristic or true of me*, and 5 = *Always characteristic or true of me*. The rationale for this response format is to increase the range of responses, promote higher-level thinking, and decrease the likelihood of scores becoming skewed (McDonald, 1999). Scoring of this scale is discussed in the Chapter 4 Results section.

Acculturation. The Vancouver Index of Acculturation (VIA; Ryder, Alden, & Paulhus, 2000) is a 20-item measure that assesses individuals' levels of acculturation to the mainstream and heritage cultures. The mainstream subscale of this index was used to assess the construct validity of the EMSSE-AA. The VIA is a self-report measure. Respondents were asked to rate their level of agreement to items using a 9-point Likert-type scale (1 = *strongly disagree* to 9 = *strongly agree*). The VIA yields two independent scores, which include the cultural identification toward one's heritage culture and acculturation for the mainstream culture (United States) subscales. The VIA was selected because it is based on Berry et al.'s (1987) two-dimensional acculturation model and assesses two orthogonal dimensions of acculturation attitudes toward the heritage culture and mainstream culture. For the purposes of this study, the acculturation for the mainstream culture will be used (VIA-Mainstream).

The VIA has also been successfully used with various samples, including individuals of Chinese, Japanese, Korean, Vietnamese, and East Indian descent. Ryder et al. reported internal consistency alpha coefficients of .89 and .85 for the Mainstream subscale among Chinese and East Asian samples, respectively. Also, concurrent validity was evaluated by comparing the two dimensions with (a) time spent living in a Western, English-speaking country; (b) time educated in a Western-speaking country, (c) generational status, (d) a single-item indicating whether or not individuals planned to return to their country of origin,

(e) status of English as a first or second language, (f) a single-item validity check measuring Western identification, and (g) mean score from the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA). Significant correlations were reported between the Mainstream subscale and the previously mentioned concurrent validity indicators with r s ranging from .26 to .60 among the Chinese sample and from .29 to .56 among the East Asian sample (Ryder et al., 2000). Evidence for structural equivalence of the VIA-Mainstream for Sample 1 and Sample 2 was reflected by a one factor structure across both samples using maximum likelihood extraction methods. Evidence for the scale's internal consistency was demonstrated in the current study, Cronbach's alpha of .91 for Sample 1 and .90 for Sample 2.

Ethnic Identity Development. The Multidimensional Ethnic Identity Measure (MEIM; Phinney & Ong, 2007) is a 14-item scale that measures ethnic identity development and was used to further assess the construct validity of EMSSE-AA. The MEIM is a self-report measure, and participants rate items using a 5-point Likert-type response scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Higher scores on the MEIM indicate more positive levels of ethnic identity development. The MEIM was chosen because it is a commonly used measure of ethnic identity and has been shown to have adequate psychometric properties when used on the Asian American population (David et al. 2009, Lee & Yoo, 2004; Tran & Lee, 2010).

Lee and Yoo (2004) identified a three-factor solution of the MEIM among an Asian American college study sample. The factor structure consisted of Cognitive Clarity, Affective Pride, and Behavioral Engagement. All three factors were also correlated (r s = .48 - .59). Internal reliability for Cognitive Clarity, Affective Pride, and Behavioral Engagement

were .81, .81, and .72, respectively (Lee & Yoo, 2004). Several studies have observed the factor structure of MEIM since its development, however, Lee and Yoo's (2004) is the only study that used a pure Asian American sample to observe the scale's factor structure. As such, the researcher will also observe the factor structure reported from Lee and Yoo's (2004) study to ensure that the factor structure holds true for the study's sample. A reliability coefficient of .88 was also reported for the entire scale when used among an Asian American college student population (Tran & Lee, 2010). Evidence for face and content validity were examined and interviews and focus groups were used to determine the appropriateness of items for diverse youth (Phinney & Ong, 2007). Evidence for structural equivalence reflective of Lee and Yoo's (2004) study was not found in Sample 1 or Sample 2. Results indicated that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .90 in Sample 1 and .90 in Sample 2, indicating high confidence that factors can be interpretable. A maximum likelihood extraction method was used. Scree plot from Sample 1 and Sample 2 reflected a single factor structure (for scree plot, please refer Figure 2 in Appendix E). The eigenvalue of the first factor was 5.96 explaining 49.55% of the variance in Sample 1. In sample 2, the eigenvalue of the first factor was 5.95 explaining 49.55% of the variance. Results reflected a single factor structure as proposed by Phinney and Ong (2007). As such, a composite MEIM score was derived. Evidence for reliability was found with a Cronbach's alpha of .90 in Sample 1 and .90 in Sample 2.

Social Anxiety. The Social Interaction Anxiety Scale (SIAS; Mattick & Clarke, 1998) is a 20-item measure that assesses fears related to general social interaction. This scale was used to further assess the construct validity of the EMSSE-AA. The SIAS is a self-report measure, and responses to items are scored using a 5-point Likert-type scale ranging

from 0 = *not at all* to 4 = *extremely*. Higher scores indicate higher levels of social anxiety. The SIAS was selected because it assesses individual's social anxieties and has been reported to have adequate psychometric properties when used on Asian adult populations.

Evidence for the internal consistency of the scale was found, Cronbach's alpha of .92, in Park et al.'s (2011) study that consisted of 784 self-identified Asian American college students. Mattick and Clarke's (1998) study yielded a Cronbach's alpha of .88 among an undergraduate student sample. The SIAS was found to discriminant between clinical groups diagnosed with social phobia, agoraphobia, and simple phobia (Mattick and Clarke, 1998). Evidence for structural equivalence for Sample 1 and Sample 2 was reflected by a one factor structure across both samples using maximum likelihood extraction methods. Internal consistency for the current study was demonstrated with a Cronbach's alpha of .92 for Sample 1 and .92 for Sample 2.

Social Self-Efficacy. The Perceived Social Self-Efficacy scale (PSSE; Smith & Betz, 2000) is a 25-item measure that assesses an individual's degree of perceived self-efficacy or confidence in a variety of social situations. This scale was used to further assess the construct validity of the EMSSE-AA. The PSSE is a self-report measure, and responses to items are scored using a 5-point Likert-type scale ranging from 1 = *no confidence at all* to 5 = *complete confidence*. Higher scores indicate higher levels of confidence. The PSSE was selected because it assesses efficacy beliefs in social situations and has been reported to have adequate psychometric properties when used on Asian adult populations.

Hermann and Betz (2006) reported a Cronbach's alpha of .95 using a sample of 696 undergraduate college students that consisted of approximately 49 Asian Americans. Moreover, Smith and Betz (2000) reported an internal consistency reliability coefficient of

.94 and a test-rest reliability coefficient of .82 over an interval of three weeks. Additionally, the PSSE was translated and cross-culturally validated using an adult sample in China (Fan et al., 2010). Construct validity was evidenced through correlations found between the PSSE and measures of social anxiety ($r = -.68$), shyness ($r = -.71$), and self-esteem ($r = .32$) (Smith & Betz, 2000). Evidence for structural equivalence for Sample 1 and Sample 2 was reflected by a one factor structure across both samples using maximum likelihood extraction methods. Evidence for the internal consistency of the scale for the current study was demonstrated with a Cronbach's alpha of .96 for Sample 1 and .96 for Sample 2.

Social Desirability. The Marlowe-Crowne Social Desirability Scale-Short Version (MCSD; Reynolds, 1982) is a 13-item inventory designed to control responses bias and tendency towards socially desirable behavior and denial of socially undesirable traits (Crowne & Marlowe, 1960). The scale was used to assess the discriminant validity of the EMSSE-AA. It is a self-report measure, and *true-false* items were used to measure individuals' desire for social approval. Higher scores indicate stronger tendencies for social desirability. The MCSD-Short Version was selected because it has been found to be a commonly used measure of social desirability, successfully used in studies that included Asian American individuals in their samples, and has adequate psychometric properties (David et al., 2009; Motl, McAuley, & DiStefano, 2005).

David and colleagues (2009) reported a coefficient alpha of .77 using a bicultural college student sample that consisted of 94 self-identified Asian Americans (from total sample of 268 participants). Reynolds (1982) also reported a reliability coefficient of .76. Validity of the scale was assessed through correlations between the short form and the original 33-item MCSD scale ($r = .93$) and Edwards Social Desirability Scale ($r = .41$)

(Reynolds, 1982). The factor structure of the MCSD-Short Version scale exhibited poor structural equivalence for Sample 1 and Sample 2. Results indicated that the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .72 in Sample 1 and .71 in Sample 2, suggesting that factors can be interpretable. A maximum likelihood extraction method was used. Scree plot from Sample 1 and Sample 2 reflected a two-factor structure (for scree plot, please refer Figure 3 in Appendix E). The eigenvalue of the first factor was 2.49 explaining 19.14% of the variance and the second factor was 1.65 explaining 12.68% of the variance in Sample 1. The eigenvalue of the first factor was 2.84 explaining 21.87% of the variance and the second factor was 1.70 explaining 13.06 % of the variance in Sample 2.

Findings indicated that the MCSD-Short Version may not have similar structural components, therefore limiting the generalizability of the scale for the current study. Similar issues were reported in a comparative study between Western and Eastern adult samples (Middleton & Jones, 2000). The scale properties were deemed adequate for the Western sample and not for the Eastern sample (Middleton & Jones, 2000). Further, the results from analysis of the scale's internal consistency indicated a Cronbach's alpha of .63 for Sample 1 and .70 for Sample 2.

Demographic questionnaire. The survey included a brief demographic questionnaire that asked for relevant demographic information of participants, such as age, gender, education level, region of residence in the United States, and specific Asian ethnic group (e.g., Chinese, Laos, Vietnamese). The survey requested information on participants' generational status of the immigrant family (e.g., first generation American born Asian, country of birth, and years living in the United States).

Design

The main purpose of the study was to develop the EMSSE-AA measure and assess the psychometric properties of the EMSSE-AA, including reliability and validity. To do this, the researcher first conducted a pilot study. The objective of this pilot study was to assess the content validity of the initially developed EMSSE-AA items and conduct semi-structured interviews that would provide evidence for process and content validity (DeVellis, 2003; Furr & Bacharach, 2008). Qualitative data were abstracted from the interviews and used to refine items and further develop domains of the construct and corresponding EMSSE-AA subscales. The primary study was a quantitative descriptive design (Heppner, Wampold, & Kivlighan, 2008). This type of design is appropriate for the current study's research goals and hypotheses, as the researcher aims to describe, explain, and explore a natural occurring phenomenon within a certain population (Heppner et al., 2008). Additionally, the constructs of interest including social self-efficacy, acculturation, social anxiety, ethnic identity, and social desirability are not variables that can be easily manipulated through experimental control.

Procedure

The following section will delineate the procedures taken to complete the pilot and primary study of this dissertation.

Preliminary Study. The pilot study served to verify the face, process, and content validity of the EMSSE-AA and identify dimensions of the EMSSE-AA (as recommended by DeVellis, 2003; Furr & Bacharach, 2008). Prior to the pilot study, the initial draft of the EMSSE-AA was developed using Bandura's social cognitive theory and domains of psychological functioning (e.g., cognitive, affective, motivational, behavioral, and selective

processes). These items were created utilizing recommendations for initial steps of scale development according to DeVellis (2003), Kline (2005), and McDonald (1999). The researcher generated 40-items to assess Asian Americans' perceived ability to initiate, maintain, and continue to expend effort in their interaction with White individuals on a day-to-day basis. Items were derived from an extensive literature review of theoretical and empirical articles on self-efficacy and measures of racial/ethnic minority individuals' self-efficacy during cross-cultural contact. Items were developed to ensure that one main thought was associated with each item, each major content area of the construct was represented by an adequate number of items, and items were developed to ensure variability in response patterns. Double negative statements, double-barreled, all or none wording, and unclear wording were avoided. Moreover, the researcher made efforts to ensure that test items were congruent with the construct of interest, contributed minimally to measurement error, utilized a format suitable to the test's goals, and satisfied ethical and legal considerations. Please see Appendix A for the initial set of EMSSE-AA items.

The University of Missouri-Kansas City (UMKC) Social Sciences Institutional Review Board (SSIRB) approved the pilot study on May of 2011. Recruitment for the study took place at UMKC. Potential participants were recruited using convenience sampling methods at UMKC. Asian student organizations on campus were contacted via contact information posted on the organizations' website or social networking sites (e.g., Facebook, organization's websites). Individuals were also provided a flyer. The flyer briefly described the study, incentive for participation, and provided the researcher's contact information. Potential participants were prompted to contact the researcher if they were interested. Participants were provided a copy of the informed consent (e.g., purpose of study,

confidentiality, voluntary nature of participation). Please refer to Appendix D for a copy of the Informed Consent.

A total of five participants of Asian racial/ethnic background were interviewed for the pilot study. Attempts were made to ensure that the pilot sample consisted of varying Asian ethnicities, age and educational groups, and gender. Participants included 3 females and 2 males, 4 undergraduate students and 1 graduate student, age range from 19 to 24 years, and varying ethnicities (e.g., Korean, Vietnamese, Laos, and Chinese). The pilot study took place at various locations on the UMKC campus (e.g., library, School of Education). The semi-structured interviews were videotaped to review data and ensure accuracy of data extraction.

During the semi-structured interview, the researcher first received individuals' consent to participate and discussed the nature and purpose of the interview. Participants read the EMSSE-AA items out loud and reflected upon their responses and response to each item (Furr & Bacharach, 2008). The researcher encouraged participants to elaborate more and/or provide specific examples while discussing the content of items. Feedback from participants was received to clarify the question, identify whether or not the question prompted the participants to reflect on their social self-efficacy when relating with White individuals, and note their personal reactions when reading the question. The interviews lasted approximately 45 to 60 minutes. After the interview was completed, each participant was given a \$10 VISA gift-card for compensation of his/her time. The content of the interview was used to determine if items were adequate and evoked responses that encouraged individuals to appraise their self-efficacy when in social contact with White individuals. Interviewees' responses were used to revise and/or add and remove items.

After each interview, items were revised to include participants' comments. Participants' feedback from the prior interviews was used also to facilitate discussion of the construct and participant's social self-efficacy beliefs during contact with White individuals. All five participants shared similar experiences with regard to their self-efficacy beliefs with White individuals and noted that these experiences were relevant to day-to-day functioning. Following the completion of all interviews, the video recordings were examined and domains of Asian American minority social self-efficacy were reviewed and revised. The original multidimensional structure, including cognitive, behavioral, affective, motivational, and selective processes, was deemed to be a poor reflection of Asian Americans' perceived social self-efficacy when interacting with White individuals.

Varying aspects of Asian American social self-efficacy with relations with White individuals were not captured by the initial EMSSE-AA. The original EMSSE-AA scale tapped into general social self-efficacy beliefs (e.g., I am confident when initiating a conversation with a White individual). Other aspects of self-efficacy unique to participants' experiences included aspects of initiating and maintaining interaction with White individuals despite apparent racial and ethnic differences. All participants reflected being sensitive White individuals' awareness to cultural diversity (e.g., *I feel anxious when White individuals appear intimidated while talking to me because I am Asian*) and believed that they made personal adjustments during their interactions with White individuals (e.g., *I feel compelled to act more "White" when I am around White people*).

As such, domains Tolerance of Cultural Interactions and Personal Adjustments were created. These domains were identified to tap into the aforementioned areas, in which the individual was able to identify whether or not White individuals were sensitive to cultural

differences (e.g., Tolerance of Cultural Interactions). Regarding the Personal Adjustments domain, this domain reflected whether or not the individual was able manage such cultural differences and feel compelled to neglect or represent aspects of their own Asian American ethnic//racial identity. Further, additional domains were included to tap into the following areas: Social Initiatives (individuals' ability to confidently initiate social interaction), Relational Maintenance (ability to develop and maintain relationships with White individuals despite their cultural differences), and General Social Self-Efficacy (which assessed overall social self-efficacy attitudes towards White individuals).

The EMSSE-AA scale was then forwarded to an expert panel of psychologists, whose area of research and study included Asian American psychosocial functioning, racial/ethnic minority identity development, acculturation, and scale development. These individuals were Drs. Mei-Fen Wei, Joel Wong, Paul Ratanasiripong, and Christopher Liang. Refer to Appendix B for reviewers' feedback. On the basis of reviewer feedback, items were reworded, edited, or dropped. The EMSSE-AA instrument was modified to address various comments.

Reviewers' feedback supported the content validity of the EMSSE-AA. Their feedback suggested that items reflected the proposed construct of interest and were pertinent to Asian American daily social interactions with White individuals. Specifically, reviewers recommended removal of the neutral (e.g., neither agree or disagree) response choice, because this response choice may measure a different construct. Reviewers also encouraged inclusion of a social anxiety measure, as several of the items in the Tolerance of Cultural Interactions and Personal Adjustments appeared to measure social anxiety. Additionally, domain Personal Adjustments did not appear to tap into the dimension of Asian American

social self-efficacy for several reviewers, and reviewers were unclear of this domain's definition. This feedback, along with editorial comments on grammatical and sentence structure of items, were incorporated into the final EMSSE-AA scale administered to participants in the Primary Study.

Primary Study. The purpose of the primary study was to address the research goals and hypotheses of the dissertation study. Approval for the primary study's data collection was received from UMKC SSIRB on April of 2012. Participants were recruited using snowball and criterion sampling because this is a particular subsample of the larger population. Additionally, the researcher sampled Asian American young adults between the ages of 18 through 30 years of age utilizing Internet social forums (e.g., Facebook, Asian American organization email listings) across regions of the United States. This age range was chosen because adolescents and young adults are likely exploring and concluding their own identity with regard to who they are and how they fit in, according to Erikson's developmental theory (Steinberg, 2007). This is also a period when racial and ethnic minority issues such as racism and cultural oppression take on personal significance (Steinberg, 2007). This young adult sample was deemed to be a developmentally appropriate age group to observe variations in their personal efficacy in relation to their minority status and social transactions with White individuals.

The researcher solicited voluntary participation by contacting several organizations via electronic email including the Asian American Psychological Association, national Vietnamese Student Association, Korean American Student Association at the University of Texas at Austin, and Asian American student organizations at the University of North Texas. Furthermore, the national alumni board of the alpha Kappa Delta Phi and Lambda Phi

Epsilon (national Asian American Greek organizations) agreed to have their members surveyed at the annual convention the week of May 25th, 2012.

Secondly, the primary study used both online web-based (e.g., Surverymonkey.com) and in-person survey methods. Data collection methods enabled the researcher to access the target population of interest and obtain an optimal sample size for statistical power. Potential participants were contacted online via social networking forums such as Facebook and web-based mailing groups. Both methods of contact allowed participant solicitation to be disseminated via online social forums. The researcher also contacted Asian American student and university alumni organizations, however no UMKC Asian American student organizations responded to the email solicitations.

All participants were provided an informed consent that fully explained any potential risk involved and informed, voluntary nature of participation, and confidentiality of participants' data. Following this, the demographic questionnaire inquired about individuals' age, gender, specific Asian ethnic group (e.g., Chinese, Laos, Vietnamese), and generational status as an immigrant family (i.e. first generation American born Asian). Directions were then presented for the remainder of the questionnaire items. Measures including the demographic questionnaire, VIA-Mainstream subscale, MCSD, MEIM, EMSSE-AA, PSSE, and SIAS were administered consecutively. Estimated completion time of the survey was about 20-25 minutes. After completing the survey, participants were provided an opportunity to enter a raffle drawing for a \$25 gift card as incentive to complete the survey. A total of three \$25 gift cards were used as incentive for participation. They were asked to provide their name and email address to enter the raffle drawing. Participants' identifying

information for the raffle was not associated with their questionnaire responses to ensure confidentiality of participants' responses.

Data Analysis

All statistical analyses were conducted using SPSS (IBM SPSS Statistics Version 20). The goal of this study was to develop a self-report measure that accurately assessed Asian Americans' perceived social self-efficacy during day-to-day social contact with White individuals and behaviors related to this construct. The main goals of analyses were to examine the internal factor structure of the items developed and determine the adequacy of the psychometric properties of the scales including test reliability and validity.

Item Development. In terms of data reduction procedures, exploratory factor analysis (EFA) is strongly encouraged when researchers do not have preconceived hypotheses about how many factors are associated with the construct of interest (Field, 2005; Kline, 2005). An EFA is conducted when the underlying/latent dimensions of a scale are not known, and a Confirmatory Factor Analysis (CFA) is used to assess the hypothesized organization of the scale (Heppner et al., 2008). Typically, an EFA is first conducted to identify the underlying factor structure of a construct and then attempts are made to cross-validate the factor structure with another sample using a CFA. For the purpose of the current study, the researcher conducted two factor analyses. Kline (2005) recommended using the same method of analysis across two different samples, when validating a scale's factor structure (Kline, 2005). For the purposes of this research study, a second EFA was used in Study 2 opposed to a confirmatory factor analysis (CFA).

Ethical Considerations

There were minimal risks involved in the nonexperimental design of the current study. Nonetheless, the researcher considered several possible ethical threats to this study. The use of self-report measures was subject to social desirability bias. Participants' awareness of racial/ethnic issues may have been increased and heightened due to the nature of measurement items. The researcher did not anticipate any particular risk associated with each measure and participants were provided the contact of counseling services if they experienced any psychological/emotional distress. Additionally, the researcher included a youth crisis hotline number where participants may solicit support and seek referrals for community counseling. This information was included in the informed consent cover letter (see Appendix D). Moreover, data obtained from participants were also kept confidential, eliminating any identifying information associated with data acquired. This also prevented possible biases to impact the analysis/interpretation of results.

CHAPTER 4

RESULTS

Data Screening and Preliminary Analyses

Data obtained from 512 participants were screened for missing data. Recommendations from Tabachnick and Fidell (2007) were used to examine missing values. A missing values analysis (MVA) was conducted to examine whether patterns of missing data were missing at random. Results revealed that less than 5% of data were missing for individual items and no problems with non-random missing data were found. Missing data appeared scattered throughout cases and variables, and it was determined that estimation/imputation of missing data would be utilized because deletion of cases could result in substantial loss of participants (Tabachnick & Fidell, 2007). Mean substitution was used to estimate missing values. Means were calculated from available data and used to replace the missing values for each item. Total scores for VIA-Mainstream subscale, MCSD, MEIM, PSSE, and SIAS variables were then computed.

Normality and presence of outliers among individual EMSSE-AA items and total scores for other variables were examined through histograms, skewness, and kurtosis statistics. Standardized z scores for each EMSSE-AA item were computed and analyzed to identify cases with standardized scores greater than three standard deviations above the mean (Tabachnick & Fidell, 2007). Distribution of scores were normal. See Appendix A for descriptive statistics, skewness, and kurtosis. Please note that the standard error for the skewness statistic was 0.15 and the standard error for the kurtosis statistic was 0.30.

The following sections have been organized to describe three separate studies. Research hypothesis 1 was addressed in Study 1 and Study 2. Study 1 included the initial

exploratory factor analysis conducted using Sample 1. Study 2 included the second factor analysis using Sample 2. Hypotheses 2 through 4 were addressed in Study 3, which provided evidence of reliability and construct validity.

Study 1

The sample for the initial exploratory factor analysis was derived by randomly selecting 60% of cases ($n = 298$). This method was utilized to ensure that the ratio of cases to parameter would be close to 7 to 1 for the initial EFA (Heppner et al., 2008; Kline, 2005). Preliminary analyses were done to test for group differences on gender and online versus in-person solicitation for participation. The magnitude and direction of correlations among items appeared consistent between groups (e.g., gender, survey type), thus suggesting no significant differences.

Item analysis. Hypothesis 1 postulated that a multiple factor structure would be extrapolated from the EMSSE-AA during factor analysis. Prior to analysis, individual scale items were evaluated to identify their appropriateness for the scale (DeVellis, 2003). Intercorrelations between items and corrected item-total scale correlations were examined to check for weak correlations, multicollinearity, and singularity (variables that are perfectly correlated) between items. The inter-item correlation matrix and corrected item-total correlations indicated that a majority of items were satisfactory with significant correlations among items ranging between .12 and .77. Nine items were found to have a series of nonsignificant and/or weak correlations below .05, which included items 2, 20, 25, 27, 31, 32, 34, 37, and 42. Of the nine items, six items were reverse scored items on the EMSSE-AA. The insignificant and weak correlations suggested that these items would not be appropriate for inclusion in the factor analysis. Item total statistics of these items were further examined and the removal of the nine items indicated an increase in the scale's variance. The variance of the entire 45-item scale was 437.43, and removal of the items noted changes in variance ranging from 704.03 to 722.64. Hence, given these findings all nine

items were removed. Review of item correlation analyses provided justification for deletion of these items prior to factor analysis.

The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .96, indicating high confidence that factors can be interpretable (Field, 2005). Bartlett's test of sphericity was also significant ($\chi^2(630) = 7362.37, p < .01$). Results indicated that the inter-item correlation matrix was not the identity matrix. This suggested that the data collected was suitable for factor analysis (Field, 2005). The communalities of all items were above .4 (see Table 3), further confirming that each item shared some common variance with other items. The factor analysis was conducted with 36 items in Study 1.

Exploratory factor analysis. A maximum likelihood factor analysis extraction method was used because data were normally distributed (Costello & Osborne, 2005) and the purpose of the factor analysis was to understand the latent structure of the variables (Conway & Huffcutt, 2003). This method yielded a 5-factor model, with eigenvalues above 1 (15.35, 3.84, 1.48, 1.22, and 1.12), accounting for 63.92% of the total variance. The eigenvalues indicated that the first factor explained 42.64% of the variance, the second factor 10.67% of the variance, and the third factor explained 4.11% of the variance. The fourth and fifth factors explained 3.39% and 3.11% of the variance, respectively.

Although the eigenvalue rule (Kaiser, 1960) suggests that eigenvalues greater than 1 may be retained, research has noted that this may be an inaccurate method for selecting the number of factors (Conway & Huffcutt, 2003; Costello & Osborne, 2005). Multiple solutions, including a three, four, and five-factor model, were examined for interpretability. Results suggested that a two-factor model was most appropriate and interpretable. The two-factor solution was also supported by the scree test (Field, 2005). This test examines the

relative value of the eigenvalue opposed to its absolute value, and the natural break point of the scree plot was observed (Costello & Osborne, 2005; DeVellis, 2003; Field, 2005). Two factors were found to lie above the point of inflexion (elbow), according to Catell's criterion (DeVellis, 2003) for the scree test. Refer to Appendix E for scree plot.

The maximum-likelihood extraction method was re-computed, specifying a two-factor model. Data were analyzed using a direct oblimin rotation. In reflection of the theoretical structure of the Asian American social self-efficacy construct, it was deemed that an oblique, non-orthogonal rotation method was more appropriate in comparison to an orthogonal rotation method. Moreover, direct oblimin rotation allows each variable to load highly on one factor and near zero on the other and the covariance between variables are minimized. Results using the direct oblimin rotation yielded a two-factor model with total eigenvalues of 14.26 and 2.94, accounting for 43.20% and 8.92% of the total variance (52.12%), respectively. The total eigenvalues of the rotation sums of squared loadings were 13.58 and 9.43.

During analysis of the scale's structure, both item content and item statistical data were considered when removing and retaining items. The content validity of items and the underlying conceptual themes from the initial scale were closely examined. The objective of this method was to reduce the number of items and naturally extract the theoretical components of the latent variable of interest. This was also done to follow recommendations in creating a parsimonious, interpretable, and valid instrument (Conway & Huffcutt, 2003; Costello & Osborn, 2005; Field, 2005).

Communalities following the direct oblimin extraction were observed to determine if items were related to one another. Communalities were examined and values greater than .40

were deemed adequate (as recommended by Costello & Osborn, 2005; Field, 2005). Results indicated that items 3, 6, 10, 17, 23, 24, 28, 26, 38 and 45 had communalities less than .40. Content of the items were also examined. The items were removed because the items did not appear related to the other items. The remaining items were examined for redundancy. Items redundant in content were initially developed to tap into the construct of interest (e.g., Item 7 *I am comfortable approaching a White person* and Item 1 *I am confident when I approach a White person in a social setting*).

Review of items in Factor 1 included items from the General Social Self-Efficacy, Social Initiative, Relational Maintenance, and Personal Adjustments subscales that were initially developed. The underlying theme derived from these items reflected domains of general social self-efficacy beliefs (perceived confidence and comfort) in engaging with White individuals and perceived ability to maintain relationships with White individuals. Items 1: *I am confident when I approach a White person in a social setting*, item 29: *I can easily decide how to be myself, in order to interact with White people comfortably*, item 13: *I feel comfortable having conversations about race and diversity when among White people*, and item 30: *My relationship style is the same when I interact with Asian people and White people*, were items in which the content was repeated and best captured by another item with higher factor loadings and communalities after extraction. Similarly, factor 2 included several items from the Tolerance for Cultural Interaction, General Social Self-Efficacy, Social Initiative, Relational Maintenance subscales. Themes emerged from this factor reflected perceived discomfort for cultural differences and uneasiness during interactions with White individuals. In observation of the underlying themes items and content of items, 1, 29, 13, and 30 were removed.

Maximum likelihood factor analysis was re-computed on the remaining 22 items using a direct oblimin two-factor rotation. The analysis indicated an improvement of the total variance explained from 52.12% to 57.33%. The two-factor solution resulted in the first factor explaining 46.88% of the variance with an eigenvalue of 9.90. The second factor explained 10.44% of the variance and was reported to have an eigenvalue of 6.50. The 22-item scale was also reported to have a stable component structure, indicated by a KMO statistic of .96. The Goodness-of-fit Test was significant ($\chi^2(188) = 428.51, p = .00$). Chi-square test of the single-factor structure yielded ($\chi^2(209) = 1045.32, p = .00$). The value of chi-square and degrees of freedom increased, which may suggest that the two-factor model better fits the data (Kline, 2005). The items appeared to load cleanly onto each factor. Fourteen items loaded onto Factor 1 and 8 items loaded onto Factor 2. The correlation between Factor 1 and 2 was $r = .54$. The communalities, the proportion of variance in the item explained by the extracted factors, ranged from .40 to .81. Please see Table 2 for the results from study's analysis and Appendix E for inter-item correlations. Altogether, results provide support for Hypothesis 1 and a multidimensional factor structure was extrapolated from the EMSSE-AA scale. The two factors were analyzed for their content and two subcategories/themes emerged after review of items.

Factor 1 of the EMSSE-AA scale reflected items that tapped into Asian Americans' perceived confidence in initiating and maintaining successful relationships with White individuals and comfort when interacting with White individuals despite cultural differences. The underlying theme derived from Factor 1 reflected aspects of social self-efficacy and with regard to Asian Americans' relationship with White individuals. Thus, Factor 1 was titled Asian American Social Engagement (AASE; 14 items).

Factor 2 of the EMSSE-AA scale included items that assessed Asian Americans' perceived discomfort for cultural differences and uneasiness when interacting with White individuals. Items were initially categorized in the Tolerance for Cultural Interaction, General Social Self-Efficacy, Social Initiative, Relational Maintenance subscales. This factor reflected uneasiness and anxiety when interacting with White individuals and lack of confidence to effectively engage with White individuals due to ethnic/cultural differences. Therefore, Factor 2 was titled Asian American Social Inhibition (AASI; 8 items).

Table 2

EMSSE-AA Items, Factors, Coefficients, and Extraction Communalities for Study 1 (n = 298)

Item Stem	Factors ^{a,b}		<i>h</i> ²
	1	2	
43. Overall, I feel confident interacting with White individuals.	.89 (.90)	.02 (.50)	.81
35. It is easy for me to start a conversation with a White person.	.86 (.85)	-.03 (.44)	.72
8. I can successfully engage in a social conversation with a White person.	.84 (.84)	-.00 (.45)	.71
36. I am capable of developing good friendships with others, including White people.	.84 (.85)	.02 (.47)	.72
39. I am confident in my abilities to develop close friends with White people.	.84 (.80)	-.06 (.40)	.65
11. I can have meaningful conversations with White people, who may know little about Asian culture.	.80 (.78)	-.05 (.38)	.60
9. I express myself freely when among White people.	.80 (.76)	-.08 (.35)	.58
21. I am happy about my ability to have lasting relationships with White people.	.78 (.83)	.09 (.51)	.69
41. I can have close friendship with White people.	.75 (.75)	-.01 (.40)	.56
7. I am comfortable approaching a White person.	.74 (.79)	.09 (.49)	.63
18. Regardless of cultural difference, I can have good relationships with White people.	.73 (.75)	.04 (.43)	.56
4. I am comfortable expressing my thoughts when around White people.	.69 (.70)	.02 (.44)	.49
33. I feel that I can be myself when I interact with White people.	.67 (.72)	.08 (.44)	.52
12. I am comfortable talking to a White person about my Asian background.	.65 (.66)	.02 (.37)	.44
22. I worry that White individuals are not interested in interacting with me because I look Asian.	.00 (.42)	.78 (.78)	.60
16. My anxiety increases when White individuals look at me differently because I am Asian.	-.07 (.34)	.77 (.73)	.54
14. I feel anxious when White individuals appear intimidated while talking to me because I am Asian.	-.07 (.31)	.71 (.67)	.45
19. I become nervous when a White person points out cultural differences between us.	-.05 (.33)	.69 (.66)	.44
15. I doubt that White individuals would like to be my close friend.	.10 (.45)	.66 (.71)	.51
44. I wish to be more comfortable when interacting with White people.	.01 (.34)	.63 (.64)	.40
5. In social situations, I feel stressed approaching a White person.	.12 (.46)	.63 (.70)	.49
40. I feel uneasy when a White person approaches me.	.16 (.48)	.62 (.72)	.51

Note. EMSSE-AA = Ethnic Minority Social Self-Efficacy Scale—Asian American; 1 = Asian American Social Engagement. 2 = Asian American Social Inhibition. Items with bolded coefficients are items retained for the factor. Only pattern coefficients above .32 were retained in the analysis. Factor correlation were $r = .54$. a. Pattern coefficients b. Structure coefficients in parentheses.

Study 2

Exploratory factor analysis. Findings following Study 1 suggested an additional factor analysis was needed to provide evidence for construct validity and to account for sampling error (Thompson, 2008). A similar analytic procedure was used in Study 2. Kline (2005) recommended using the same method of analysis across two different samples, when validating a scale's factor structure (Kline, 2005). The sample for the second analysis was derived from the remaining 40% of cases ($n = 214$). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .95, providing the researcher with high confidence that factors were interpretable (Field, 2005). Bartlett's test of sphericity was also significant ($\chi^2(231) = 3236.43, p = .00$). Item analysis of the 22-items of the EMSSE-AA instrument revealed adequate inter-item correlations (see Appendix E). The 22-items were analyzed using a maximum likelihood data reduction analysis. Similar methods from Study 1 were utilized for the extraction, rotation, and factor loading criteria. Two factors were extracted and evaluated to determine whether or not the same items loaded onto the same factor found in Study 1.

Results yielded a two-factor structure accounting for 56.37% of the variance. Factor 1 accounted for 48.37% of the variance with an eigenvalue of 10.10. Factor 2 accounted for 8.0% of the variance with an eigenvalue of 7.35. The pattern matrix was examined to evaluate which items loaded onto the two factors. The rotations converged after four iterations, and most items loaded onto each factor with relatively equal strength as in Study 1. Values, including factor loadings and communalities, appear similar to results indicated in Study 1. Please see Table 3 for Study 2's analysis. Factor correlation between Factor 1 and 2 was $r = .62$. The communalities, the proportion of variance in the item explained by the

extracted factors, ranged from .41 to .76. The Goodness-of-fit Test was significant ($\chi^2(188) = 385.97, p = .00$).

Exceptions were found for one item 40, *I feel uneasy when a White person approaches me*. This item loaded on the second factor in Study 1 and the first factor in Study 2. However, the content of item 40 aligned conceptually with the second factor, and it was determined to retain this item in Factor 2. Study 2 supported hypothesis one as well as the final factor structure of the EMSSE-AA with the following subscales: AASE (14 items) and AASI (8 items).

Table 3

EMSSE-AA Items, Factors, Coefficients, and Extraction Communalities for Study 2 (n = 214)

Item Stem	Factors ^{a,b}		
	1	2	<i>h</i> ²
39. I am confident in my abilities to develop close friends with White people.	.88 (.84)	-.07 (.48)	.71
43. Overall, I feel confident interacting with White individuals.	.86 (.87)	.03 (.55)	.76
21. I am happy about my ability to have lasting relationships with White people.	.84 (.77)	-.11 (.41)	.60
18. Regardless of cultural difference, I can have good relationships with White people.	.83 (.80)	-.04 (.47)	.65
9. I express myself freely when among White people	.79 (.76)	-.06 (.43)	.57
41. I can have close friendship with White people.	.78 (.79)	.02 (.50)	.62
8. I can successfully engage in a social conversation with a White person.	.77 (.79)	.02 (.50)	.62
35. It is easy for me to start a conversation with a White person.	.77 (.82)	.07 (.55)	.67
36. I am capable of developing good friendships with others, including White people.	.76 (.83)	.12 (.58)	.69
11. I can have meaningful conversations with White people, who may know little about Asian culture.	.69 (.63)	-.09 (.33)	.41
7. I am comfortable approaching a White person.	.66 (.76)	.15 (.56)	.58
33. I feel that I can be myself when I interact with White people.	.64 (.71)	.12 (.51)	.52
12. I am comfortable talking to a White person about my Asian background.	.62 (.65)	.04 (.42)	.42
4. I am comfortable expressing my thoughts when around White people.	.56 (.61)	.20 (.59)	.49
40. I feel uneasy when a White person approaches me.	.39 (.61)	.35 (.60)	.45
16. My anxiety increases when White individuals look at me differently because I am Asian.	-.03 (.49)	.84 (.82)	.68
14. I feel anxious when White individuals appear intimidated while talking to me because I am Asian.	-.07 (.41)	.78 (.74)	.55
22. I worry that White individuals are not interested in interacting with me because I look Asian.	-.05 (.41)	.75 (.72)	.52
19. I become nervous when a White person points out cultural differences between us.	-.02 (.43)	.72 (.71)	.51
5. In social situations, I feel stressed approaching a White person.	.16 (.54)	.62 (.72)	.53
15. I doubt that White individuals would like to be my close friend.	.11 (.47)	.60 (.66)	.44
44. I wish to be more comfortable when interacting with White people.	.13 (.48)	.57 (.65)	.43

Note. EMSSE-AA = Ethnic Minority Social Self-Efficacy Scale—Asian American; 1 = Asian American Social Engagement. 2 = Asian American Social Inhibition. Items with bolded coefficients are items retained for the factor. Only pattern coefficients above .32 were retained in the analysis. Factor correlation were $r = .62$. a. Pattern coefficients. b. Structure coefficients in parentheses.

Study 3

Additional analysis was needed to examine the psychometric properties of the EMSSE-AA scale, including evidence for reliability and validity. Sample 1 and 2 were used to assess the validity of the scale. Composite total scores for the each scale were examined for outliers and normality. Review of scores indicated no significant issues with distribution, with no outliers. Bivariate correlations, means, standard deviations, skewness and kurtosis statistics, and alpha coefficients for all scales are reported in Table 4.

Hypothesis 2. The internal consistency of the EMSSE-AA items was analyzed using the Cronbach's alpha statistic. The scale was deemed to have two subscales. Using the sample extracted for Study 1, Cronbach's alpha of .96 for AASE and .88 for AASI was found. Additional support for reliability was found using the sample for Study 2. Results yielded a Cronbach's alpha of .95 for AASE and .89 for AASI. Analysis of items suggested that each item's contribution to the scale appeared significant, as the Cronbach's alpha would have decreased if any items were deleted. The Cronbach's alpha values ranged from .88 to .96, providing evidence that the EMSSE-AA subscale scores were internally consistent (Field, 2005). This also provides support for hypothesis three.

Hypothesis 3. Evidence of criterion of construct validity was assessed through tests of convergent validity with ethnic identity. Bivariate correlations of participants' responses to the EMSSE-AA subscales and the Multidimensional Ethnic Identity Measure (MEIM; Phinney & Ong, 2007) were observed. The average MEIM score was correlated with the EMSSE-AA subscales. Results yielded a significant positive correlation between the AASE subscale and MEIM scores ($r = .14, p < .05$) in Sample 1. No other significant relationship

was observed between the EMSSE-AA subscales and MEIM in Sample 2. Hypothesis three was partially supported by results.

Hypothesis 4. Analysis of bivariate correlations between scores on the EMSSE-AA subscales and the mainstream subscale of the Vancouver Index of Acculturation (VIA; Ryder, Alden, & Paulhus; 2000) was examined for evidence of convergent validity. Results reflected significant positive correlations in Sample 1 (AASE: $r = .44$ and AASI: $r = .19$, $p < .01$) and Sample 2 (AASE: $r = .43$ and AASI: $r = .20$, $p < .01$) with magnitudes moderate and small in size. Findings indicate that EMSSE-AA subscales positively correlate with Asian American acculturation to mainstream culture and provide evidence for convergent validity.

Hypothesis 5. Analysis of bivariate correlations between the EMSSE-AA subscales and Perceived Social Self-Efficacy scale (PSSE; Smith & Betz, 2000) was observed. Findings yielded significant positive correlations between the EMSSE-AA subscales and PSSE scores. Results indicated that PSSE significantly positively correlated with AASE ($r = .52$, $p < .01$) and AASI ($r = .22$, $p < .01$) in Sample 1 and AASE ($r = .60$, $p < .01$) and AASI ($r = .30$, $p < .01$) in Sample 2. The effect sizes were small to large in range. Results provide evidence for convergent validity of the EMSSE-AA subscales and social self-efficacy.

Hypothesis 6. The relationship between the EMSSE-AA subscales and Social Interaction Anxiety Scale (SIAS; Mattick & Clarke, 1998) was assessed for evidence of convergent validity. Bivariate correlations between the EMSSE-AA subscale scores and SIAS scores were examined. Results yielded significant negative correlations between the SIAS and AASE ($r = -.30$, $p < .01$) and AASI ($r = -.46$, $p < .01$) in Sample 1 and AASE ($r = -.57$, $p < .01$) and AASI ($r = -.52$, $p < .01$) in Sample 2. The significant negative correlations

provide evidence for convergent validity, in which the EMSSE-AA subscales were negatively correlated with the social anxiety. Thus, the hypothesis was supported and evidence for convergent was found.

Hypothesis 7. Evidence of construct validity was further assessed through tests of discriminant validity. The relationship between the EMSSE-AA subscales and Marlowe-Crowne Social Desirability Scale-Short Version (MCSD; Reynolds, 1982) was examined. Bivariate correlations between the EMSSE-AA subscale scores and social desirability reflected significant positive correlations in Sample 2. The AASE and MCSD ($r = .19, p < .01$) and AASI and MCSD ($r = .17, p < .05$) correlations were small in magnitude. Though evidence for discriminant validity was found, the structural dimensions of the MCSD scale did not reflect a single factor structure as expected. Thus, findings may not support this hypothesis, as limitations existed in the structural equivalence of the MCSD.

Table 4

Descriptive Statistics, Internal Reliability, and Intercorrelations

Measures	1	2	3	4	5	6	7
1. AASE	-	.52**	.14*	.44**	.52**	-.30**	.08
2. AASI	.64**	-	.11	.19**	.22**	-.46**	.09
3. MEIM	.05	-.02	-	.05	.34**	-.26**	.06
4. VIA- Mainstream	.43**	.20**	-.11	-	.20**	-.08	-.10
5. PSSE	.60**	.30**	.29**	.26**	-	-.51**	.11
6. SIAS	-.57**	-.52**	-.21**	-.20**	-.70**	-	-.17**
7. MCSD	.19**	.17*	.10	.08	.22**	-.30**	-
<i>M</i>	3.86/3.88	3.65/3.70	3.24/3.18	6.80/6.76	3.56/3.54	1.47/1.40	6.30/6.17
<i>SD</i>	.76/.76	.79/.82	.49/.53	1.26/1.24	.70/.71	.68/.72	2.65/2.86
Range	1-5	1-5	1-5	1-9	1-5	0-4	0-13
Skewness	-.38/-.58	-.59/-.37	-.23/-.52	-.66/-.61	-.03/.02	.22/.13	-.05/.22
Kurtosis	-.16/.16	.69/-.26	-.45/-.10	1.41/1.02	-.06/.20	-.18/-.50	-.55/-.36
Alpha	.96/.95	.88/.89	.90/.90	.91/.90	.96/.96	.92/.92	.63/.70

Note. Intercorrelations for Sample 1 ($n = 298$) are presented above the diagonal, intercorrelations for Sample 2 ($n = 214$) are presented below the diagonal. Descriptive statistics and Cronbach's alpha are stated as: "Sample 1/Sample 2". AASE = Asian American Social Engagement; AASI = Asian American Social Inhibition; MEIM = Minority Ethnic Identity Measure; VIA-Mainstream = Vancouver Index of Acculturation-Mainstream Subscale; PSSE = Perceived Social Self-Efficacy; SIAS = Social Interaction Anxiety Scale; MCSD = Marlowe-Crowne Social Desirability Scale-Short Version. * $p < .05$. ** $p < .01$.

CHAPTER 5

DISCUSSION

The present study aimed to understand the social experiences of minority individuals in the United States. By directly observing Asian American adults' social self-efficacy beliefs in mainstream American society, this study proposed to operationalize Asian Americans' social efficacy beliefs through the development of the EMSSE-AA. Current instruments measure various aspects of personal self-efficacy relevant to minority and cultural interactions. However, evaluation of measures suggest these instruments are not specific to Asian American social experiences in the United States and would not be appropriate to use (Briones et al., 2009; David et al., 2009; Fan et al., 2010; Fan & Mak, 1998; Liang & Prince, 2008). Hence, it was determined that a reliable and valid measure of Asian American perceived social self-efficacy during interpersonal contact with White individuals was necessary. Steps taken to conceptualize and operationalize the content of the construct were done through an extensive literature review of Bandura's social cognitive theory and Asian Americans' unique cultural adjustments/transitions into American mainstream society. Further, semi-structured interviews with Asian American adults and expert consultation were used to further extract items and determine the utility and appropriateness of the scale. This dissertation investigated the operationalized construct using a quantitative nonexperimental descriptive design. The study explored the psychometric properties of the EMSSE-AA including (a) initial factor structure, (b) scale reliability, (c) convergent validity, and (d) discriminant validity. Findings provided evidence in support of the EMSSE-AA instrument for research and clinical purposes. A summary and

discussion of findings will be presented in this chapter. Limitations and implications for future research will also be discussed.

Hypothesis 1

The EMSSE-AA instrument was hypothesized to yield a multidimensional factor structure. The scale's factors were proposed to reflect dimensions of Asian American perceived self-efficacy beliefs during interactions with White individuals. Support for this hypothesis was found in Study 1 and Study 2. Results from the exploratory factor analysis indicated a two-factor structure in both studies.

The multidimensional definition of Asian American social self-efficacy with regard to contact with White individuals that guided the item development of the study was derived from both theoretical and qualitative data from the preliminary study. For the purposes of the current study, Asian American perceived social self-efficacy in relation to social contact with White individuals was defined as one's perceived ability to initiate, maintain, and continue to spend effort in his/her interaction with White individuals on a day-to-day basis (Capara et al., 2010, Liang & Prince, 2008; Smith & Betz, 2000). In addition to this, themes were derived from qualitative semi-structured interviews that included the following: (a) *Social Initiatives*, perceived confidence initiating social contact with a White person, (b) *Tolerance for Cultural Interactions*, perceived ability to tolerate a White individual's insensitivity to diversity, (c) *Personal Adjustments*, perceived ease in managing racial difference by which compromises are made to either feel compelled to seek acceptance or believe he/she is valued equally, (d) *Relational Maintenance*, confidence to maintain relationships with White people, and (e) *General Social Self-Efficacy*, perceived confidence about one's interactions. Although a two-factor structure was not hypothesized, it was hypothesized that a multidimensional factor

structure would emerge provided the defining features of the construct and themes derived throughout the scale development process.

The final factor structure of the EMSSE-AA reflected conceptually meaningful dimensions of the construct, comprising of two distinct components (Factor 1 = Asian American Social Engagement, AASE, Factor 2 = Asian American Social Inhibition, AASI). Items in the first factor, AASE, reflected abilities to confidently initiate and develop meaningful relationships with White individuals. These items aligned with defining features of Bandura's theory of social self-efficacy (Bandura, 1997; Bandura, 1989; Bandura, 1986; Hsu et al., 2012, Liang & Prince, 2008). Sample items from Factor 1 include: *Overall, I feel confident interacting with White individuals; It is easy for me to start a conversation with a White person; I can successfully engage in a social conversation with a White person.*

Items in the first factor appeared to differ from items in the second factor of the EMSSE-AA. Sample items from the second factor, AASI, include: *I worry that White individuals are not interested in interacting with me because I look Asian; My anxiety increases when White individuals look at me differently because I look Asian; I feel anxious when White individuals appear intimidated while talking to me because I am Asian.*

Components of these items reflect the individual's perceived discomfort in interactions with White individuals due to unique racial/ethnic differences. Review of these items based on content also implied that negatively worded items clustered onto the second factor. Though the relationship between the first and second factor appeared to contrast one another, the items in the second factor reflected unique aspects of Asian American social experiences and self-efficacy beliefs. Specifically, Asian Americans' conflicting beliefs such as discomfort and uneasiness during interactions with White individuals were highlighted in the AASI

subscale. One item on the second factor reflected individuals' desires to be more close to White individuals (*I wish to be more comfortable when interacting with White individuals*).

Items in the AASI subscale correlated in the same direction with variables measuring acculturation to mainstream U.S. culture, social self-efficacy, and social anxiety as items in the AAE subscale. Furthermore, the relationship the AASE and AASI subscale was positive and moderate in magnitude. Hence this author would argue that the items in the AASI subscale were not simply negative aspects of Asian Americans' social self-efficacy. But rather, the AASI subscale may tap into a unique construct of Asian Americans' social self-efficacy that is culturally specific to their experiences as Asian Americans in the United States. Where items in AASE reflect expectations of successful and potentially fruitful relations with White individuals, items in the AASI subscale reflect Asian Americans' perceived uneasiness during interactions with White individuals due to racial/ethnic differences.

These findings suggest that examination of culturally unique aspects of Asian Americans' social experiences and factors relevant to moderating self-efficacy beliefs during interactions with White individuals is necessary (Bandura 1989, Bandura, 1986; Leong & Okazaki, 2009; Suzuki, 2002). Specifically, Hsu and colleagues (2012) ascribed Asian Americans as particularly sensitive to social standards and hierarchies within social systems as a result of their endorsed Asian cultural values of filial piety, collectivism, and deference to social rank. Asian Americans may perceive White individuals as socially dominant figures to have higher social status in mainstream society (Hsu et al., 2012). However, research findings have also noted greater apprehension and more social anxiety among Asian Americans in situations that require assertiveness (Sue, Ino, & Sue, 1983; Sue, Sue, Hu, &

Kwon, 1991; Zane & Song, 2007). These research findings suggest endorsement of Asian cultural values may lend Asian Americans as being perceived uneasy in social settings.

Literature on bicultural identity has observed the degree to which Asian Americans identify with two cultural groups (e.g., independent and interdependent self-construal; Markus & Kitayama, 1991; Tawa & Suyemoto, 2010; Uba, 1994). Asian Americans are exposed to the two cultural systems and have a cultural meaning system, which they use to internalize the two self-construals and engage in cultural frame switching (Tawa & Suyemoto, 2010). Cultural frame switching between Asian and Western meaning systems are subconsciously activated in response to external cues (e.g., language, visual images) and functions to allow individuals to attend to the demands of either the individualistic or collectivistic culture (Tawa & Suyemoto, 2010). Results of the two-dimensional structure of the EMSSE-AA may reflect the cultural meaning system used by Asian Americans. Items in the AASI subscale suggest that Asian Americans are aware of racial/ethnic differences between Asian and White individuals. Subsequently, Asian Americans monitor their interactions with White individuals and their awareness of racial/ethnic differences may be highlighted in the AASI subscale. Furthermore, aspects of discomfort and uneasiness throughout their interactions with White individuals may vary according to the Asian American individuals' comfort with cultural frame switching and endorsed bicultural identity (high levels of both independent and interdependent self-construals are endorsed; Markus & Kitayama, 1991). Hence, findings of the current study appeared consistent with literature on Asian American cultural values and bicultural identity. Thus, the AASI is a culturally unique dimension of Asian American social self-efficacy and does not necessarily reflect Asian Americans' social anxieties or poor levels of self-efficacy.

Further, one strength of the study is the replication of findings in two studies. This practice is supported in data reduction research (Thompson, 2008) and increases confidence that the two-factor structure is stable across two randomly selected samples of Asian American adults. Additionally, the EMSSE-AA captures the psychological processes involved in the development of social self-efficacy beliefs including cognitive, affect, motivational, and selective processes. These findings further improve the construct validity of the instrument.

While this author believed that the second subscale tapped into a unique dimension of Asian American social self-efficacy in mainstream society, there may exist alternative explanations for the EMSSE-AA factor structure. For instance, items in the AASE subscale may best reflect Asian American social self-efficacy during interactions with White individuals alone and the AASI subscale may tap into another construct altogether. However, the interpretation of subscales two may be subject to the reification fallacy, which is the interpretation that the hypothetical construct must correspond to a real thing (Kline, 2005). Specifically, aspects of Asian American self-efficacy with regard to interactions with White individuals may not be accurately represented in the EMSSE-AA, as there may be errors in attempting to over-simplify this construct. Errors may have been made with regard to treating the construct of interest if it were a concrete event. Moreover, the name of the second factor, AASI, may not be an accurate label of the construct observed and merely naming the AASI subscale as a component of EMSSE-AA may be a misinterpretation of the results. This error may be reflective of the naming fallacy, which assumes that because a factor is named and identified that the hypothetical construct was correctly labeled and understood (Kline, 2005).

Hypothesis 2

The EMSSE-AA was hypothesized to have adequate evidence of reliability. Evidence for internal consistency of test item scores was supported by a Cronbach's alpha of .70 or higher. The Cronbach's alpha ranged from .88 and .96 for both subscales. A large Cronbach's alpha demonstrates that items within the scale are sufficiently correlated with one another (Clark & Watson, 1995; Cronbach, 1951; Worthington & Whittaker, 2006). Evidence for reliability is particularly important because it increases confidence that the test scores for each item are consistent and decreases likelihood of measurement error. Support for the internal consistency of the EMSSE-AA instrument is strengthened with high internal consistencies found across two studies.

Hypothesis 3

Construct validity of the EMSSE-AA was assessed through a series of proposed convergent relationships with similar constructs, including ethnic identity. Hypothesis 3 proposed that the relationship between EMSSE-AA and ethnic identity would reflect a positive moderate to large correlation. Results yielded a significant relationship between Social Engagement and ethnic identity scale in Study 1 (at $p < .01$). However, the magnitude of this relationship was small in size and no other significant relationship was found between these variables. Ethnic identity is arguably a multidimensional construct, and literature has indicated that deriving a composite, single ethnic identity score from the MEIM is not ideal (Yoon, 2011). In the current study, the structural components of the MEIM scale did not reflect Lee and Yoo's (2004) three-factor model, which included cognitive clarify, affective pride, and behavioral engagement. The structural components of the MEIM reflected a single factor across both studies. However, distinctions were found between the current study's

samples and the sample population of the Lee and Yoo's (2004) study. Lee and Yoo's (2004) samples consisted of university college students located in Texas and California. Samples differed with regard to age, occupation, and geographical location of participants, which may affect the structural equivalence of the MEIM for the current study.

Furthermore, the MEIM was developed to assess the identity formation stage of Erikson's identity model and targets older adolescent identity development. As such, the MEIM may not be an ideal measure to assess ethnic identity for the current samples. Type II error may have resulted, as a significant relationship between EMSSE-AA and ethnic identity may exist and possible issues with a smaller sample size (reduction of statistical power) in Sample 2, thus limiting conclusions drawn. Despite these limitations, the research finding implies that higher levels of Social Engagement were found to be associated with more positive sense of belong to one's ethnic group. This finding provides evidence to support the significance of Asian Americans' perceived social self-efficacy beliefs regarding White individuals on aspects of ethnic identity.

Hypothesis 4

Hypothesis 4 proposed that the relationship between EMSSE-AA and acculturation to mainstream culture would reflect a positive moderate to large correlation. The hypothesis was supported by significant positive relationships between the two EMSSE-AA subscales and the VIA-Mainstream in Study 1 and Study 2. This suggests that one's perceived ability to engage in relationships with White individuals and manage inhibitions and discomfort when relating to White individuals positively influences adherence to mainstream culture. Findings were consistent with literature (Constantine et al., 2004; David et al., 2009) and further substantiate the significance of social self-efficacy beliefs with beliefs to become

involved in mainstream culture. Moreover, distinctions between the magnitude of the correlations between EMSSE-AA subscales and VIA-Mainstream were found. Results stated that the correlation between the AASE and VIA-Mainstream was larger in magnitude, and the correlation between the AASI and VIA-Mainstream was moderate in magnitude. AASI would likely have a stronger relationship with a measure of enculturation, as items in the AASI subscale appeared consistent to adherence to one's heritage culture and heritage identity, and items in the AASE subscale appeared consistent with adherence to the United States' cultural values.

Hypothesis 5

Hypothesis 5 held that the relationship EMSSE-AA and social self-efficacy would reflect a positive moderate to large correlation. Significant positive relationships between the EMSSE-AA and social self-efficacy were found across both studies (Sample 1 and Sample 2). Results reflected that higher levels of Asian Americans' social self-efficacy, with regard to engaging White individuals, was associated with lower levels of social anxiety. Findings were consistent with literature, indicating a significant relationship between Asian American social self-efficacy beliefs regarding contact with White individuals and general social self-efficacy beliefs (Briones et al., 2009; David et al., 2009; Fan et al., 2010; Fan & Mak, 1998; Liang & Prince, 2008).

Moreover, distinctions between the magnitude of the correlations between EMSSE-AA subscales and PSSE were found. Results stated that the correlation between the AASE and PSSE was larger in magnitude, and the correlation between the AASI and PSSE was moderate in magnitude. Possible differences may be because the PSSE is a measure of general social self-efficacy and the AASI measures a specific domain of social self-efficacy.

The AASI subscale measured Asian Americans' social self-efficacy beliefs regarding interactions with White individuals, and the correlation between the AASI and PSSE is likely to be moderate.

Hypothesis 6

Hypothesis 6 proposed a negative relationship would be found between EMSSE-AA and social anxiety, with moderate to large correlations in magnitude. Findings were consistent with research implicating a significant negative relationship between social self-efficacy beliefs and anxiety (Ho and Lau 2011; Hsu et al., 2012) in both Study 1 and Study 2. The AASI was found to negatively correlate with social anxiety. Findings suggested that the AASI subscale measures a unique aspect of Asian American social self-efficacy. Individual items in the AASI appear to reflect Asian Americans' awareness of cultural differences and ability to manage their discomfort when interacting with White individuals.

Hypothesis 7

Additional evidence for construct validity of the EMSSE-AA was observed in relationships between EMSSE-AA and a measure of social desirability. Hypothesis 7 proposed a correlation between EMSSE-AA and social desirability that was small in magnitude. Relationships between these measures provide evidence for discriminant validity, thus suggesting that the EMSSE-AA is unrelated to social desirability. Findings reflected small correlations in magnitude, with significant positive correlations between the EMSSE-AA and social desirability in Study 2 and non-significant relationships in Study 1. However, limitations exist in the interpretation of these results due to poor psychometric properties of the MCSD-Short Version for the current study. Furthermore, research has implicated that East Asian participants tend to have more variable responses and

interpretations of the MCSD scale items (Middleton & Jones, 2000). Findings further implicate that the MCSD-Short Version may not be an appropriate measure to use on Asian American samples, as cultural response bias may jeopardize the construct validity of the MCSD-Short Version when used on non-Western samples (Middleton & Jones, 2000).

Limitations

Potential threats to the validity of conclusions drawn from this study should also be noted (Heppner, Wampold, & Kivlighan, 2008). Identified limitations were categorized as threats to statistical conclusion validity, construct validity, and external validity.

Statistical conclusion validity refers to the degree to which accurate conclusions were drawn from relationships found between variables. Findings regarding the placement of item 40, *I feel uneasy when a White person approaches me* in the final EMSSE-AA were inconsistent. This item loaded on factor 2 in Study 1, however, findings from Study 2 indicated the item loaded onto factor 1 with relatively weaker factor loading coefficients. This may be problematic, as the item may not load cleanly onto factor 2 in future studies. Despite this limitation, item 40 was retained due to the relevance of the item content on factor 2 and high communality values and in Study 1 (.51) and Study 2 (.45). Conceptually, this item taps into aspects of Asian Americans' ability to monitor their cultural meaning system. Markus and Kitayama's (1991) model suggests that individuals endorse varying levels of the independent and interdependent self-construal. Item 40 was retained because it captures varying aspects of Asian Americans' comfort with cultural frame switching. Asian Americans with low bicultural identity, who present with difficulties in incorporating both cultures into a cohesive identity and view the two cultures as highly dissimilar, may find that this item is highly characteristic of them in comparison to individuals with high levels of

bicultural identity integration. Thus, this item was retained because the item, in relation to other items in the EMSSE-AA, theoretically captures different dimensions of Asian Americans' bicultural identity.

Future research may ameliorate this limitation by testing different models of the EMSSE-AA factor structure and provide justification for dropping the item in future studies. Further, for the purpose of the current study, findings concluded a two-factor structure model of the EMSSE-AA instrument. However, Factor 1 consistently reported a relatively larger proportion of variance in Study 1 and Study 2. Future research may further assess the dimensional aspects of the EMSSE-AA measure.

Construct validity reflects how well the variables represent constructs they were intended to measure. When there is ambiguity about a construct and the manner in which the construct was operationalized, a confound may exist. For instance, all variables in the current study were operationalized using self-report measures. Issues with mono-method bias may exist and make findings vulnerable to inflated correlations because of halo rating effects. Additionally, issues with the MEIM and MCSD-Short Version scales were found. These scales had poor structural equivalence in both Sample 1 and 2. These instruments may not be valid measures to use on the Asian American adult populations, as past studies also noted inconsistencies in the structural components of the MEIM measure and poor reliability coefficients for the MCSD-Short Version scale.

Generalizability of results from the current study may be limited. The sample size obtained for this current study, although large, may have benefitted from a larger sample. Kline's (2005) recommendations were initially used as guidelines, which proposed to recruit a minimum of 10 participants per item developed to assess the psychometric properties of the

scale. This requirement suggested a total of 600 participants were needed (400 participants for the initial EFA and 200 participants for the following EFA). However, due to limitations in accessing a large enough participant pool and attrition rates using internet-based surveys, only 512 participants completed the study. Although the final sampling recommendations followed adequate ratio of cases to parameter, a larger sample size may have increased the generalizability of results and decreased sampling error. Limitations to sampling procedures affected the overall generalizability of findings and applicability of the EMSSE-AA instrument among the Asian American adult population.

Furthermore, discrepancies were found in the demographic characteristics of the Samples 1 and 2 in comparison to the target population. Sample 1 and 2 did not reflect the target population of Asian American adults in the United States. The study's samples did not accurately reflect the percentage of Asian Indian individuals and male adults, when compared to population statistics. Sampling theory states that researchers should select samples that reflect the population of interest because inferences about the population are based on the sample used. (Heppner, Wampold, & Kivlighan, 2008). This is also necessary when using inferential statistics, because generalizations about the population parameters are made on the basis of sample statistics, and for population validity in quantitative research. To achieve good population validity, the sample must be randomly selected from a defined population to generalize the results to reduce the probability that the sample has different characteristics than the population from which it was drawn (Gall, Gall, & Borg, 2007).

Mean imputation was also used because this was the more preferred method of addressing missing values (Tabachnick & Fidell, 2007). A limitation exists when using this method, as scores may trend towards the mean and there exists errors the data overfitting.

Additionally, extraction of Sample 1 and Sample 2 from the single sample collected for the study may also impact the data. Findings may have poor predictive power because the samples were derived from the same sample pool and errors may exist in overfitting the data utilizing this particular sampling method as well.

Research Recommendations

Moreover, future research with aims to further strengthen the psychometric properties of the EMSSE-AA instrument and address the aforementioned threats to validity is recommended. Specifically, replication of findings using a confirmatory factor analysis (CFA) is necessary to determine if the two subfactors are reflective of the latent variable. A CFA may also increase the ability to make accurate conclusions about the instrument and the generalizability of the instrument among the Asian American adult population (Kline, 2005). Further, additional replication of the exploratory factor analysis would further substantiate evidence for the dimensional structure of the EMSSE-AA and provide opportunity to assess for test-retest reliability among Asian American adults (Kline, 2005). Such findings would provide additional evidence to either support the current study's findings and/or improve upon the psychometric properties of the scale.

Specifically, the relationship between the EMSSE-AA and measures of ethnic identity should be replicated to delineate the relationship between these constructs. Research would suggest a positive relationship between the AASE subscale and ethnic identity. The relationship between the AASI subscale and ethnic identity has yet to be determined, and a follow-up study utilizing an alternative measure of ethnic identity and larger sample may be useful. Alternative measures of ethnic identity, such as the Ethnic Identity Measure, may be used in the future. Additionally, an evaluation between a measure of social assertiveness and

the EMSSE-AA, specifically with the AASI subscale, would further build upon literature regarding Asian American assertiveness in social settings (Zane et al., 1991) and possibly provide evidence of incremental validity for the AASI. Prior research by Zane and colleagues (1991) conclude that self-efficacy beliefs serve as cultural factors that drive social interactions and Asian Americans' perceived assertiveness in various social settings. The EMSSE-AA may better account for Asian American's social interactions, more so than current measures of assertiveness.

Implications and Conclusions

Overall findings from the study demonstrate the utility of the EMSSE-AA instrument. Specifically, results from this study provide information on cultural nuances of Asian American social experiences for those in public service and the mental health profession. With regard to clinical practice, research supports the notion that cultural competence can be important for counseling particularly in increasing the client's perception of the counselor's cultural competence (Grant-Thompson & Atkinson, 1997; Pomales, Claiborn, & LaFromboise, 1986). Results from this study identify specific experiences with regard to Asian Americans' perceived self-efficacy during social interactions with White individuals. Acknowledgement and understanding of the EMSSE-AA construct may further promote aspects of cultural competency in clinical practice (Sue et al., 1992). Discussion surrounding Asian Americans' perceived discomfort surrounding the relationship would likely further develop therapeutic alliance factors and increase their sense of agency. The AASI subscale may be used to enhance knowledge of Asian Americans' social experience and help increase awareness surrounding their day-to-day interactions with White individuals.

Moreover, literature on multicultural counseling and theories instruct helping professionals to have an advanced understanding and awareness of racism and White privilege. The current study sheds light on Asian American minority experiences and an alternative perspective of how Asian Americans perceive these experiences. Information obtained from the current study may provide a more accurate account of how Asian American adults manage day-to-day social interactions. Findings also suggest that Asian Americans' social self-efficacy is a highly relevant construct in observing cross-racial dynamics. It seems that understanding this aspect of social self-efficacy is critical in studying the development of racial/ethnic social experiences and provides a theoretical and empirical framework identifying their experience in relation to White Americans in the United States. Future multicultural literature may build upon the current study and attempt to understand how other minority groups interact with members of the dominant culture.

Appendix A
Original EMSSE-AA Instrument

1 2 3 4 5 6 7
Strongly disagree Disagree Somewhat disagree Neither agree or disagree Somewhat agree Agree Strongly Agree

Cognitive Processes

1. I am confident when initiating a conversation with a White individual.
2. I can successfully engage in social conversations with a White individual.
3. When I approach White individuals, they will openly reciprocate my interest to converse.
4. I often leave a conversation with a White individual feeling misunderstood.
5. I am confident in my abilities to approach White individuals during social situations.
6. My attitude towards White individuals in social settings is positive.
7. I am able to maintain positive interactions with White individuals.
8. I recognize that it is difficult for me to converse with White individuals.
9. It is easy for me to approach White individuals.
10. I sometimes doubt myself when I talk with White individuals.

Motivational Processes

11. I sometimes doubt myself when I talk with White individuals.
12. I only interact with White individuals when necessary.
13. It is important for me to be effective when interacting with White individuals.
14. It is important that I can interact with White individuals well.
15. I would like to be sociable when among White individuals.
16. It is important that I interact with White individuals.
17. I would like to be able to express myself openly when among White individuals.
18. It is necessary that I interact with White individuals.
19. I want to share aspects of my culture with White individuals.
20. I wish to be comfortable with myself with interacting with White individuals.

Affective Processes

21. I enjoy interacting with White individuals.
22. I feel it is easy for me to start a conversation with White individuals.
23. It is stressful for me to approach White individuals.
24. I feel threatened when White individuals approach me.
25. My daily interactions with White individuals are stressful.
26. I doubt that White individuals treat me the same as other White people.
27. I am calm when entering a room full of White individuals.
28. I am confident with myself when talking to a group of White individuals.
29. I feel my comments are underappreciated when interacting with White individuals.
30. I am shy when interacting with White individuals

Selective Processes

31. I am uncomfortable with entering a room full of White individuals.
 32. I avoid social situations when I am the minority.
 33. I prefer to attend events when other minorities are likely present.
 34. I prefer to interact with White individuals when I am not the only minority present.
 35. My network of friends consist of mostly Asian Americans.
 36. I prefer not to interact with White individuals because they view me differently.
 37. I am less comfortable hosting social events with White individuals.
 38. I prefer to work in a setting with individuals other than White individuals.
 39. I prefer a network of close friends that include White individuals.
 40. I am more comfortable in settings where a mix of White individuals and racial individuals are present.
-

Original EMSSE-AA Items, Descriptive Statistics, Score Ranges

EMSSE Item	<i>N</i>	<i>M</i>	<i>SD</i>	Score Range	Skewness	Kurtosis
1. I am confident when I approach a White person in a social setting.	512	3.80	0.92	1-5	-0.45	-0.09
2. I get along well with White people.	512	3.98	0.84	1-5	-0.58	0.25
3. It is difficult for me to start a conversation with a White person.	512	3.64	1.02	1-5	-0.47	-0.22
4. I am comfortable expressing my thoughts when around White people.	512	3.79	0.97	1-5	-0.51	-0.11
5. In social situations, I feel stressed approaching a White person.	512	3.76	1.02	1-5	-0.60	-0.05
6. I am unable to express my emotions in the same way as White people do.	512	3.49	1.13	1-5	-0.27	-0.60
7. I am comfortable approaching a White person.	512	3.96	0.95	1-5	-0.77	0.42
8. I can successfully engage in a social conversation with a White person.	512	4.03	0.90	1-5	-0.63	-0.09
9. I express myself freely when among White people.	512	3.70	0.95	1-5	-0.22	-0.62
10. It is easy for me to be social even when a White person seems uncomfortable with me being Asian.	512	3.28	1.05	1-5	-0.14	-0.50
11. I can have meaningful conversations with White people, who may know little about Asian culture.	512	3.85	0.94	1-5	-0.48	-0.17
12. I am comfortable talking to a White person about my Asian background.	512	3.94	0.99	1-5	-0.71	0.04
13. I feel comfortable having conversations about race and diversity when among White people.	512	3.83	0.95	1-5	-0.42	-0.43
14. I feel anxious when White individuals appear intimidated while talking to me because I am Asian.	512	3.64	1.04	1-5	-0.46	-0.24
15. I doubt that White individuals would like to be my close friend.	512	3.86	1.06	1-5	-0.72	-0.07
16. My anxiety increases when White individuals look at me differently because I am Asian.	512	3.38	1.19	1-5	-0.26	-0.78
17. I try to avoid interacting with White individuals when they appear uncomfortable with diversity.	512	3.25	1.14	1-5	-0.06	-0.66
18. Regardless of cultural differences, I can have good relationships with White people.	512	4.02	0.89	1-5	-0.74	0.42
19. I become nervous when a White person points out cultural differences between us.	512	3.75	1.00	1-5	-0.55	-0.13
20. It bothers me when a White person does not talk to me because I am Asian.	512	2.66	1.30	1-5	0.26	-0.95
21. I am happy about my ability to have lasting relationships with White people.	512	3.81	0.94	1-5	-0.39	-0.28

EMSSE Item	<i>N</i>	<i>M</i>	<i>SD</i>	Score Range	Skewness	Kurtosis
22. I worry that White individuals are not interested in interacting with me because I look Asian.	512	3.67	1.13	1-5	-0.56	-0.41
23. I am not confident addressing cultural differences between a White person and me.	512	3.49	1.09	1-5	-0.56	-0.22
24. In most situations, I tend to adjust who I am to be accepted by White people.	512	3.41	1.12	1-5	-0.23	-0.58
25. I feel confident to approach a White person who makes insensitive comments about Asians.	512	3.16	1.06	1-5	-0.08	-0.41
26. In social situations, I present myself the same to Asian people and White people	512	3.76	0.98	1-5	-0.32	-0.59
27. I feel compelled to act more "White" when I am around White people.	512	3.47	1.13	1-5	-0.23	-0.77
28. I am able to decide when I can be myself when around White people easily.	512	3.63	0.97	1-5	-0.42	-0.03
29. I can easily decide how to be myself, in order to interact with White people comfortably.	512	3.67	0.93	1-5	-0.35	-0.18
30. My relationship style is the same when I interact with Asian people and White people.	512	3.59	1.06	1-5	-0.26	-0.72
31. In social situations, I must adjust myself to fit in with White people.	512	3.44	1.02	1-5	-0.18	-0.53
32. It is important that I try to make White people feel more comfortable when around me.	512	3.35	1.10	1-5	-0.16	-0.67
33. I feel that I can be myself when I interact with White people.	512	3.73	1.02	1-5	-0.46	-0.30
34. I'd rather adapt and be more White, than to act Asian when I'm around White people.	512	3.62	1.15	1-5	-0.43	-0.69
35. It is easy for me to start a conversation with a White person.	512	3.77	0.95	1-5	-0.43	-0.18
36. I am capable of developing good friendships with others, including White people.	512	3.96	0.93	1-5	-0.50	-0.49
37. I wish to feel more confident when I am around White individuals.	512	3.28	1.16	1-5	-0.23	-0.58
38. I only interact with a White person when I have to.	512	3.76	1.10	1-5	-0.58	-0.37
39. I am confident in my abilities to develop close friends with White people.	512	3.79	0.99	1-5	-0.52	-0.20
40. I feel uneasy when a White person approaches me.	512	4.04	1.00	1-5	-0.94	0.43
41. I can have close friendships with White people.	512	3.83	1.06	1-5	-0.52	-0.52
42. I feel confident to talk to a White person who makes a racist comment about me.	512	2.89	1.22	1-5	0.14	-0.86
43. Overall, I feel confident interacting with White individuals.	512	3.96	0.92	1-5	-0.62	0.05
44. I wish to be more comfortable when interacting with White people.	512	3.25	1.16	1-5	-0.24	-0.61
45. In social interactions, I believe my opinions are equally values as a White person's.	512	3.89	0.99	1-5	-0.48	-0.46

Appendix B
Revisions and Expert Review of EMSSE-AA Instrument

Ethnic Minority Social Self-Efficacy Scale—Asian American Version

Directions: The following questions will ask you to think about your social interactions with White people and how comfortable you feel interacting with White people. Though you may have close White friends or significant relationships with White people, these questions are directed towards your social interactions with White strangers and/or White individuals you are unfamiliar with.

Please answer each statement as carefully as possible. Please circle one of the numbers to the right of each statement to indicate your degree of agreement or disagreement.

1 Strongly disagree 2 Disagree 3 Somewhat disagree 4 Neither agree or disagree 5 Somewhat agree 6 Agree 7 Strongly Agree

Comment [W31]: In terms of validity evidence, I would recommend that you include a measure of social anxiety. A reviewer might wonder if your measure is a function of social anxiety, i.e. people who score low on perceived confidence are folks with social anxiety and it's not a function of race. To rule out this confound, you can control for social anxiety in a test of incremental validity – you can demonstrate that your measure is related to other outcomes over and beyond the effects of social anxiety (use multiple regression).

I. SOCIAL INITIATIVES—Perceived confidence initiating social contact with a White person

1. I am confident when I approach a White person in a social setting.	1	2	3	4	5	6	7
*2. It is difficult for me to start a conversation with a White person.	1	2	3	4	5	6	7
3. It is easy for me to start a conversation with a White person.	1	2	3	4	5	6	7
*4. In social situations, I feel stressed approaching a White person when only a small number of racial minorities are present.	1	2	3	4	5	6	7
*5. I feel uneasy when a White person approaches me.	1	2	3	4	5	6	7
6. I am comfortable approaching a White person even when I am the only minority in the room.	1	2	3	4	5	6	7
7. I can successfully engage in a social conversation with a White person.	1	2	3	4	5	6	7

Comment [W32]: Consider using a 6-point scale and don't use "neither agree or disagree" Some psychometricians believe that "neither agree or disagree" measures a different construct...

Comment [W33]: I worry that you'll get very little variance on this subscale if you're using a largely American-born sample. I might be wrong – I can't imagine a lot of U.S.-born AAs having anxiety interacting with White people unless they are generally anxious in social situations regardless of whom they talk with. However if your sample includes Asian international students and more recent Asian American immigrants, I can see how this subscale is relevant to their experiences.

Comment [W34]: I wonder if you should use "Asians" instead of "racial minorities" to be consistent with dimension 2. Same for 6.

II. TOLERANCE FOR CULTURAL INTRODUCTIONS/INTERACTIONS—Perceived ability to tolerate a White individual's sensitivity to diversity

8. It is easy for me to be sociable even when a White person seems uncomfortable with me being Asian.	1	2	3	4	5	6	7
9. I can have meaningful conversations with White people, who may know little about Asian culture.	1	2	3	4	5	6	7
10. I can handle conversations about race and diversity when among White people.	1	2	3	4	5	6	7
*11. I feel anxious when White individuals appear intimidated of talking to me because I am Asian.	1	2	3	4	5	6	7
*12. My anxiety increases when White individuals look at me differently because I am Asian.	1	2	3	4	5	6	7

Comment [W35]: Do you mean "discomfort with diversity"?

Comment [W36]: Items 11, 12, 14-18 deal with emotions whereas the other items do not. It's possible that your factor analysis might uncover 2 dimensions that are distinguished by emotion-related vs. non-emotion-related items. You might want to standardize the items by only using emotion-related items.

*13. I try to avoid interacting with White individuals when they appear uncomfortable with diversity.	1	2	3	4	5	6	7
*14. I become nervous when a White person points out cultural differences between us.	1	2	3	4	5	6	7
*15. It bothers me when a White person does not talk to me because I am Asian.	1	2	3	4	5	6	7
*16. I worry that White individuals are not interested in interacting with me because I look Asian.	1	2	3	4	5	6	7
*17. My confidence to address cultural differences between a White person and me is low.	1	2	3	4	5	6	7
18. My confidence to approach a White person who makes a racist comment about me is high.	1	2	3	4	5	6	7

III. PERSONAL ADJUSTMENTS—Perceived ease in managing racial differences by which compromises are made to either compel the individual to want acceptance or believe he/she is valued equally

*19. I am compelled to act more "White" when I am around White people.	1	2	3	4	5	6	7
*20. I choose to be less "Asian" when I interact with White people.	1	2	3	4	5	6	7
*21. It is easier for me to adapt and be more White, than to act Asian when I'm around White people.	1	2	3	4	5	6	7
*22. In social situations, I adjust myself to fit in with White people.	1	2	3	4	5	6	7
*23. I try to make White people feel more comfortable when around me.	1	2	3	4	5	6	7
24. I am equally comfortable with myself when around Asian people and White people.	1	2	3	4	5	6	7
25. I feel that I can be myself when I interact with White people.	1	2	3	4	5	6	7
26. In social situations, I present myself the same to Asian people and White people.	1	2	3	4	5	6	7

IV. RELATIONAL MAINTAINENCE—Perceived ability and confidence to maintain relationships with White people and have successful relationships with White people

†7. I am capable of developing good friendships with others, including White people.	1	2	3	4	5	6	7
28. I am happy about my ability to have lasting relationships with White people.	1	2	3	4	5	6	7
29. I can have a social network of close friends that include White people.	1	2	3	4	5	6	7
†30. I am only interact with a White person when I have to.	1	2	3	4	5	6	7

Comment [W17]: Rephrase for clarity:

"I am not confident of addressing cultural differences between a White person and me."

Comment [W18]: Rephrase for clarity: "I feel confident confronting a White person who makes a racist comment about me."

Comment [W19]: I really like this subscale - I think it will be an important contribution to the literature - this speaks to the experiences of many Asian Americans --- the extent to which one is different across different racial contexts. Good job!

Comment [W110]: Consider rephrasing - this subscale has less to do with comfort and more to do with adjusting to fit with White people. Something along the lines of "My interpersonal style is the same when I interact with Asian people versus White people."

31. Regardless of cultural differences, I can have good relationships with White people.	1	2	3	4	5	6	7
32. I am confident in my abilities to develop close friends with White people.	1	2	3	4	5	6	7
33. I can have a social network of good friends that consist of different people, including White people.	1	2	3	4	5	6	7
* 34. <i>I doubt that White individuals would like to be my close friend.</i>	1	2	3	4	5	6	7
35. I can have close friendships with White people.	1	2	3	4	5	6	7

V. General Social Self-Efficacy—Perceived confidence about one's social interactions

36. I am comfortable talking to a White person about a variety of things including my Asian background.	1	2	3	4	5	6	7
37. Overall, I feel confident interacting with White individuals.	1	2	3	4	5	6	7
38. I <u>enjoy spending time with White people.</u>	1	2	3	4	5	6	7
39. I express myself freely when among White people.	1	2	3	4	5	6	7
40. In general social interactions, I believe my opinions are equally valued as a White person's.	1	2	3	4	5	6	7
*41. <i>I am unable to express my emotions in the same way as White people do.</i>	1	2	3	4	5	6	7
*42. <i>I wish to feel more confident when I am around White individuals.</i>	1	2	3	4	5	6	7
43. I am comfortable expressing my thoughts when around White people.	1	2	3	4	5	6	7
*44. <i>I wish to be more comfortable when interacting with White people</i>	1	2	3	4	5	6	7

Comment [WJ11]: It helps to be more specific.

Comment [WJ12]: This item doesn't explicitly relate to confidence. I guess it's possible to be confident but still not enjoy spending time with White people.

Ethnic Minority Social Self-Efficacy Scale—Asian American Version

Directions: The following questions will ask you to think about your social interactions with White people and how comfortable you feel interacting with White people. Though you may have close White friends or significant relationships with White people, these questions are directed towards your social interactions with White strangers and/or White individuals you are unfamiliar with.

Please answer each statement as carefully as possible. Please circle one of the numbers to the right of each statement to indicate your degree of agreement or disagreement.

1 Strongly disagree 2 Disagree 3 Somewhat disagree 4 Neither agree or disagree 5 Somewhat agree 6 Agree 7 Strongly Agree

I. SOCIAL INITIATIVES—Perceived confidence initiating social contact with a White person

1. I am confident when I approach a White person in a social setting.	1	2	3	4	5	6	7
*2. It is difficult for me to start a conversation with a White person.	1	2	3	4	5	6	7
3. It is easy for me to start a conversation with a White person.	1	2	3	4	5	6	7
*4. In social situations, I feel stressed approaching a White person when only a small number of racial minorities are present.	1	2	3	4	5	6	7
*5. I feel uneasy when a White person approaches me.	1	2	3	4	5	6	7
6. I am comfortable approaching a White person even when I am the only minority in the room.	1	2	3	4	5	6	7
7. I can successfully engage in a social conversation with a White person. I can initiate to make a White friend easily.	1	2	3	4	5	6	7

II. TOLERANCE FOR CULTURAL INTRODUCTIONS—Perceived ability to tolerate a White individual's sensitivity to diversity

8. It is easy for me to be social even when a White person seems uncomfortable with me being Asian.	1	2	3	4	5	6	7
9. I can have meaningful conversations with White people, who may know little about Asian culture.	1	2	3	4	5	6	7
10. I can handle conversations about race and diversity when among White people.	1	2	3	4	5	6	7
*11. I feel anxious when White individuals appear intimidated of talking to me because I am Asian.	1	2	3	4	5	6	7
*12. My anxiety increases when White individuals look at me differently because I am Asian.	1	2	3	4	5	6	7

Comment [w1]: Does it refer to social relationship only?

Comment [w2]: Are these questions ONLY directed towards the interaction with White strangers or White individuals you are unfamiliar with? The questions below do not seem to ONLY limit the stranger.

Also, I think social self-efficacy do not need to limit to strangers.

Comment [w3]: In the actual scale, I do not think that you will put these two items together. Correct?

Comment [w4]: Is this part necessary?

Comment [w5]: Necessary?

Comment [w6]: Not clear to me.

Comment [w7]: If it is to tolerate...whether it needs to tolerate insensitivity...

*13. I try to avoid interacting with White individuals when they appear uncomfortable with diversity.	1	2	3	4	5	6	7
*14. I become nervous when a White person points out cultural differences between us.	1	2	3	4	5	6	7
*15. It bothers me when a White person does not talk to me because I am Asian.	1	2	3	4	5	6	7
*16. I worry that White individuals are not interested in interacting with me because I look Asian.	1	2	3	4	5	6	7
*17. My confidence to address cultural differences between a White person and me is low.	1	2	3	4	5	6	7
18. My confidence to approach a White person who makes a racist comment about me is high	1	2	3	4	5	6	7

III. PERSONAL ADJUSTMENTS—Perceived ease in managing racial differences by which compromises are made to either compel the individual to want acceptance or believe he/she is valued equally

*19. I am compelled to act more “White” when I am around White people.	1	2	3	4	5	6	7
*20. I choose to be less “Asian” when I interact with White people.	1	2	3	4	5	6	7
*21. It is easier for me to adapt and be more White, than to act Asian when I’m around White people.	1	2	3	4	5	6	7
*22. In social situations, I adjust myself to fit in with White people.	1	2	3	4	5	6	7
*23. I try to make White people feel more comfortable when around me.	1	2	3	4	5	6	7
24. I am equally comfortable with myself when around Asian people and White people.	1	2	3	4	5	6	7
25. I feel that I can be myself when I interact with White people.	1	2	3	4	5	6	7
26. In social situations, I present myself the same to Asian people and White people.	1	2	3	4	5	6	7

IV. RELATIONAL MAINTAINENCE—Perceived ability and confidence to maintain relationships with White people and have successful relationships with White people

27. I am capable of developing good friendships with others, including White people.	1	2	3	4	5	6	7
28. I am happy about my ability to have lasting relationships with White people.	1	2	3	4	5	6	7
29. I can have a social network of close friends that include White people.	1	2	3	4	5	6	7
*30. I am only interact with a White person when I have to.	1	2	3	4	5	6	7

Comment [w8]: How about this.
I feel confident to approach a White person who makes a racist comment about me.
This question seems to be more related to negotiate the conflict or manage the conflict.

Comment [w9]: This definition is not clear to me regarding the meaning....

Comment [w10]: I suggest removing these two words because it has different meanings.
---with others, including White people: there are others and White people. Then, it is not clear that participants are answering for Others or for White...
----with White people: It is more straightforward...

Comment [w11]: The same issue as above...
How about...close friends who are White or close White friends.

31. Regardless of cultural differences, I can have good relationships with White people.	1	2	3	4	5	6	7
32. I am confident in my abilities to develop close friendships with White people.	1	2	3	4	5	6	7
33. I can have a social network of good friends that consist of different people, including White people.	1	2	3	4	5	6	7
* 34. I doubt that White individuals would like to be my close friend.	1	2	3	4	5	6	7
35. I can have close friendships with White people.	1	2	3	4	5	6	7
V. General Social Self-Efficacy—Perceived confidence about one's social interactions with White people							
36. I am comfortable talking to a White person about a variety of things including my Asian background.	1	2	3	4	5	6	7
37. Overall, I feel confident interacting with White individuals.	1	2	3	4	5	6	7
38. I enjoy spending time with White people.	1	2	3	4	5	6	7
39. I express myself freely when among White people.	1	2	3	4	5	6	7
40. In general social interactions, I believe my opinions are equally valued as a White person's.	1	2	3	4	5	6	7
*41. I am unable to express my emotions in the same way as White people do.	1	2	3	4	5	6	7
*42. I wish to feel more confident when I am around White individuals.	1	2	3	4	5	6	7
43. I am comfortable expressing my thoughts when around White people.	1	2	3	4	5	6	7
*44. I wish to be more comfortable when interacting with White people	1	2	3	4	5	6	7
45. I get along well with White people.	1	2	3	4	5	6	7

Comment [w12]: This question is the same as item 29.

Comment [w13]: I think that general self-efficacy still needs to be with White people.

Comment [w14]: Needed?

Comment [w15]: What's the difference with or without the word 'general'?

Comment [w16]: I have some reactions for this item. It is a measure of self-perception of social efficacy. However, this item is more on others' evaluation.

Comment [w17]: This question has a bias...it implied that expressing emotion is good....it is a White standard....Also, it does not seem to fit with this scale well because it involves a comparison between Asian and White.

| One possible dimension is to negotiate the conflict or differences in the relationship...

Ethnic Minority Social Self-Efficacy Scale—Asian American Version

Directions: The following questions will ask you to think about your social interactions with White people and how comfortable you feel interacting with White people. Though you may have close White friends or significant relationships with White people, these questions are directed towards your social interactions with White strangers and/or White individuals you are unfamiliar with.

Please answer each statement as carefully as possible. Please circle one of the numbers to the right of each statement to indicate your degree of agreement or disagreement.

1 2 3 4 5 6 7
 Strongly disagree Disagree Somewhat disagree Neither agree or disagree Somewhat agree Agree Strongly Agree

I. SOCIAL INITIATIVES—Perceived confidence initiating social contact with a White person

1. I am confident when I approach a White person in a social setting.	1	2	3	4	5	6	7
*2. It is difficult for me to start a conversation with a White person.	1	2	3	4	5	6	7
3. It is easy for me to start a conversation with a White person.	1	2	3	4	5	6	7
*4. In social situations, I feel stressed approaching a White person when only a small number of racial minorities are present.	1	2	3	4	5	6	7
*5. I feel uneasy when a White person approaches me.	1	2	3	4	5	6	7
6. I am comfortable approaching a White person even when I am the only minority in the room.	1	2	3	4	5	6	7
7. I can successfully engage in a social conversation with a White person.	1	2	3	4	5	6	7

II. TOLERANCE FOR CULTURAL INTRODUCTIONS—Perceived ability to tolerate a White individual's sensitivity to diversity

8. It is easy for me to be social even when a White person seems uncomfortable with me being Asian.	1	2	3	4	5	6	7
9. I can have meaningful conversations with White people, who may know little about Asian culture.	1	2	3	4	5	6	7
10. I can handle conversations about race and diversity when among White people.	1	2	3	4	5	6	7
*11. I feel anxious when White individuals appear intimidated <i>by</i> talking to me because I am Asian.	1	2	3	4	5	6	7
*12. My anxiety increases when White individuals look at me differently because I am Asian.	1	2	3	4	5	6	7
*13. I try to avoid interacting with White individuals when they appear	1	2	3	4	5	6	7

Comment [P1]: white?

31. Regardless of cultural differences, I can have good relationships with White people.	1	2	3	4	5	6	7
32. I am confident in my abilities to develop close friendships with White people.	1	2	3	4	5	6	7
33. I can have a social network of good friends that consist of different people, including White people.	1	2	3	4	5	6	7
* 34. I doubt that White individuals would like to be my close friend.	1	2	3	4	5	6	7
35. I can have close friendships with White people.	1	2	3	4	5	6	7

V. General Social Self-Efficacy—Perceived confidence about one's social interactions

36. I am comfortable talking to a White person about a variety of things including my Asian background.	1	2	3	4	5	6	7
37. Overall, I feel confident interacting with White individuals.	1	2	3	4	5	6	7
38. I enjoy spending time with White people.	1	2	3	4	5	6	7
39. I express myself freely when among White people.	1	2	3	4	5	6	7
40. In general social interactions, I believe my opinions are equally valued as a White person's.	1	2	3	4	5	6	7
*41. <i>I am unable to express my emotions in the same way as White people do.</i>	1	2	3	4	5	6	7
*42. <i>I wish to feel more confident when I am around White individuals.</i>	1	2	3	4	5	6	7
43. I am comfortable expressing my thoughts when around White people.	1	2	3	4	5	6	7
*44. <i>I wish to be more comfortable when interacting with White people</i>	1	2	3	4	5	6	7

Comment [P4]: How do you account for the cultural norm of Asians being less expressive about their emotions in general?

uncomfortable with diversity.

*14. I become nervous when a White person points out cultural differences between us.	1	2	3	4	5	6	7
*15. It bothers me when a White person does not talk to me because I am Asian.	1	2	3	4	5	6	7
*16. I worry that White individuals are not interested in interacting with me because I look Asian.	1	2	3	4	5	6	7
*17. My confidence to address cultural differences between a White person and me is low.	1	2	3	4	5	6	7
18. My confidence to approach a White person who makes a racist comment about me is high.	1	2	3	4	5	6	7

III. PERSONAL ADJUSTMENTS—Perceived ease in managing racial differences by which compromises are made to either compel the individual to want acceptance or believe he/she is valued equally

*19. I am compelled to act more "White" when I am around White people.	1	2	3	4	5	6	7
*20. I choose to be less "Asian" when I interact with White people.	1	2	3	4	5	6	7
*21. It is easier for me to adapt and be more White, than to act Asian when I'm around White people.	1	2	3	4	5	6	7
*22. In social situations, I adjust myself to fit in with White people.	1	2	3	4	5	6	7
*23. I try to make White people feel more comfortable when around me.	1	2	3	4	5	6	7
24. I am equally comfortable with myself when around Asian people and White people.	1	2	3	4	5	6	7
25. I feel that I can be myself when I interact with White people.	1	2	3	4	5	6	7
26. In social situations, I present myself the same to Asian people and White people.	1	2	3	4	5	6	7

IV. RELATIONAL MAINTAINENCE—Perceived ability and confidence to maintain relationships with White people and have successful relationships with White people

27. I am capable of developing good friendships with others, including White people.	1	2	3	4	5	6	7
28. I am happy about my ability to have lasting relationships with White people.	1	2	3	4	5	6	7
29. I can have a social network of close friends that include White people.	1	2	3	4	5	6	7
*30. I can only interact with a White person when I have to.	1	2	3	4	5	6	7

Comment [P2]: It might be interesting to add an additional item that might occur more often (at least in California):

My confidence to approach a White person who makes an insensitive comment about Asians is high.

Comment [P3]: The way you describe this dimension, if the respondent adjust the way he/she acts with White individual (such as acting more "White" as indicated in item 19), he/she will get lower score on the scale.

Couldn't one have high level of social self-efficacy while slightly adapting to various social situations? Many successful Asian Americans are bi-cultural and are competent in both Asian settings and White settings.

How are you distinguishing the differences between healthy adjustments in social situation and unhealthy compromising of the self?

Asian American Perceived Social Self-Efficacy **Minority** scale (APSEEM)

Please answer each statement as carefully as possible. Please circle one of the numbers to the right of each statement to indicate your degree of agreement or disagreement.

1 Strongly disagree 2 Disagree 3 Somewhat disagree 4 Neither agree or disagree 5 Somewhat agree 6 Agree 7 Strongly Agree

I. Social Initiatives—Perceived confidence initiating social contact with a White person							
1. I am confident when I approach a White person in a social setting.	1	2	3	4	5	6	7
*2. It is difficult for me to converse with a White person initially.	1	2	3	4	5	6	7
3. It is easy for me to start a conversation with a White person.	1	2	3	4	5	6	7
*4. It is stressful for me to approach a White person when I am the only racial minority in a social setting.	1	2	3	4	5	6	7
*5. I feel threatened when a White person approaches me.	1	2	3	4	5	6	7
6. I am comfortable approaching a White person even when I am the only minority in the room.	1	2	3	4	5	6	7
7. I can successfully engage in a social conversation with a White person.	1	2	3	4	5	6	7
II. Efforts to Increase Comfort with Diversity—Sensing a White person's interest in Asian culture and their receptiveness towards Asian Americans							
<u>I am not sure why "sensing a White person's discomfort" would be an indicator for Asian Minority Social Self-Efficacy, especially when you appear considering it as a negative indicator. When interacting with Whites, it is okay to sense their discomfort as long as Asians do not get too caught up on that or feel compelled to suppress themselves to rescue Whites. The main idea here should be on obsessive monitoring at the behavioral level or internal needs to do that.</u>							
*8. <u>I sense that cultural differences make it difficult for White individuals to relate with me.</u>	1	2	3	4	5	6	7
*9. <u>I feel uneasy talking to White individuals who seem uncomfortable with me being Asian.</u>	1	2	3	4	5	6	7
*10. <u>I can sense when White individuals are intimidated of approaching me.</u>	1	2	3	4	5	6	7
*11. <u>I can sense when White individuals are uncomfortable with me because I am Asian.</u> <u>Maybe to revise it to something like</u> <u>When sensing White individuals are uncomfortable with me because I am</u>	1	2	3	4	5	6	7

Comment [DCW1]: You may want to reconsider the title of the scale; the term "minority" does not convey what you intend to measure with this scale.

Comment [DCW2]: Consider adding a brief description about the construct so respondents will have a basic idea about what to look for.

Comment [DCW3]: Initial social contact refers to talking to a White stranger, not anyone White person they already know. You may want to find ways to emphasize this.

Comment [DCW4]: Why emphasizing the "only racial minority"; using "few" not many might help to broaden the scope

Comment [DCW5]: Feeling "threatened" is a strong word; consider alternatives such as uncomfortable, unease, anxious, etc...

Comment [DCW6]: Not sure items 8-11 tap into the social self-efficacy construct you intend to measure;

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<u>Asian, I try to change the subjects to make them feel better.</u>							
*12. I immediately stop do not interacting with White individuals who appear uncomfortable with diversity.	1	2	3	4	5	6	7
*13. When I interact with a White person, I monitor <u>closely</u> how comfortable they are with me being Asian.	1	2	3	4	5	6	7
14. I am comfortable when a White person is genuinely interested in my culture.	1	2	3	4	5	6	7
Perceived ease in managing racial differences by which compromises (personal adjustments) are made to feel accepted by White people opposed to no longer feeling compelled to adapt and believing that one is valued equally <u>The previous theme could be obsessive monitoring and this one will be compromising oneself to fit in. Consider separating them into two distinct factors.</u>							
*15. I feel pressured to be less Asian when around White people.	1	2	3	4	5	6	7
*16. I tend to feel inferior when interacting with White people.	1	2	3	4	5	6	7
*17. I worry that White individuals <u>are not interested in interacting with</u> cannot relate to me because I look Asian. <u><<this item may fit better with the previous factor>></u>	1	2	3	4	5	6	7
*18. I am conflicted to act more "White" when I am around White people.	1	2	3	4	5	6	7
*19. I wish to be more comfortable when interacting with White people <<this item sounds more like one for generic social efficacy>>	1	2	3	4	5	6	7
*20. It is necessary that I adapt to social settings when the majority of individuals are White.	1	2	3	4	5	6	7
*21. I avoid conversation topics about Asian culture to make White people feel more comfortable around me.	1	2	3	4	5	6	7
22. I feel comfortable to approach a White person who makes a racist comment about me. <<why would this behavior indicate minority social self-efficacy? Do you mean "when a White person makes a racist comment about me, I feel comfortable to confront her/him" >>	1	2	3	4	5	6	7
*23. It is difficult for me to address a White person when he/she makes an offensive comment about Asians.	1	2	3	4	5	6	7
*24. Being Asian affects how White people view my social status. <<not sure this item tapping into the construct, it sounds more like an item for one's perception about being a minority but does not measure the social interaction aspect. Revise it or delete it >>	1	2	3	4	5	6	7
III. Relational Maintenance— One's desire to have successful relations with others, including White individuals							
<u>After carefully review your items under this factor, I notice a tricky potential!</u>							

Comment [DCW7]: Again, I am not sure this is related to minority social self-efficacy.

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Comment [DCW8]: Not sure what you meant? Consider using another word.

Comment [DCW9]: "Adapt to social setting" is not a bad thing and may not necessarily indicate lower Asian minority social self-efficacy; be more specific or delete this item

Comment [DCW10]: Do you mean "question" or "challenge"? address sounds too general.

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Comment [DCW11]: It should not be just desire; some items under this factor should also measure their perception on their ability and confidence to maintain a relationship with White people (acquaintances or co-workers).

pitfall. When the items say "I value..." or "I prefer..." you are measuring their preference or value, not respondents' social self-efficacy any more. When measuring social efficacy, perceived self-confidence or ability is the key, not one's wish or preference. A person may feel comfortable and capable of handling interaction actions with Whites but prefer not to friend with them for whatever reasons. Revise your items accordingly.							
25. I wish to have meaningful relationships with others, including White people. Maybe changing this item into: I am capable of developing good friendships with others, including White people.	1	2	3	4	5	6	7
26. It is important that I am happy about my ability able to have close relationships with White people.	1	2	3	4	5	6	7
27. I want to have a social network of close friends that include White people.	1	2	3	4	5	6	7
28. I only interact with White people when <u>it is necessary</u> .	1	2	3	4	5	6	7
29. Regardless of cultural differences, I can have good relationships with White people.	1	2	3	4	5	6	7
*30. I would prefer that my close friends are Asian and not White.	1	2	3	4	5	6	7
31. I value having a variety of relationships with different people, including White individuals.	1	2	3	4	5	6	7
32. I prefer to that my close friends are Asian and not White.	1	2	3	4	5	6	7
IV. General Social Self-Efficacy—Perceived confidence about one's social interactions							
33. I am comfortable talking to a White person about a variety of things including my Asian background.	1	2	3	4	5	6	7
34. I feel confident interacting with White individuals.	1	2	3	4	5	6	7
35. I enjoy spending time with White people.	1	2	3	4	5	6	7
36. I express myself freely when among White people.	1	2	3	4	5	6	7
37. <u>In general social interactions</u> , I believe my opinions are equally valued as a White person's.	1	2	3	4	5	6	7
38. I am unable to express myself (e.g., show emotions) in the same way as White people do. Item #39 taps into thoughts so maybe this item could just focus on emotions	1	2	3	4	5	6	7
*39. I wish to feel more confident when I am around White individuals.	1	2	3	4	5	6	7
40. I am comfortable expressing my thoughts when around White people.	1	2	3	4	5	6	7

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Comment [DCW12]: Close relationship sounds too much to ask; how about meaningful or lasting relationships

Comment [DCW13]: This item is about preference, not social efficacy; same as item # 31 and # 32.

Comment [DCW14]: Revise these two items.

Asian American Perceived Social Self-Efficacy Minority scale (APSSEM)

Please answer each statement as carefully as possible. Please circle one of the numbers to the right of each statement to indicate your degree of agreement or disagreement.

1	2	3	4	5	6	7
Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly Agree

I. Social Initiatives—Perceived confidence initiating social contact with a White person

1. I am confident when I approach a White person in a social setting.	1	2	3	4	5	6	7
*2. <i>It is difficult for me to converse with a White person initially.</i>	1	2	3	4	5	6	7
3. It is easy for me to start a conversation with a White person.	1	2	3	4	5	6	7
*4. <i>It is stressful for me to approach a White person when I am the only racial minority in a social setting.</i>	1	2	3	4	5	6	7
*5. <i>I feel threatened when a White person approaches me.</i>	1	2	3	4	5	6	7
6. I am comfortable approaching a White person even when I am the only minority in the room.	1	2	3	4	5	6	7
7. I can successfully engage in a social conversation with a White person.	1	2	3	4	5	6	7

II. Efforts to Increase Comfort with Diversity—Sensing a White person’s interest in Asian culture and their receptiveness towards Asian Americans

*8. <i>I sense that cultural differences make it difficult for White individuals to relate with me.</i>	1	2	3	4	5	6	7
*9. <i>I feel uneasy talking to White individuals who seem uncomfortable with me being Asian.</i>	1	2	3	4	5	6	7
*10. <i>I can sense when White individuals are intimidated of approaching me.</i>	1	2	3	4	5	6	7
*11. <i>I can sense when White individuals are uncomfortable with me because I am Asian.</i>	1	2	3	4	5	6	7
*12. <i>I do not interact with White individuals who appear uncomfortable with diversity.</i>	1	2	3	4	5	6	7
*13. <i>When I interact with a White person, I monitor how comfortable they</i>	1	2	3	4	5	6	7

are with me being Asian.

14. I am comfortable when a White person is genuinely interested in my culture. 1 2 3 4 5 6 7

Perceived ease in managing racial differences by which compromises (personal adjustments) are made to feel accepted by White people opposed to no longer feeling compelled to adapt and believing that one is valued equally

*15. I feel pressured to be less Asian when around White people. 1 2 3 4 5 6 7

*16. I tend to feel inferior when interacting with White people. 1 2 3 4 5 6 7

*17. I worry that White individuals cannot relate to me because I look Asian. 1 2 3 4 5 6 7

*18. I am conflicted to act more “White” when I am around White people. 1 2 3 4 5 6 7

*19. I wish to be more comfortable when interacting with White people 1 2 3 4 5 6 7

*20. It is necessary that I adapt to social settings when the majority of individuals are White. 1 2 3 4 5 6 7

*21. I avoid conversation topics about Asian culture to make White people feel more comfortable around me. 1 2 3 4 5 6 7

22. I feel comfortable to approach a White person who makes a racist comment about me. 1 2 3 4 5 6 7

*23. It is difficult for me to address a White person when he/she makes an offensive comment about Asians. 1 2 3 4 5 6 7

*24. Being Asian affects how White people view my social status. 1 2 3 4 5 6 7

III. Relational Maintenance—One’s desire to have successful relations with others, including White individuals

25. I wish to have meaningful relationships with others, including White people. 1 2 3 4 5 6 7

26. It is important that I am able to have close relationships with White people. 1 2 3 4 5 6 7

27. I want to have a social network of close friends that include White people. 1 2 3 4 5 6 7

*28. I only interact with White people when necessary. 1 2 3 4 5 6 7

29. Regardless of cultural differences, I can have good relationships with 1 2 3 4 5 6 7

White people.

*30. <i>I would prefer that my close friends are Asian and not White.</i>	1	2	3	4	5	6	7
31. I value having a variety of relationships with different people, including White individuals.	1	2	3	4	5	6	7

IV. General Social Self-Efficacy—Perceived confidence about one's social interactions

32. I am comfortable talking to a White person about a variety of things including my Asian background.	1	2	3	4	5	6	7
33. I feel confident interacting with White individuals.	1	2	3	4	5	6	7
34. I enjoy spending time with White people.	1	2	3	4	5	6	7
35. I express myself freely when among White people.	1	2	3	4	5	6	7
36. I believe my opinions are equally valued as a White person's.	1	2	3	4	5	6	7
*37. <i>I am unable to express myself (e.g., show emotions) in the same way as White people do.</i>	1	2	3	4	5	6	7
*38. <i>I wish to feel more confident when I am around White individuals.</i>	1	2	3	4	5	6	7
39. I am comfortable expressing my thoughts when around White people.	1	2	3	4	5	6	7

Appendix C
Dissertation Surveys

Background Information

1. Age: _____
2. Gender: _____ Male _____ Female _____ Transgender
3. Highest educational degree obtained: _____
4. Occupation (if student, please state grade): _____
5. City and State of Residence: _____
6. Years lived in the U.S.: _____
7. Country of birth: _____ United States
_____ Outside of the United States (Please specify country: _____)
8. Asian Racial/Ethnic identification (*Check all that apply.*)
- _____ Chinese
 - _____ Japanese
 - _____ Korean
 - _____ Laos
 - _____ Pilipino
 - _____ Taiwanese
 - _____ Vietnamese
 - _____ Hmong
 - _____ Thai
 - _____ Other/Biracial (Please Specify: _____)

9. Were your parents born in the United States?

Father: Yes _____ No _____

Mother: Yes _____ No _____

If no, then how many years have your parents lived in the United States? Father: _____ Mother : _____

10. My father's 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): _____

11. My mother's 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): _____

12. Religious affiliation (*Check all that apply.*)

- _____ Agnostic
- _____ Atheist
- _____ Buddhist
- _____ Catholic
- _____ Christian
- _____ Muslim

____ Other (Please Specify: _____)

The following will include a list of surveys. Please be sure to read the directions and respond to all items.

VIA-Mainstream

Please answer each question as carefully as possible. Please circle *one* of the numbers to the right of each question to indicate your degree of agreement or disagreement. Use the following key to guide your answers:

(1) Strongly disagree (2) Disagree (3) Neutral/Depends (4) Agree (5) Strongly agree

1. I often participate in mainstream American cultural traditions.	1	2	3	4	5	6	7	8	9
2. I would be willing to marry a white American person.	1	2	3	4	5	6	7	8	9
3. I enjoy social activities with typical American people.	1	2	3	4	5	6	7	8	9
4. I am comfortable interacting with typical American people.	1	2	3	4	5	6	7	8	9
5. I enjoy American entertainment (e.g. movies, music).	1	2	3	4	5	6	7	8	9
6. I often behave in ways that are “typically American”.	1	2	3	4	5	6	7	8	9
7. It is important for me to maintain or develop American cultural practices.	1	2	3	4	5	6	7	8	9
8. I believe in mainstream American values.	1	2	3	4	5	6	7	8	9
9. I enjoy white American jokes and humor.	1	2	3	4	5	6	7	8	9
10. I am interested in having white American friends.	1	2	3	4	5	6	7	8	9

MCSD Short Form

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is *true* or *false* as it pertains to you personally. Please circle either T (True) or F (False).

1. It is sometimes hard for me to go on with my work if I am not encouraged.	T	F
2. I sometimes feel resentful when I don't get my way.	T	F
3. On a few occasions, I have given up doing something because I thought too little of my ability.	T	F
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.	T	F
5. No matter who I'm talking to, I'm always a good listener.	T	F
6. There have been occasions when I took advantage of someone.	T	F
7. I'm always willing to admit it when I make a mistake.	T	F
8. I sometimes try to get even rather than forgive and forget.	T	F
9. I am always courteous, even to people who are disagreeable.	T	F
10. I have never been irked when people expressed ideas very different from my own.	T	F
11. There have times when I was quite jealous of the good fortune of others.	T	F
12. I am sometimes irritated by people who ask favors of me.	T	F

13. I have never deliberately said something that hurt someone's feelings.

T F

MEIM

In this country, people come from many different countries and cultures, and there are many different words to describe the different backgrounds or *ethnic groups* that people come from. Some examples of ethnic groups are Latino, African American, Mexican, Asian American, Chinese, 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.

(1) Strongly Disagree (2) Somewhat Disagree (3) Somewhat Agree (4) Strongly Agree

1. I have spent time trying to find out more about my ethnic group, such as history, traditions, and customs.	1	2	3	4
2. I am active in organizations or social groups that include mostly members of my own ethnic group.	1	2	3	4
3. I have a clear sense of my ethnic background and it means for me.	1	2	3	4
4. I think a lot about how my life will be affected by my ethnic group membership.	1	2	3	4
5. I am happy that I am a member of the group I belong to.	1	2	3	4
6. I have a strong sense of belonging to my own ethnic group.	1	2	3	4
7. I understand pretty well what my ethnic group membership means to me.	1	2	3	4
8. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.	1	2	3	4
9. I have a lot of pride in my ethnic group.	1	2	3	4
10. I participate in cultural practices of my own group, such as a special food, music, or customs.	1	2	3	4
11. I feel a strong attachment towards my own ethnic group.	1	2	3	4
I. Please circle 3 here.	1	2	3	4
12. I feel good about my cultural or ethnic background.	1	2	3	4

EMSSE—AA

1. On a scale from 0-10, how often do you interact with White people daily? Please circle the number below.

No Interaction

Some Interaction

Regular Interaction

0-----1-----2-----3-----4-----5-----6-----7-----8-----9-----10

2. Following question #1, do you have significant relationships with White individuals (e.g., parent, sibling, romantic partner, best friends)?

No _____

Yes _____

If Yes, who is this individual in relation to you? _____

How long have you have a relationship with this individual? _____

The following questions will ask you to think about your social interactions with White people and how comfortable you feel interacting with White people. Though you may have close White friends or significant relationships with White people, these questions are directed towards your day-to-day social interactions with White people, who are likely White strangers and/or White individuals you are unfamiliar with.

For each statement, please circle the number to the right of each statement to indicate the degree to which you feel the statement is characteristic or true for you.

- 1 = **Never** characteristic or true of me
- 2 = **Rarely** characteristic or true of me
- 3 = **Sometimes** characteristic or true of me
- 4 = **Often** characteristic or true of me
- 5 = **Always** characteristic or true of me

	Never	Rarely	Sometimes	Often	Always
1. I am confident when I approach a White person in a social setting.	1	2	3	4	5
2. I get along well with White people.	1	2	3	4	5
3. It is difficult for me to start a conversation with a White person.	1	2	3	4	5
4. I am comfortable expressing my thoughts when around White people.	1	2	3	4	5
5. In social situations, I feel stressed approaching a White person.	1	2	3	4	5
6. I am unable to express my emotions in the same way as White people do.	1	2	3	4	5
7. I am comfortable approaching a White person	1	2	3	4	5
8. I can successfully engage in a social conversation with a White person.	1	2	3	4	5
9. I express myself freely when among White people.	1	2	3	4	5
10. It is easy for me to be social even when a White person seems uncomfortable with me being Asian.	1	2	3	4	5
11. I can have meaningful conversations with White people, who may know little about Asian culture.	1	2	3	4	5
12. I am comfortable talking to a White person about my Asian background.	1	2	3	4	5
13. I feel comfortable having conversations about race and diversity when among White people.	1	2	3	4	5
14. I feel anxious when White individuals appear intimidated while talking to me because I am Asian.	1	2	3	4	5
15. I doubt that White individuals would like to be my close friend.	1	2	3	4	5
16. My anxiety increases when White individuals look at me differently because I am Asian.	1	2	3	4	5
17. I try to avoid interacting with White individuals when they appear uncomfortable with diversity.	1	2	3	4	5
18. Regardless of cultural differences, I can have good relationships with White people.	1	2	3	4	5
19. I become nervous when a White person points out cultural differences	1	2	3	4	5

between us.

20. It bothers me when a White person does not talk to me because I am Asian. 1 2 3 4 5

Never Rarely Sometimes Often Always

21. I am happy about my ability to have lasting relationships with White people. 1 2 3 4 5

22. I worry that White individuals are not interested in interacting with me because I look Asian. 1 2 3 4 5

23. I am not confident addressing cultural differences between a White person and me. 1 2 3 4 5

24. In most situations, I tend to adjust who I am to be accepted by White people. 1 2 3 4 5

25. I feel confident to approach a White person who makes insensitive comments about Asians. 1 2 3 4 5

26. In social situations, I present myself the same to Asian people and White people. 1 2 3 4 5

27. I feel compelled to act more “White” when I am around White people. 1 2 3 4 5

28. I am able to decide when I can be myself when around White people easily. 1 2 3 4 5

29. I can easily decide how to be myself, in order to interact with White people comfortably. 1 2 3 4 5

30. My relationship style is the same when I interact with Asian people and White people. 1 2 3 4 5

I. If you are Asian American, please circle 3. 1 2 3 4 5

31. In social situations, I must adjust myself to fit in with White people. 1 2 3 4 5

32. It is important that I try to make White people feel more comfortable when around me. 1 2 3 4 5

33. I feel that I can be myself when I interact with White people. 1 2 3 4 5

34. I’d rather adapt and be more White, than to act Asian when I’m around White people. 1 2 3 4 5

35. It is easy for me to start a conversation with a White person. 1 2 3 4 5

36. I am capable of developing good friendships with others, including White people. 1 2 3 4 5

37. I wish to feel more confident when I am around White individuals. 1 2 3 4 5

38. I only interact with a White person when I have to. 1 2 3 4 5

39. I am confident in my abilities to develop close friends with White people. 1 2 3 4 5

40. I feel uneasy when a White person approaches me. 1 2 3 4 5

41. I can have close friendships with White people. 1 2 3 4 5

42. I feel confident to talk to a White person who makes a racist comment about me. 1 2 3 4 5

43. Overall, I feel confident interacting with White individuals. 1 2 3 4 5

44. I wish to be more comfortable when interacting with White people	1	2	3	4	5
45. In social interactions, I believe my opinions are equally valued as a White person's.	1	2	3	4	5

PSSE

Please read each statement carefully. Then decide how much confidence you have that you could perform each of these activities successfully. Please use the following key.

- 1 = No** Confidence at all
- 2 = Little** Confidence
- 3 = Moderate** Confidence
- 4 = Much** Confidence
- 5 = Complete** Confidence

How much confidence do you have that you could:

1. Start a conversation with someone you don't know very well.	1	2	3	4	5
2. Express your opinion to a group of people discussing a subject that is of interest to you.	1	2	3	4	5
3. Work on a school, work, community, or other project with people you don't know very well.	1	2	3	4	5
4. Help to make someone you've recently met feel comfortable with a group of your friends.	1	2	3	4	5
5. Share with a group of people an interesting experience you once had.	1	2	3	4	5
6. Put yourself in a new and different social situation.	1	2	3	4	5
7. Volunteer to help organize an event.	1	2	3	4	5
8. Ask a group of people who are planning to engage in a social activity (e.g., go to a movie) if you can join them.	1	2	3	4	5
9. Get invited to a party that is being given by a prominent or popular individual.	1	2	3	4	5
10. Volunteer to help lead a group or organization.	1	2	3	4	5
11. Keep up your side of the conversation.	1	2	3	4	5
12. Be involved in group activities.	1	2	3	4	5
13. Find someone to spend a weekend afternoon with.	1	2	3	4	5
14. Express your feelings to another person.	1	2	3	4	5
15. Find someone to go out to lunch with.	1	2	3	4	5
16. Ask someone out on a date.	1	2	3	4	5
17. Go to a party or social function where you probably won't know anyone.	1	2	3	4	5
18. Ask someone for help when you need it.	1	2	3	4	5
19. Make friends with a member of your peer group.	1	2	3	4	5
20. Join a lunch or dinner table where people are already sitting and talking.	1	2	3	4	5
21. Ask someone out after he/she was busy the first time you asked.	1	2	3	4	5
22. Get a date to a dance that your friends are going to.	1	2	3	4	5

23. Call someone you've met and would like to know better.	1	2	3	4	5
24. Ask a potential friend out for coffee.	1	2	3	4	5
25. Make friends in a group where everyone else knows each other.	1	2	3	4	5

SIAS

For each item, please circle the number to indicate the degree to which you feel the statement is characteristic or true for you. 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 get nervous if I have to speak with someone in authority (teacher, boss, etc.).	0	1	2	3	4
2. I have difficulty making eye contact with others.	0	1	2	3	4
3. I become tense if I have to talk about myself or my feelings	0	1	2	3	4
4. I find it difficult to mix comfortably with the people I work with.	0	1	2	3	4
5. I find it easy to make friends my own age.	0	1	2	3	4
6. I tense up if I meet an acquaintance in the street.	0	1	2	3	4
7. When mixing socially, I am uncomfortable.	0	1	2	3	4
8. I feel tense if I am alone with just one other person.	0	1	2	3	4
9. I am at ease meeting people at parties, etc.	0	1	2	3	4
10. I have difficulty talking with other people.	0	1	2	3	4
III. If you are over the age of 18 years, please circle 2.	0	1	2	3	4
11. I worry about expressing myself in case I appear awkward.	0	1	2	3	4
12. I find it easy to think of things to talk about.	0	1	2	3	4
13. I find it difficult to disagree with another's point of view.	0	1	2	3	4
14. I have difficulty talking to attractive persons of the opposite sex.	0	1	2	3	4
15. I find myself worrying that I won't know what to say in social situations.	0	1	2	3	4
16. I am nervous mixing with people I don't know well.	0	1	2	3	4
17. I feel I'll say something embarrassing when talking.	0	1	2	3	4
18. When mixing in a group, I find myself worrying I will be ignored.	0	1	2	3	4
19. I am tense mixing in a group.	0	1	2	3	4
20. I am unsure whether to greet someone I know only slightly.	0	1	2	3	4

Appendix D
IRB Protocol Documentation

Informed Consent
Preliminary Study

You are invited to participate in a research study that examines racial/ethnic minority college students' social experiences in United States. The principal investigator of this study is Young S. Song, a doctoral candidate in the Counseling Psychology Program at the University of Missouri-Kansas City (UMKC) and this study has been approved by the UMKC campus Social Sciences IRB.

You are eligible to participate only if you are 18 years of age or older, currently enrolled at UMKC, and Asian American. Participation requires approximately 10-15 minute phone interview and an individual interview that will last between thirty minutes to an hour. Your participation is *completely* voluntary. You may choose to discontinue your participation at any time during the study, even after you have started the interview, without penalty. Your alternative in this study is to not participate.

For the research purposes, your participation in the interview will be video-recorded. The content of video recording will be kept confidential and discarded after 5 years. The primary investigator will ensure that the video recording will be stored in a locked and secured space. All information shared during the study will remain confidential.

The findings of this study will benefit the field of psychology. For compensation of your time, you will be given a \$10 gift card.

We do not expect any risks associated with participation in this study, however, should you feel disturbed as a result of participating in this study, you are encouraged to contact the helping resources in your community such as the Community Counseling and Assessment Services in Kansas City at (816) 235-2725 or if you are a UMKC student, you may contact UMKC Counseling, Health, and Testing Center at (816) 235-1635. While every effort will be made to keep confidential all the information you complete and share, it cannot be absolutely guaranteed. Individuals from the University of Missouri-Kansas City Institutional Review Board (a committee that reviews and approves research studies), Research Protection Program, and Federal regulatory agencies may look at the records related to this study for quality improvement and regulatory function.

I sincerely appreciate your consideration and participation in this study. If you have any questions about the study, please email me at yssnn3@mail.umkc.edu

If you have any questions about your rights as a research participant, please contact the UMKC's Social Sciences Institutional Review Board at 816-235-1764.

Participant Name (Print) _____

Participant Signature _____ Date _____

Researcher Signature _____ Date _____

Informed Consent (Hard-copy surveys)
Dissertation Study

You are invited to participate in a research study that examines racial/ethnic minority college students' social experiences in United States. The principal investigator of this study is Young S. Song, a doctoral candidate in the Counseling Psychology Program at the University of Missouri-Kansas City (UMKC) and this study has been approved by the UMKC campus Social Sciences IRB.

You are eligible to participate only if you are between the ages of 18-30 years and Asian American. Participation requires approximately 20-25 minutes to complete a confidential and anonymous survey. Your participation is *completely* voluntary. You may choose to discontinue your participation at any time during the study, even after you have started the interview, without penalty. Your alternative in this study is to not participate.

All information shared during the study will remain confidential. The content of your survey responses will be kept confidential and discarded after 7 years. The primary investigator will ensure that information obtained will be stored in a locked and secured space.

For compensation of your time, you will have the opportunity to win a \$25.00 gift certificate (3 winners in total). After completing the survey, you will have the option of entering the raffle drawing for the gift certificates. To enter the drawing you will be asked to provide your name, email address forward the information winnings to you. This information will not be linked to your survey results, so all of your responses will remain anonymous.

We do not expect any risks associated with participation in this study, however, should you feel disturbed as a result of participating in this study, you are encouraged to contact the helping resources in your community and university institutions. The Substance Abuse and Mental Health Administration also provides a resource for counseling support, and they can be reached at 1-800-622-4357. While every effort will be made to keep confidential all the information you complete and share, it cannot be absolutely guaranteed. Individuals from the University of Missouri-Kansas City Institutional Review Board (a committee that reviews and approves research studies), Research Protection Program, and Federal regulatory agencies may look at the records related to this study for quality improvement and regulatory function.

I sincerely appreciate your consideration and participation in this study. If you have any questions about the study, please email me at yssnn3@mail.umkc.edu

If you have any questions about your rights as a research participant, please contact the UMKC's Social Sciences Institutional Review Board at 816-235-5927.

Participant Name (Print) _____

Participant Signature _____ Date _____

Researcher Signature _____ Date _____

Informed Consent (Online) Dissertation Study

You are invited to participate in a research study that examines racial/ethnic minority college students' social experiences in United States. The principal investigator of this study is Young S. Song, a doctoral candidate in the Counseling Psychology Program at the University of Missouri-Kansas City (UMKC) and this study has been approved by the UMKC campus Social Sciences IRB.

You are eligible to participate only if you are between the ages of 18-30 years and Asian American. Participation requires approximately 20-25 minutes to complete a confidential and anonymous survey. Your participation is *completely* voluntary. You may choose to discontinue your participation at any time during the study, even after you have started the interview, without penalty. Your alternative in this study is to not participate.

All information shared during the study will remain confidential. The content of your survey responses will be kept confidential and discarded after 7 years. The primary investigator will ensure that information obtained will be stored in a locked and secured space.

For compensation of your time, you will have the opportunity to win a \$25.00 gift certificate (3 winners in total). After completing the survey, you will have the option of entering the raffle drawing for the gift certificates. To enter the drawing you will be asked to provide your name, email address forward the information winnings to you. This information will not be linked to your survey results, so all of your responses will remain anonymous.

We do not expect any risks associated with participation in this study, however, should you feel disturbed as a result of participating in this study, you are encouraged to contact the helping resources in your community and university institutions. The Substance Abuse and Mental Health Administration also provides a resource for counseling support, and they can be reached at 1-800-622-4357. While every effort will be made to keep confidential all the information you complete and share, it cannot be absolutely guaranteed. Individuals from the University of Missouri-Kansas City Institutional Review Board (a committee that reviews and approves research studies), Research Protection Program, and Federal regulatory agencies may look at the records related to this study for quality improvement and regulatory function.

I sincerely appreciate your consideration and participation in this study. If you have any questions about the study, please email me at yssnn3@mail.umkc.edu

If you have any questions about your rights as a research participant, please contact the UMKC's Social Sciences Institutional Review Board at 816-235-5927.

Clicking on the "I Want to Participate in this Survey Study" button means that you have been informed of the procedures, benefits, and risks of participating in this study and are ready to start the survey.

If you do not want to participate in the survey, please click on "I Don't Want to Participate" button or leave this page at this time.

Appendix E
Scree Plot and Inter-item Correlations

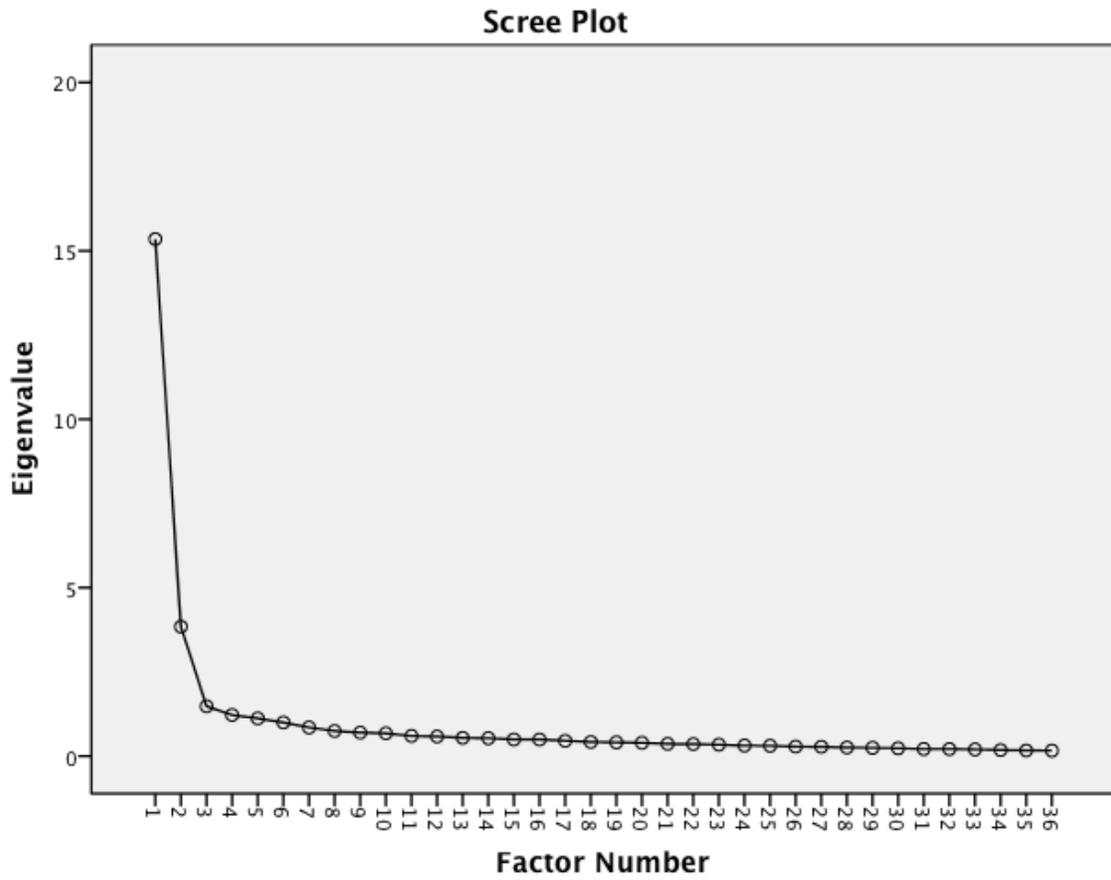


Figure 1. Scree plot test of EMSSE-AA in Study 1. Plot indicates two points lie above point of inflexion (Factor number 3).

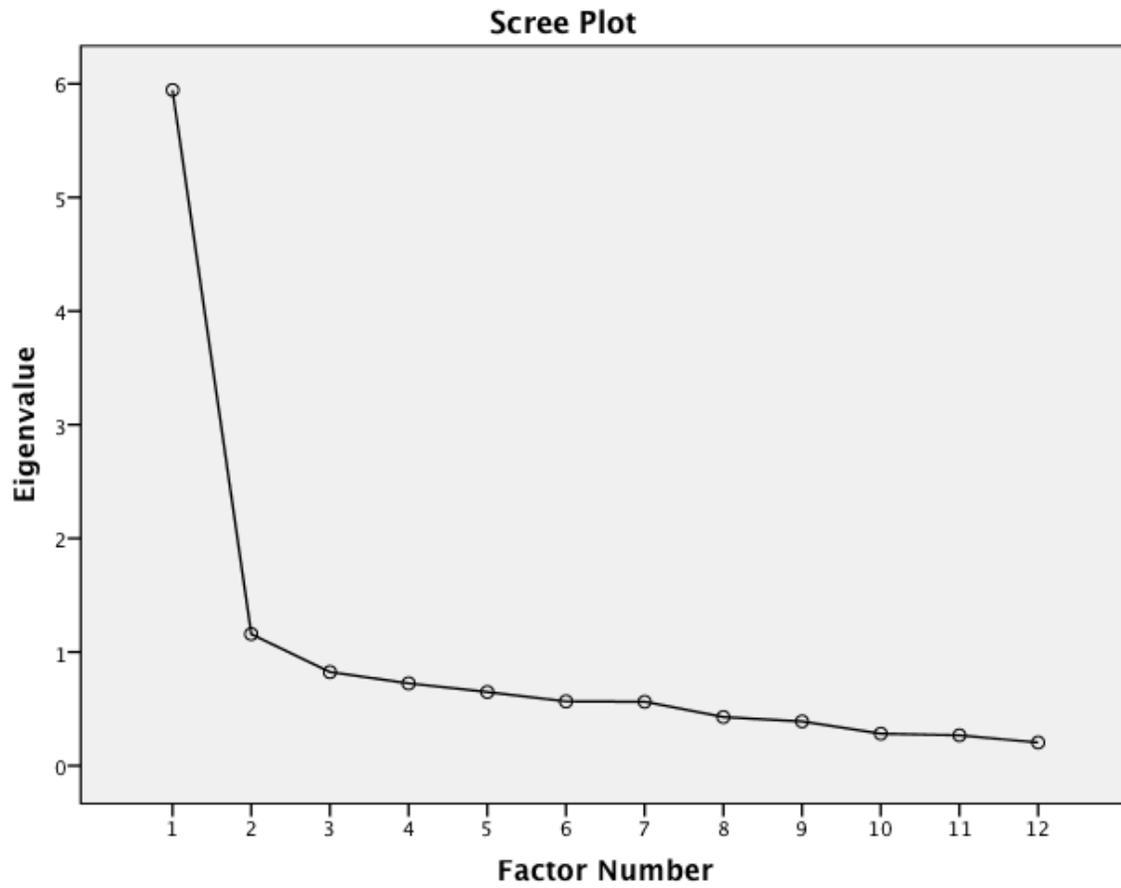


Figure 2. Scree plot test of MEIM in Study 1. Plot indicates one point lies above point of inflexion.

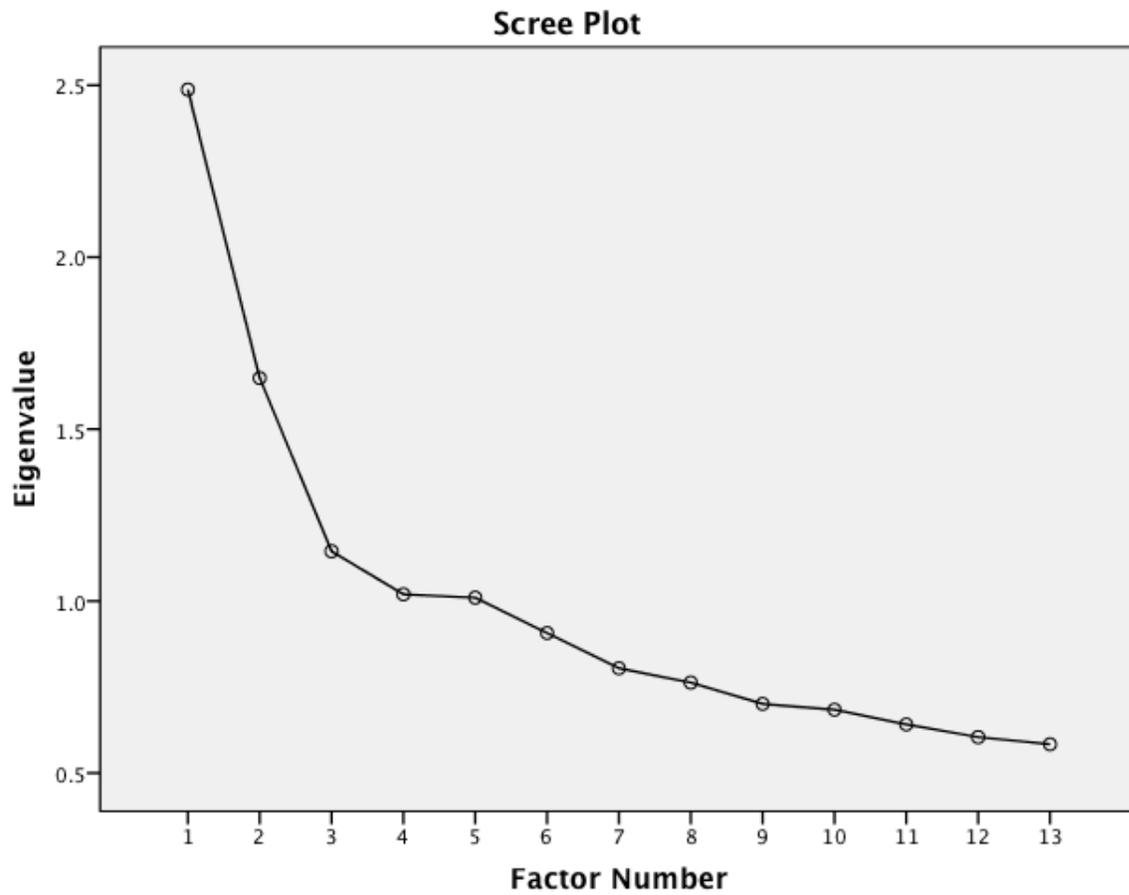


Figure 3. Scree plot test of MCSD-Short Version in Study 1. Plot indicates two points lie above point of inflexion.

Correlations for Final EMSSE-AA Items in Study 1

EMSSE-AA Items	4	5	7	8	9	11	12	14	15	16	18	19	21	22	33	35	36	39	40	41	43	44
4. I am comfortable expressing my thoughts.	-	.34	.65	.63	.66	.55	.51	.26	.30	.27	.49	.23	.57	.29	.49	.58	.52	.52	.31	.45	.62	.26
5. In social situations, I feel stressed approaching a White person.		-	.43	.46	.35	.36	.25	.47	.54	.48	.31	.41	.42	.54	.34	.39	.38	.29	.51	.29	.41	.47
7. I am comfortable approaching a White person.			-	.74	.62	.62	.55	.33	.36	.31	.56	.28	.65	.37	.56	.68	.65	.59	.46	.51	.70	.34
8. I can successfully engage in a social conversation with a White person.				-	.71	.63	.57	.26	.37	.27	.59	.23	.70	.32	.59	.71	.69	.63	.41	.58	.75	.31
9. I express myself freely when among White people.					-	.58	.49	.21	.28	.29	.51	.17	.61	.26	.61	.66	.57	.58	.24	.50	.67	.24
11. I can have meaningful conversations with White people, who may know little about Asian culture.						-	.59	.22	.30	.27	.58	.23	.64	.27	.56	.67	.65	.62	.34	.54	.69	.23
12. I am comfortable talking to White person about my Asian background.							-	.23	.29	.26	.51	.32	.54	.27	.49	.54	.53	.49	.32	.47	.60	.18
14. I feel anxious when White individuals appear intimidated while talking to me because I am Asian.								-	.46	.57	.22	.47	.30	.44	.29	.24	.26	.20	.47	.17	.32	.43
15. I doubt that White individuals would like to be my close friend.									-	.50	.39	.42	.45	.58	.34	.38	.36	.37	.55	.39	.40	.40
16. My anxiety increases when White individuals look at me differently because I am Asian.										-	.23	.52	.34	.55	.30	.26	.29	.24	.41	.19	.33	.55
18. Regardless of cultural differences, I can have good											-	.22	.65	.37	.57	.63	.68	.59	.47	.62	.67	.28

relationships with White people.

EMSSE-AA Items	4	5	7	8	9	11	12	14	15	16	18	19	21	22	33	35	36	39	40	41	43	44
19. I become anxious when a White person points out cultural differences between us.												-	.32	.55	.27	.25	.29	.27	.51	.26	.31	.33
21. I am happy about my ability to have lasting relationships with White people.													-	.38	.60	.68	.71	.69	.42	.63	.74	.30
22. I worry that White individuals are not interested in interacting with me because I look Asian.														-	.34	.35	.41	.30	.58	.34	.36	.51
33. I feel that I can be myself when I interact with White people.															-	.59	.59	.55	.32	.55	.65	.37
35. It is easy for me to start a conversation with a White person.																-	.74	.68	.40	.63	.76	.29
36. I am capable of developing good relationships with others, including White people.																	-	.73	.47	.69	.77	.29
39. I am confident in my abilities to develop close friends with White people.																		-	.38	.71	.73	.21
40. I feel uneasy when a White person approaches me.																			-	.38	.44	.42
41. I can have close friendships with White people.																				-	.69	.28
43. Overall, I feel confident interacting with White individuals.																					-	.30
44. I wish to be more comfortable when interacting with White people.																						-

Correlations for Final EMSSE-AA Items in Study 2

EMSSE-AA Items	4	5	7	8	9	11	12	14	15	16	18	19	21	22	33	35	36	39	40	41	43	44
4. I am comfortable expressing my thoughts.	-	.47	.53	.57	.64	.44	.49	.40	.34	.45	.53	.44	.48	.29	.51	.57	.57	.57	.36	.49	.54	.45
5. In social situations, I feel stressed approaching a White person.		-	.55	.46	.38	.29	.37	.52	.53	.55	.40	.48	.36	.52	.39	.48	.49	.40	.55	.43	.46	.48
7. I am comfortable approaching a White person.			-	.68	.60	.46	.47	.32	.38	.46	.61	.41	.53	.41	.54	.69	.57	.61	.48	.53	.68	.37
8. I can successfully engage in a social conversation with a White person.				-	.65	.52	.48	.33	.34	.41	.69	.32	.56	.33	.51	.69	.58	.64	.49	.57	.67	.38
9. I express myself freely when among White people.					-	.51	.61	.27	.27	.39	.57	.34	.58	.24	.53	.61	.55	.65	.38	.52	.66	.32
11. I can have meaningful conversations with White people, who may know little about Asian culture.						-	.47	.26	.27	.27	.54	.25	.48	.21	.44	.51	.52	.52	.34	.46	.54	.18
12. I am comfortable talking to White person about my Asian background.							-	.25	.23	.37	.51	.35	.49	.33	.51	.49	.57	.50	.36	.48	.56	.27
14. I feel anxious when White individuals appear intimidated while talking to me because I am Asian.								-	.49	.62	.30	.55	.27	.52	.28	.36	.44	.31	.45	.36	.40	.43
15. I doubt that White individuals would like to be my close friend.									-	.54	.41	.38	.41	.51	.35	.41	.47	.35	.43	.44	.41	.45
16. My anxiety increases when White individuals look at me differently because I am Asian.										-	.38	.63	.31	.59	.41	.46	.43	.38	.40	.36	.41	.56
18. Regardless of cultural differences, I can have good relationships with White people.											-	.31	.67	.30	.56	.59	.65	.63	.52	.66	.71	.34

EMSSE-AA Items	4	5	7	8	9	11	12	14	15	16	18	19	21	22	33	35	36	39	40	41	43	44
19. I become anxious when a White person points out cultural differences between us.												-	.27	.50	.39	.35	.41	.33	.42	.34	.37	.43
21. I am happy about my ability to have lasting relationships with White people.													-	.23	.52	.57	.64	.68	.45	.65	.67	.38
22. I worry that White individuals are not interested in interacting with me because I look Asian.														-	.37	.34	.39	.31	.43	.39	.43	.45
33. I feel that I can be myself when I interact with White people.															-	.60	.61	.61	.48	.51	.64	.46
35. It is easy for me to start a conversation with a White person.																-	.70	.71	.43	.65	.71	.45
36. I am capable of developing good relationships with others, including White people.																	-	.71	.58	.71	.75	.42
39. I am confident in my abilities to develop close friends with White people.																		-	.49	.72	.72	.47
40. I feel uneasy when a White person approaches me.																			-	.48	.61	.45
41. I can have close friendships with White people.																				-	.70	.37
43. Overall, I feel confident interacting with White individuals.																					-	.37
44. I wish to be more comfortable when interacting with White people.																						-

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VITA

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