ABSTRACT

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ACCULTURATION PREDICTORS OF THE
COLLEGE ADJUSTMENT OF ASIAN
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The purpose of the present study was to extend understanding of factors

related to the college adjustment of Asian and Asian Americans. The study was

based on the SCCT model of well-being and included an exploratory focus on

culture-specific variables. Data were collected from 122 undergraduate college

students who self-identified as Asian, Asian Americans, or Pacific Islander. The

present findings are generally consistent with previous studies of the SCCT model of

satisfaction, providing empirical support for the cross-cultural validity of the SCCT

model with Asian American students. The predictive model accounted for a

substantial percentage (41-44%) of variance in the college adjustment indicators,

academic and social domain satisfaction. The present study extends the findings of

previous studies by showing the differential utility of self-efficacy and social support

in predicting domain satisfaction. Results from both quantitative and qualitative data

highlighted the importance of social support in the college adjustment of Asian Americans. The present findings also suggest that cultural variables (acculturation and enculturation) relate to Asian Americans' college adjustment indirectly via self-efficacy, social support, and goal progress. Limitations of the study and implications for practice and future research are discussed.

SOCIAL COGNITIVE AND ACCULTURATION PREDICTORS OF THE
COLLEGE ADJUSTMENT OF ASIAN AMERICANS

By

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Chapter I: Introduction

Background

Since the mid-1980s, Asian Americans have become the fastest growing ethnic minority group in the United States (U.S. Census, 2000). As of 2000, there were over 12 million Asian Americans living in the United States. Similar to the growing trend of Asian immigrants, there has been a large increase in Asian American college student enrollment. According to Wilds (2000), Asian American college student enrollment increased by 73% from 1988 to 1997. This group currently represents 6% of the total enrollment in higher education (Liang & Sedlacek, 2003).

Asian Americans, as a group, are viewed by the general public as well as by many mental health professionals as well-adjusted because of their relatively low rate of criminal activity and high educational, occupational, and economic attainment (Sue, Sue, Sue, & Takeuchi, 1995). Unfortunately, labeling Asian Americans as "the model minority" often overshadows the social, economic, educational, and psychological concerns that many Asian Americans experience (Hune & Chan, 1997; Qin, Way, & Makherjee, 2008).

A growing body of research challenges the perception of Asian Americans as a well-adjusted group (Leong, 1986; Sue et al., 1995). In addition, Sue et al. noted that the interpretation of Asian Americans' adjustment and mental health conditions are typically complicated by the heterogeneity and changing demographics within the larger group as well as by unrepresentative samples in many studies. Further, much of the empirical research on Asian Americans has focused on their academic achievement (Gloria & Ho, 2003; Sue & Okazaki, 1990; Strage, 2000), which tends to perpetuate the stereotype of

educational attainment in Asian Americans and overlooks problems of psychological and social adjustment.

Adjustment Problems of Asian Americans

Although most Asian American college students demonstrate satisfactory academic achievement (Sue & Okazaki, 1990), a growing body of research suggests that many Asian Americans experience major adjustment and emotional problems (Leong, 1986; Sue et al., 1995). In fact, on average, Asian American students may experience greater psychological symptoms and emotional distress than do White American college students (Gregersen, Nebeker, Seely, & Lambert, 2004). Research on the Asian American population has consistently shown that Asian American students report multiple social and psychological concerns (Leong, 1986; Lorenzo, Frost, & Reinherz, 2000; Leong, 1986; Qin et al., 2008). Despite high academic achievement and low drop-out rates, Asian American freshmen have reported concerns with fitting in socially in college (Liang & Sedlacek, 2003). Further, Asian American students from low-income immigrant families have been found to report feelings of loneliness and social isolation (Qin, 2006; Qin et al., 2008). Compared to non-Hispanic White students, Asian American students have also shown more symptoms of anxiety and depression (Okazaki, 1997), greater social problems and withdrawal behaviors (Lorenzo et al., 2000), lower self-esteem (Green, Way, & Paul, 2006), and less satisfaction with their college experience (Okazaki, 1997).

Consequences of Maladjustment of Asian American College Students

Poor adjustment and a tendency to underutilize psychological services often bring detrimental consequences for Asian American students. Of particular concern is the high

suicide rate among Asian Americans aged 15 to 24 (Kisch, Leino, & Silverman, 2005; Liu, Yu, Chang, & Fernandez, 1990). According to the National College Health Assessment Survey (ACHA, 2001), Asian American students were 1.6 times more likely to have seriously considered suicide than White American students (Kisch et al., 2005). The underutilization of services may feed the perception that Asian Americans rarely experience adjustment problems or psychological distress (Choi, Roger, & Werth Jr., 2009). Liang and Sedlacek (2003) for instance, have found that Asian American students with adjustment concerns were more likely to avoid their social problems, which may partly explain their low utilization of counseling services. Other research suggests that Asian Americans may experience more problems in their psychological functioning than they tend to report (Gregersen et al., 2004).

Some researchers suggest that systematic and cultural barriers may play a role in Asian Americans' underuse of counseling services (Okasaki, 2000; Sue, 1994). However, relatively little research has examined culture-specific variables which may relate to the adaptation of Asian American college students (Gloria & Ho, 2003). It has been proposed that enhanced knowledge about Asian Americans' special needs and cultural values may inform interventions and facilitate Asian Americans' willingness to seek counseling services (Kim & Omizo, 2003; Liang & Sedlacek, 2003).

Problem Statement

Past studies have cited multiple predictors of college adjustment outcomes for Asian Americans (e.g., Gloria & Ho, 2003; Kenny & Stryker, 1996; Sue & Okazaki, 1990; Ying, Lee, & Tsai, 2007). Findings suggest that both individual characteristics (e.g., self-efficacy beliefs, comfort in the university environment, self-concept) and

environmental factors (e.g., social support, discrimination) are significantly associated with the college adjustment of Asian Americans (Gloria & Ho, 2003).

Although empirical studies have shed light on some of the important factors that may influence the college adjustment of Asian American students, there is a dearth of theory-driven research. Indeed, a lingering criticism of much multicultural research is its atheoretical and primarily descriptive nature (Heppner, Wampold, & Kivligan, 2008). Theory-driven research not only could identify variables that explain the college adjustment process of Asian American students, but also could facilitate our understanding of how these variables jointly promote or deter academic or social adjustment outcomes.

Similar to the context of adjustment in educational settings, some career development theories, such as the theory of work adjustment (TWA; Dawis & Lofquist, 1984), have attempted to identify variables related to an individual's vocational adjustment (e.g., job satisfaction, tenure; Bretz & Judge, 1994; Lyons & O'Brien, 2006). Some theories in social and personality psychology have also explored factors related to individuals' psychosocial adjustment, with an emphasis on the construct of well-being (e.g., Ryff, 1989, 1995; Ryff & Singer, 1998). However, most of these models are based on Western, individualistic values and have infrequently been applied to people of color (Lyons & O'Brien, 2006).

In general, previous studies have proposed various independent variables including personality traits, social support, cognitive, and behavioral variables that might link to individuals' psychological adjustment. In the effort to integrate the literatures on adjustment and well-being with a focus on practical utility, Lent (2004) proposed a

unified theoretical framework on well-being and psychological adjustment based on key components of social cognitive career theory (SCCT; Lent, Brown, & Hackett, 1994). Because both individual characteristics and the social environment appear to play significant roles in the college adjustment experience of Asian Americans, the SCCT model may be readily applicable to the present study. Further, empirical tests have provided support for the validity of the model in predicting academic and social satisfaction in both cross-sectional and longitudinal data using diverse college student samples (Lent, Singley et al., 2005; Sheu & Lent, 2008; Lent, Taveira, Sheu, & Singley, 2009).

The present study will be the first to relate the SCCT model to Asian Americans. Despite the supportive findings in past studies, this relatively new model has been studied largely with European American and European samples (Sheu & Lent, 2008). The model's predictors were intended to be pancultural in nature. However, there have been some cross-cultural variations in the prediction of psychological adjustment in the well-being literature (Lent, 2004). For example, different cultural values or cultural identity may influence how individuals perceive support from the environment as well as their selection of goals and participation in valued tasks that may affect their well-being. Further, the relative weight of each predictor in the model may also vary by culture (Sheu & Lent, 2008). Thus, the primary purpose of the present study is to examine how well the model explains the adjustment outcomes of Asian American college students, which also addresses the cross-cultural generalizability of the model.

Another purpose of the present study is to examine how the culture-specific variables of acculturation and enculturation relate to the social cognitive variables and to

college adjustment. Acculturation and enculturation are important cultural-psychological constructs that may help to explain within-group differences in Asian Americans' cultural adjustment and life adaptation (Yeh, 2003). *Acculturation* refers to the process of adapting to the norms of the dominant European American culture; *enculturation* is defined as the process of retaining the norms of the native Asian culture (Kim & Abreu, 2001).

Many Asian American college students are first and second generation Americans whose parents have immigrated to the United States (Garrod & Kilkenny, 2007). Growing up in immigrant-headed households, they are challenged to balance the influences of mainstream European American culture with their culture of origin (Yeh & Huang, 2000). As a result, they may achieve differrent levels of adjustment outcomes according to their attachment to each culture. Acculturation, in particular, has been found to relate to numerous cognitive variables (e.g., cognitive flexibility, self-efficacy, self-identity; Kim & Omizo, 2005, 2006) and to psychosocial functioning (Nguyen, Messe, & Stollack, 1999; Ryder, Alden, & Paulhus, 2000).

This study aims to expand knowledge about factors that may have a bearing on Asian American students' college adjustment, particularly ones that may explain the diversity within the Asian American student body. In the present study, the bidimensional model of acculturation (Berry, 1995; LaFromboise, Coleman, & Gerton, 1993) will be used as the framework for the study of within-group differences in the college adjustment of Asian American students. Specifically, this study will examine the addition of acculturation (engagement in the mainstream European American culture) and

enculturation (engagement in the Asian culture of origin) to social cognitive variables in predicting Asian American college students' social and academic adjustment.

In summary, the rapid growth of the Asian American college student body and a growing literature on the psychosocial adjustment of Asian Americans highlights the need to closely examine factors associated with the adjustment of this population. Existing studies also underscore individual and environmental factors related to the college adjustment of Asian Americans. Thus, the first purpose of the current study is to examine how well social cognitive variables predict adjustment outcomes of Asian American college students. Lent's (2004) model of well-being and adjustment, derived from social cognitive theory, will be used as the basic theoretical framework of the current study. In addition to testing specific hypothesized relationships leading to adjustment and satisfaction of Asian American college students, the study will include an exploratory focus on acculturation and enculturation as cultural variables that may (a) relate to the social cognitive variables and (b) moderate their relation to the college adjustment of Asian American students.

Chapter II: Literature Review

The Academic and Psychosocial Adjustment of Asian American College Students

Successful college adjustment is a multidimensional concept which may include having a sense of psychological well-being, performing well academically and, ultimately, completing the college degree (Baker & Siryk, 1984). In past research, Asian American students have, on average, been shown to outperform students from other ethnic minority groups in their high school graduation rates, test scores, high school grade point averages, and enrollment in higher education (Sue & Okazaki, 1990). Despite the "model minority" stereotype of being well-adjusted, high academic achievers, there is within-group variability in these academic outcomes. For example, Southeast Asians, Filipinos, and Pacific Islanders often have much lower levels of education attainment and socioeconomic status when compared with East Asians (Ong & Hee, 1993; Suzuki, 1994). Southeast Asian Americans also show lower academic adjustment and persistence compared to their Hispanic and White counterparts (Strage, 2000).

Recent research has raised concerns about Asian Americans' psychological and social adjustment (Lorenzo, Frost, & Reinherz, 2000; Qin, Way, & Mukherjee, 2008; Way & Chen, 2000). Empirical evidence shows that Asian American students often report more mental health issues (Sue & Chu, 2003; Greene, Way, & Paul, 2006) and lower self-esteem (Greene et al., 2006) than their non-Asian peers. Further, the higher suicide rate among Asian American adolescents (aged 15 to 24) compared to White youths highlights serious concerns about the psychological well-being in this population (Liu, Chang, & Fernandez, 1990).

A recent qualitative study with first and second generation Chinese American adolescents has revealed an ongoing pattern of social alienation from peers and generational conflicts with parents (Qin et al., 2008). Similarly, Sue and Zane (1985) found in their sample of 177 Chinese American participants that Chinese American students, particularly recent immigrants, often strived for academic success at the expense of their psychological and social well-being. Although Chinese Americans overall achieved higher than average academic performance, recent immigrants demonstrated lower levels of socioemotional adjustment compared to other Chinese Americans (Sue & Zane, 1985). For example, they reported lower happiness, greater anxiety symptoms, and more social isolation. Sue and Zane suggested that acculturation may be of great relevance to these findings.

Liang and Sedlacek (2003) conducted a factor analysis of 417 Asian American college students' responses regarding their perceptions, interests, expectations, and attitudes of their first-year college experience. They found that adjustment to the university and an avoidant style of coping emerged as significant areas of concern among students in the sample. The authors noted that Asian Americans tend to adopt social avoidance as a coping style, a tendency that may prevent them from seeking help and receiving early interventions.

Although a growing body of research highlights adjustment issues and mental health symptoms of Asian Americans, much of the empirical research has focused on their academic performance (Sue & Okazaki, 1990). Further, the prevalent model minority myth obscures the psychological, social, and educational concerns many Asian Americans experience (Qin et al., 2008; Suzuki, 1994). As one of the fastest growing

racial groups in the United States, the Asian American student population continues to grow in number and diversity (Barnes & Bennett, 2000). The lack of research on psychological and social functioning of Asian American students may hinder the development of interventions for Asian Americans with college adjustment concerns.

Within-group Variation of Adjustment among Asian Americans

The Asian American student body reflects remarkable diversity in its culture and immigration histories (Atkinson, 2004). While many Asian American students are descendents of Asians who migrated to the United States, others are more recent immigrants. This within-group variability in immigration status may reflect different levels of acculturation and enculturation (Tsai, Ying, & Lee, 2000). Acculturation has been conceptualized as the process by which an individual manages changes in his or her cultural values, behaviors, and cognitions as he or she comes into contact with the new mainstream culture (Lee, Yoon, & Liu-Tom, 2006; Yeh, 2003). Enculturation is described as the process by which an individual maintains the values, behaviors, and cognitions of his or her native culture (Kim & Abreu, 2001).

Over the past decades, researchers have been interested in examining specific outcomes associated with acculturation and enculturation (e.g., Berry, 1979, 2003). The focus has largely been on how individuals manage the conflict between maintaining and letting go of their culture of origin, while assimilating to a new mainstream culture (LaFromboise, Coleman, & Gerton, 1993). Two models of acculturation, the unidimensional and bidimensional models, have been proposed to examine the psychological experiences and outcomes related to acculturation and enculturation (Miller, 2007). Empirical findings have supported acculturation and enculturation as

important cultural factors in the adjustment process and psychological well-being of Asian Americans (Kim, Atkinson, & Yang, 1999; Tsai et al., 2000). In the following section, I introduce models of acculturation and present empirical studies of two widely investigated psychological constructs that capture some of the within-group variation in Asian Americans' adjustment – acculturation and enculturation.

The Unidimensional Model of Acculturation

Early models of acculturation were unidimensional in that they assumed individuals' changes in their cultural values, behaviors, or identity occur along a single continuum, such that over time as individuals adjust to their new mainstream culture, they would eventually relinquish identification with their native culture (Ryder, Alden, & Paulhus, 2000). Thus, the only outcome associated with acculturation according to this model is assimilation, which is described as an "ongoing process of absorption into the culture that is perceived as dominant" (p. 396, LaFromboise et al., 1993).

The most common indicator of acculturation is demographic variables such as individuals' age at immigration, generation status, and number of years of residence in the new country (Jackson, 2006). Other acculturation instruments, such as the Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA; Suinn, Rickard-Figueroa, Lew, & Vigil, 1987), were designed to assess psychological aspects (e.g. cultural identity) of acculturation in multiple life domains (e.g., food, language, social activities). Overall, these acculturation instruments were based on the unidimensional assumption that, over time, as individuals have more exposure to the new mainstream culture, they will display greater adaptation to and identification with it (Ryder et al., 2000).

The Bidimensional Model of Acculturation

A more recent and competing model of acculturation, the bidimensional model, posits that individuals can be oriented to both their native and second cultures (Berry, 1995; LaFromboise et al., 1993; Tsai et al., 2000). In other words, an individual can simultaneously identify with both the mainstream culture and his or her culture of origin, thus acquiring knowledge of and competence in two different cultures (LaFromboise et al., 1993). In the literature on bidimensional acculturation, *acculturation* is often defined as "the process of adapting to the norms of the dominant group, i.e., European American", and *enculturation* as "the process of retaining the norms of the indigenous group, e.g., Asian American" (Kim & Omizo, 2006, p. 246).

Acculturation and enculturation are conceptualized as bidimensional constructs, in which enculturation is believed to operate relatively independently of acculturation (Lee et al., 2006). Acculturation and enculturation each occur at different rates across various life domains (e.g., language, food preference, social interactions, values), and across different social contexts and life circumstances (Lee et al.). Acculturation and enculturation in different life domains are also assumed to influence Asian Americans' psychosocial adjustment, mental health, and physical health (Lee et al.). Further, the constructs of acculturation and enculturation can be operationalized in terms of multiple dimensions such as behaviors, values, identity, and attitudes (Kim & Abreu, 2001). Among these different dimensions, the behavioral aspect of acculturation and enculturation is considered the primary focus of study (Kim & Omizo, 2005). More than half of the items in the existing instruments of acculturation and enculturation are designed to assess the behavioral changes and preferences of individuals (Kim & Omizo).

Under the bidimensional model of acculturation, it is possible to have a number of potential acculturation outcomes (Berry, 1995). According to John Berry and his colleagues (e.g., Berry, 1995; Berry, Kim, Minde, & Mok, 1987), the degree to which an individual identifies with his or her culture of origin versus the mainstream culture may result in different adjustment experiences. These experiences are theorized to fall into four categories: *assimilation, separation, marginalization, and integration*.

Assimilation occurs when an individual internalizes the dominant culture and no longer attaches to the culture of origin. Thus, these individuals are considered highly acculturated but not enculturated. *Separation* occurs when an individual is only interested in adhering to the culture of origin but not the dominant culture. These individuals are strongly enculturated but not acculturated. *Marginalization* occurs when an individual has no interest in participating in either the dominant or the indigenous culture. These individuals are neither acculturated nor enculturated. Marginalization is viewed as the most problematic of the four statuses as individuals in this status tend to be isolated from both cultures. Finally, *integration* occurs when one adapts to the dominant culture while remaining proficient in the culture of origin. Thus, these individuals are considered as both highly acculturated and enculturated.

Unidimensional versus Bidimensional Model Comparisons

The fundamental difference between the unidimensional and bidimensional models is their assumptions about how an individual's native cultural behaviors, values, and identity change during the adaptation process to the new mainstream culture (Ryder et al., 2000). Whereas the unidimensional model suggests a negative relationship between acquisition of the mainstream culture and adherence to values and behaviors

from the native culture, the bidimensional model asserts that the process by which

individuals adopt aspects of the mainstream culture and aspects of their native culture is

independent of one another (Cuellar, Arnold, & Maldonado, 1995; LaFromboise et al.,

1993).

The unidimensional model has been widely adopted in the study of acculturation,

as it provides a parsimonious explanation of acculturation (Kim & Abreu, 2001; Ryder et

al., 2000). However, this model also has its limitations. The most common criticism of

this model is the assumption that individuals are incapable of simultaneously maintaining

competence in both their native culture and the new mainstream culture (Cuellar et al.,

1995). Further, as the only outcome of the unidimesional model of acculturation is

assimilation (La Fromboise et al., 1993), the model fails to differentiate between

individuals who are strongly identified with both cultures and those who adhere to neither

culture (Ryder et al., 2000). Thus, the conceptualization and measurement of

acculturation from a unidimensional model may obscure understanding of the role of

acculturation in adjustment (Ryder et al.).

The bidimensional conceptualization and measurement of acculturation has been

featured in more recent research because it promotes a more nuanced understanding of

the acculturation process than does the unidimensional model (Flannery, Reise, & Yu,

2001; Lieber, Chin, Nihira, & Mink, 2001; Ryder et al., 2000). Ryder et al., for example,

compared the utility of the two models by studying the self-identity and psychosocial

adjustment of 150 first and second generation Chinese Canadian participants (study 2).

Results supported the main predictions of the bidimensional model, in which distinctive

patterns of correlations were found between the two dimensions of acculturation and the

criterion variables (i.e., psychological adjustment and self-identity). For example, in the overall sample, enculturation was predictive of interdependent self-identity ($\beta = .34$, $p < .01$), whereas acculturation was predictive of independent self-identity ($\beta = .40$, $p < .01$). Further, the acculturation and enculturation measures were relatively orthogonal to one another in both first generation ($r = .09$, ns) and second generation ($r = .15$, ns) groups, which suggest that the two subscales reflect independent aspects of the acculturation process. Overall, in both generation groups, the bidimensional model accounted for slightly greater variance in Asian Americans' psychosocial adjustment (defined as social maladjustment) than did the unidimensional model ($\eta^2 = .10$ vs., .06, respectively). The two models did not differ in their prediction of academic adjustment ($\eta^2 = .03$ for each model).

In another study, Flannery et al. (2001) compared the amount of variance explained by each of the acculturation models relative to different adjustment criteria in a sample of 291 Asian American undergraduates. They found that both unidimensional and bidimensional models significantly predicted Asian cultural preferences, ethnic identification, cultural knowledge, and generational status, and the bidimensional measures explained somewhat more variance in some of the criterion variables of interest. For example, the enculturation subscale in the bidimensional model accounted for greater variance in ethnic identification ($R^2 = .14$, $p < .05$) than did the unidimensional acculturation measure ($R^2 = .00$, ns). However, contrary to bidimensional model assumptions, the two subscales of acculturation were strongly and inversely correlated ($r = -.55$, $p < .05$).

Although the bidimensional conceptualization of acculturation is generally favored by multicultural researchers at present (Lee, Yoon, & Tom-Liu, 2006), some researchers posit that the utility of the acculturation models in predicting different criterion variables may vary depending on the contexts in which the individuals are acculturating (Ryder et al., 2000). Tsai et al. (2000), for instance, assessed cultural orientations in a sample of 353 Chinese American undergraduates. Based on self reports in which participants indicated how Chinese and American they were along a 5-point scale, Tsai et al. did not find a significant association between ratings of their Chinese and American cultural identities among American-born Chinese. However, for recent immigrant Chinese who arrived in the U.S. after age 12, results showed a significant negative correlation between the two cultural orientations ($r = -.26$, $p < .01$).

Further, Tsai et al. (2000) measured participants' Chinese and American cultural orientation separately based on their engagement in multiple cultural domains (e.g. language, food preferences, social affiliation, activities). Results for American-born Chinese were consistent with the bidimensional model assumption, in that measures of the Chinese and American cultural domains each independently represented a domain-specific cultural orientation (adjusted $R^2 = .43$, $p < .01$ for Chinese cultural orientation; adjusted $R^2 = .35$, $p < .01$ for American cultural orientation). Thus, these findings suggest that for American-born Chinese, the meaning of being Chinese and being American are independent constructs. On the other hand, variance in the cultural orientations of immigrant Chinese were jointly explained by engagement in both Chinese and American cultural domains, indicating that "being Chinese" and "being American"

covary inversely – the more an individual affiliates with American culture, the less s/he engages in Chinese activities.

Acculturation/Enculturation and Adjustment Outcomes

The relation between acculturation and adjustment has been studied in recent years (Ryder et al., 2000). Studies using models of either the unidimensional or the bidimensional approach have shown that acculturation is associated with multiple psychological and behavioral variables – such as mental health symptoms (Yeh, 2003); attitudes toward help-seeking (Kim & Omizo, 2003; Tata & Leong, 1994); intergenerational family conflicts (Chung, 2001); perceived social support (Tseng, 2004); career development (Tang, Fouad, & Smith, 1999; Leong, 2001); educational achievement (Sue & Zane, 1985); and self-esteem and self-concept (Kim & Omizo, 2005, 2006; Ying, Lee, & Tsai, 2007). These studies provide empirical support for the possible roles of acculturation and enculturation in the psychosocial functioning and adjustment of Asian Americans.

Numerous studies using the unidimensional model have yielded consistent conclusions that a low level of acculturation is predictive of psychological maladjustment and mental health risks in Asian American college students (e.g. Abe & Zane, 1990; Shim & Schwartz, 2008; Sue & Zane, 1985). For example, Sue and Zane (1985) studied adjustment in 177 Chinese American college students (53% were foreign born) from the West Coast. Using number of years of living in the United States and English proficiency as indicators of acculturation, they found that less acculturated Chinese Americans were less academically involved (e.g., took less courses) than their more acculturated peers. Further, Asian American students with lower acculturation levels

reported less college satisfaction, a higher anxiety level, and a narrower range of options in their choice of majors than did those reporting higher acculturation levels.

Similarly, Abe and Zane (1990) compared differences in psychological maladjustment among 136 foreign-born Asian, U.S.-born Asian, and White American college students by assessing their interpersonal and intrapersonal distress, controlling for personality factors (social desirability, extraversion, and self-consciousness). Their findings showed that foreign-born (less acculturated) Asian Americans exhibited higher levels of psychological maladjustment than did American-born (more acculturated) Asian Americans, with a medium effect size ($d = .60$). They also found that Southeast Asians, in particular, reported greater levels of interpersonal and intrapersonal distress compared to other Asian groups and White Americans.

In more recent studies, multicultural scholars have focused on the bidimensional model, particularly on the assumption that integration status (or biculturalism) confers certain adjustment advantages. LaFromboise et al. (1993) posited that integrated individuals tend to function effectively in both the mainstream culture and their native culture because they possess *bicultural competence,* that is, positive attitudes toward and knowledge of both dominant and native groups, proficient communication ability in both cultures, and efficacy to maintain interpersonal relationships and behave appropriately under two different cultural norms.

To examine the theorized benefits of bicultural competence on psychological adjustment and self-identity, Kim and Omizo (2005, 2006) conducted a study of 156 Asian American college students. Results provided partial support for the psychological benefits of bicultural competence. Specifically, Kim and Omizo (2005) showed that high

levels of acculturation and enculturation significantly predicted Asian Americans'

collective self esteem ($R^2 = .25$, $p < .001$), Their findings suggested that bicultural

individuals, who engage in both Asian and European American cultures, are more likely

to perceive that they are worthy members of the Asian American group. In relation to

other cognitive variables, only acculturation was found to be significantly associated with

cognitive flexibility ($r = .36$, $p < .001$) and general self-efficacy ($r = .33$, $p < .001$).

Enculturation, on the other hand, was found to correlate positively with other important

aspects of self-concepts, including perceived importance of group membership as an

Asian American ($r = .31$, $p < .001$) and positive feelings toward the Asian American

group ($r = .31$, $p < .001$).

Similarly, other researchers have found that Asian Americans' levels of

acculturation and enculturation were associated with different patterns of psychosocial

adjustment (e.g., Huang & Ting, 2008; Nguyen, Messe, & Stollack, 1999; Ryder et al.,

2000). For example, Nguyen et al. (1999) found in their sample of 182 Vietnamese

college students that acculturation was related to better adjustment outcomes, including

higher self-esteem ($\beta = .40$, $p < .01$), lower depression ($\beta = -.26$, $p < .01$) , better quality

family relationships ($\beta = .32$, $p < .001$), and better academic performance ($\beta = .20$, $p <$

.01). Enculturation, or involvement in one's native culture, was positively associated

with better quality family relationships ($\beta = .46$, $p < .001$). However, enculturation was

also predictive of greater psychological distress ($\beta = .33$, $p < .001$). These findings

suggest that bicultural competence, or frequent engagement in both Asian and American

cultures, is predictive of positive family relationships. However, the benefits of

biculturalism in mental health did not seem to receive adequate support. Nguyen et al.

(1999) noted that acculturation and enculturation may facilitate or impede adjustment depending on the degree of fit between the individual and his or her contextual demand. Thus, the authors concluded that it is important to consider the impact of contextual factors (e.g., environmental demand) to determine the role of acculturation in adjustment (Nguyen et al., 1999).

Ryder et al. (2000) demonstrated in their samples of Chinese Canadian college students that a high level of acculturation is associated with better psychosocial adjustment – including less depressive symptoms, lower social maladjustment, and lower academic maladjustment. In other words, being less identified or proficient with the mainstream culture could increase the risk of maladjustment for Asian Americans. However, it should be noted that unlike the previous study by Nguyen et al. (1999), Ryder et al. (2000) did not find any significant correlation between enculturation and any indices of adjustment. These studies highlight the importance of the acculturative process, specifically identification with and proficiency in the mainstream culture, to the psychosocial adjustment of Asian American college students.

In summary, empirical research on the bidimensional models of acculturation has been growing (Flannery et al., 2000; Nguyen et al., 1999; Ryder et al., 2000). However, perhaps due to the shortage of adequate tools for measuring acculturation and enculturation, relatively few studies have examined the relationship between bidimensional acculturation and adjustment and psychological functioning in Asian Americans (Jackson, 2006; Kim & Omizo, 2006; Ryder et al., 2000). Further, the literature on acculturation and enculturation has yielded inconclusive results as to how acculturation and enculturation individually and jointly relate to the psychological

functioning of Asian Americans. Additional study is, therefore, needed regarding the relationship between acculturation and enculturation and the linkage of each of them to adjustment outcomes. Such research may shed light on within-group variations in the adjustment experience of Asian American college students.

Factors Related to Academic and Social Adjustment of Asian American College Students

In the literature on the college adjustment of ethnic minority students, academic and psychosocial adjustment have been studied using both quantitative (Hurtado, Carter, & Spuler, 1996; Rodriguez, Mira, Myers, Morris, & Cardoza, 2003) and qualitative methods (Qin et al., 2008; Santos, Ortiz, Morales, & Rosales, 2007). Some researchers have focused on broader environmental and systemic predictors of college adjustment, such as perceived racism and campus climate (e.g., Liang & Sedlacek, 2003). Others have focused on personal and interpersonal predictors of college adjustment, such as stress, coping strategies (Crockett et al., 2007), self-esteem (Boulter, 2002; Hickman, Toews, & Andrews, 2001), peer and parental support (Lidy & Kahn, 2006; Crockett et al., 1997; Schneider & Ward, 2003), and parental education (Toews & Yazedjian, 2007).

A general conclusion from this body of research is that stress (e.g., acculturative stress) and an avoidant coping style are negatively associated with college adjustment of ethnic minority students (Crockett et al., 2007). Further, it has been shown that access to resources through interpersonal relationships, specifically peer support, is associated with better social and psychological adjustment (Rodriguez, Mira, Myers, Monis, & Cardoza, 2003). Similarly, family support has been found to have psychological benefits for ethnic minority students. In particular, such support buffers the effect of stress on mental health

symptoms (Crockett et al., 1997). Higher family support is also associated with lower psychological distress (Rodriguez et al., 2003).

Recently, some researchers have adopted the ecological framework (Bronfenbrenner, 1979) to predict college adjustment. The ecological model posits that multiple contexts (e.g., interpersonal, community, macrosystem) jointly predict college adjustment (Sy & Brittian, 2008). Studies based on this model have confirmed that individuals' personal relationships (e.g., peer support, parental support) and environmental factors (e.g., comfort in the university environment) are significant predictors of college adjustment (Dennis, Phinney, & Chuateco, 2005; Gloria & Ho, 2003).

Longitudinal findings further highlight the importance of personal characteristics and contextual factors in predicting the college adjustment of ethnic minorities. Specifically, Dennis et al. (2005) examined environmental and personal factors in relation to the academic achievement and adjustment of 100 Asian and Latino first generation college students. Data were collected in Fall and Spring semesters of their second year. Results showed that both social support and personal motivations to attend college measured in the Fall were significant predictors of participants' GPA ($R^2 = .35$, $p < .01$), social and academic adjustment ($R^2 = .39$, $p < .01$), and academic commitment ($R^2 = .24$, $p < .01$) in the following Spring semester. In addition, Dennis et al examined the perceived lack (rather than presence) of social support in predicting college adjustment of ethnic minorities. Their findings indicated that poorer social and academic adjustment was associated with a greater lack of needed family social support ($r = -.32$, $p < .01$) and peer social support ($r = -.44$, $p < .01$).

Although previous studies have provided useful findings regarding factors related to the academic and psychosocial adjustment of ethnic minority college students, many of these studies have excluded Asian Americans in their samples (e.g., Lidy & Kahn, 2006; Toews & Yazedjian, 2007), while others have focused mainly on Latino students (e.g., Crockett et al., 2007; Schneider & Ward, 2003). The universality of adjustment patterns among different ethnic minority groups has been called into question (Kenny & Stryker, 1996; Stage, 1993). In addition, it has been argued that special attention should be placed on the diversity of college adjustment within different ethnic groups of Asian Americans (Gloria & Ho, 2003; Strage, 2000).

Even though there have not been a large number of studies on the adjustment of Asian American students (House, 1997), some studies have demonstrated that social support is significantly related to Asian Americans' psychological and social adjustment. For instance, Kenny and Stryker (1996) assessed social relation characteristics of 218 White Americans and ethnic minority students. They found that social adjustment was associated more with family support for ethnic minority students, including Asian Americans, whereas European American students were more likely to rely on peer support for their social adjustment. Further, Qin et al. (2008) conducted a qualitative study with a sample of 120 Chinese immigrant adolescents from two East Coast cities. Their analyses suggested that many of the immigrant youths who had experienced social alienation also reported poor relationships with their parents and peers.

Gloria and Ho (2003) examined factors related to the academic adjustment of 160 Asian American undergraduate students from six ethnic groups. Three sets of variables (environmental support, self-beliefs, and social support) were used to predict academic

persistence. Results showed that perception of social support, comfort in the university

environment, and self-efficacy beliefs were each significant predictors of academic

persistence, with social support accounting for the most variance in academic persistence.

Findings also indicated differences between Asian ethnic groups in terms of how each

predictor variable related to academic persistence. For example, university environment

was found to be correlated moderately to strongly with academic persistence for Chinese

($r = .30$, $p < .05$) and Korean Americans($r = .60$, $p < .05$), but this correlation was not

significant for Filipino, Vietnamese, Japanese, and Pacific Islander Americans.

Although a small but growing number of studies have explored factors related to

Asian Americans' college adjustment, the majority of these studies have focused only on

academic adjustment (Sue & Okazaki, 1990). Further, investigations of environmental

characteristics as well as social and psychological experiences of Asian American college

students are still limited (Suzuki, 1994). Even though Asian Americans are known as a

remarkably diverse group, very few studies have examined factors related to college

adjustment within different ethnic groups of Asian Americans (Gloria & Ho, 2003).

Thus, more research is needed to shed light on factors related to college adjustment

beyond the academic domain, and with special attention to the within-group diversity of

students in this population.

Using Theories to Guide Research on the College Adjustment of Asian Americans

The literature on college student development has confirmed that both personal

and environmental factors are valuable predictors of college adjustment for racial and

ethnic minorities (Gloria & Ho, 2003; Sue & Okazaki, 1990). However, very few of

these studies have been based on a theoretical framework, and most of them are primarily

descriptive in nature. Theory-driven research would facilitate identification of explanatory variables and the mechanisms by which different variables jointly affect the academic and social adjustment of Asian American college students.

Limitations of Existing Adjustment Theories

Traditional career development theories of work and educational adjustment conceive of adjustment as an outcome of the interaction between an individual and the environment (e.g., the Minnesota theory of work adjustment; Dawis & Lofquist, 1984). Models of general well-being posit that personality attributes (Diener et al., 1999) or cognitive processes (Bandura, 1997) are important predictors of well-being. However, these theories tend not to emphasize cultural and contextual factors, such as acculturation, that may uniquely affect the adjustment experience of Asian Americans. Other research based on the ecological framework emphasizes the relation of multiple interpersonal and environmental contexts to the adjustment process (Bronfenbrenner, 1979). The ecological theory emphasizes the major role of environment and cultural factors in individuals' development process, and assumes that the salience of each context varies from culture to culture (Santrock, 2007). Nevertheless, the ecological model may overlook the importance of individual characteristics and psychological factors, which have been found to predict the college adjustment of Asian Americans (Gloria & Ho, 2003).

The Social Cognitive Model of Adjustment and Well-being

The unifying social cognitive model of adjustment and well-being (Lent, 2004) was intended to extend the study of individuals' psychological adjustment in terms of domain-specific satisfaction and global life satisfaction. In an effort to integrate both

hedonic and eudaemonic perspectives on well-being, two interrelated models were developed to understand individuals' subjective feelings of happiness (hedonic perspective) and psychological well-being and goal fulfillment (eudaemonic perspective). The first, normative model, focuses on obtaining and maintaining well-being under ordinary life circumstances, whereas the second model focuses on the recovery of well-being subsequent to stressful or aversive life situations. Both models incorporate key elements of general social cognitive theory (Bandura, 1997, 2001), an important framework in the study of adjustment processes and well-being.

Lent and Brown (2006, 2008) later extended the normative model to the context of adjustment in vocational and educational settings. In the following introduction, I will focus on the domain of education or academic satisfaction, defined as the individual's enjoyment regarding his or her role and experiences as a student (Lent & Brown, 2006). According to the model, educational satisfaction is jointly determined by personality, social, cognitive, and behavioral variables (see Figure 1).

Figure 1. *Lent and Brown's (2006) Model of Work Satisfaction.*
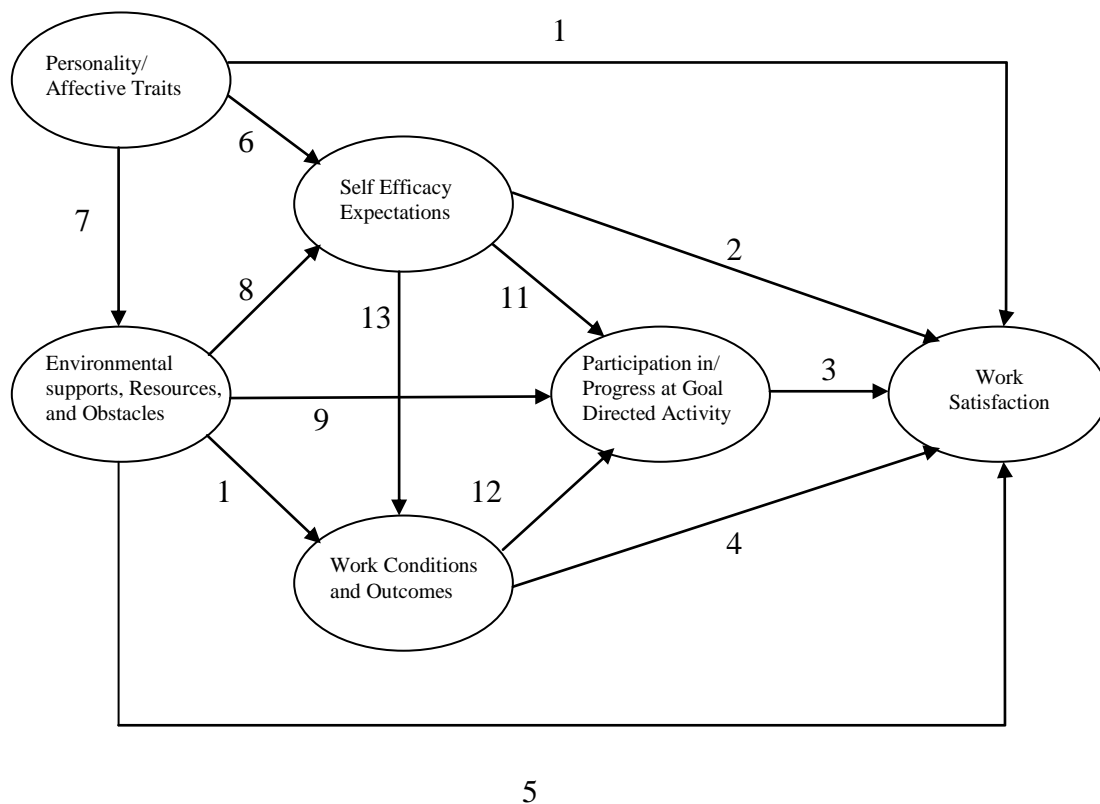
Lent and Brown (2006) posit five major predictor variables that may have direct

influence on one's educational satisfaction. These variables include (a) personality and

affective traits (path 1), (b) self-efficacy (path 2), (c) progress at goal-directed activities

(path 3), (d) work conditions and outcomes (path 4), and (e) goal-relevant environmental

supports, resources, and obstacles (path 5).

Further, Lent and Brown (2006) proposed a number of indirect paths among the

variables that are linked to educational satisfaction. First, it is believed that personality

traits, such as positive or negative affect, may indirectly affect educational satisfaction

through self-efficacy (path 6) and environmental resources and support (path 7). Second,

environmental resources and obstacles are likely to affect educational satisfaction

indirectly through their impact on self-efficacy (path 8), goal progress (path 9), and work-related conditions and outcomes (path 10).

In addition to the five key predictor variables in the model, Lent and Brown posit a network of relations among the predictor variables. Of particular focus is the relation between goal progress and other social cognitive variables in the prediction of satisfaction. The model posits that several factors may alter individuals' perception of their progress in goal pursuits, which, in turn, influence their level of satisfaction. These factors include (a) self-efficacy (path 11), or "personal beliefs about one's capability to perform particular behaviors necessary to achieve valued school or work goals" (Lent & Brown, 2006, p. 239), (b) environmental resources and obstacles, and (c) work conditions and outcomes (path 12). In other words, those who perceive their environments as supportive of their goal pursuits, see themselves as capable of achieving their goals, and believe their work conditions are favorable are more likely to make progress at their goals and, in turn, to feel satisfied with their work/educational lives. Further, higher self-efficacy beliefs are seen as contributing to more favorable views of one's working conditions and anticipated outcomes (path 13).

Consistent with social cognitive theory, the model highlights several variables that are relatively modifiable (e.g. self-efficacy, goal progress) and, thus, allow individuals' agency over aspects of their educational adjustment. In contrast to the predominant trait perspective on individuals' well-being or satisfaction in the personality literature, the social cognitive model predicts that individuals are capable of managing or promoting their satisfaction through building social support, enhancing self-efficacy, setting and pursuing personal goals, and participating in valued life tasks (Lent, 2004).

Empirical Evidence on the Unifying Model

Lent, Singley et al. (2005) conducted two cross-sectional studies to test the normative model using samples of college students. Results of both studies showed good fit of the model to the data. Consistent with Bandura's (1997)'s social cognitive theory, both studies confirmed goal progress as a reliable predictor of satisfaction in specific life domains (academics, social life). Most of the social cognitive hypotheses were supported by the findings. However, contrary to expectations, outcome expectations did not significantly predict goal progress or satisfaction in either social or academic domains.

The normative model of well-being has also been applied to other studies of educational and work satisfaction. Lent, Singley, Sheu, Schmidt, and Schmidt (2007) tested the model of satisfaction in a sample of engineering undergraduates. They found good overall fit of the model to the data. In particular, the social cognitive assumptions of the model consistently showed significant results for domain-specific (academic) satisfaction. Lent et al. (2007) found that environmental support contributed significantly to academic satisfaction both directly and indirectly through self-efficacy beliefs and goal progress. Contrary to the model's hypotheses, outcome expectations did not significantly predict either goal progress or academic satisfaction.

Duffy and Lent (2009) tested the model of work satisfaction within a sample of 366 school teachers by assessing personality variables (positive affect) and social cognitive variables, including progress at work-related goals, work-related self-efficacy, and work conditions (as indicated by perceptions of organizational support). This model provided good fit to the data and accounted for 75% of the variance in work satisfaction. In particular, positive affect, self-efficacy, and work conditions were either moderately or

strongly correlated with work satisfaction. Each of these predictors was found to explain unique variance in work satisfaction. In addition, Duffy and Lent (2009) found that work conditions mediated the relations of (a) self-efficacy to work satisfaction and (b) goal support to work satisfaction.

Research findings from two longitudinal studies of the normative model (Lent, Taveira, Sheu, & Singley, 2009; Singley, Lent, & Sheu, 2010) revealed temporal predominance of the relations between the predictors and the criterion variables, which is consistent with causal hypotheses proposed by the model. Both studies examined a similar set of variables that included the personality variable of positive affect, social support, academic goal self-efficacy, academic goal progress, academic domain satisfaction, and life satisfaction. Moreover, both studies showed good overall model-data fit, which highlights the roles of self-efficacy and environmental support in predicting goal progress over time.

In addition to the evidence of possible causal links of the social cognitive variables to the prediction of domain satisfaction, Lent, Taviera et al. (2009) findings suggest the cross-national validity of the model in their study with a Portuguese college sample. However, contrary to predictions and prior findings, positive affect did not contribute to academic adjustment or life satisfaction but was reciprocally related to self-efficacy. The authors interpreted this finding as suggesting that positive affect may be modified by interventions that enhance self-efficacy and academic social support.

Together, the studies testing Lent's (2004) model of well-being have provided empirical support from both cross-sectional and longitudinal data. In particular, consistent with social cognitive theory (Bandura, 1997, 2001), the studies indicate

support for the theory's hypotheses regarding the relation of most of the social cognitive predictors to goal progress and domain-specific satisfaction (Duffy & Lent, 2009; Lent, Singley et al., 2005; Lent, Taviera et al., 2009). Variables in the unifying model explain significant amounts of variance in both domain-specific satisfaction (63-73%) and global life satisfaction (53%; Lent, Singley et al., 2005). The findings also highlight the significant linkage between personality variables and social cognitive variables, which may jointly function as precursors of domain and overall life satisfaction. Hence, despite the newness of this model, the available findings suggest that it is a useful framework for the investigation of adjustment (as indexed by satisfaction) in both general and domain-specific contexts (e.g., social and academic life domains) (Lent, Taviera et al., 2009; Sheu & Lent, 2008).

It is important to note that although empirical findings have offered good overall support for the model, several issues need to be considered. First, findings from multiple studies consistently show a non-significant relation between outcome expectations and domain-specific satisfaction (e.g., Lent et al., 2007). Thus, this relation still needs further clarification, perhaps by using alternative measures of outcome expectations. Second, no study of this model has thus far focused on the adjustment of particular racial/ethnic minority groups. In addition to the pancultural variables of well-being, Lent and his colleagues have acknowledged possible cross-cultural variations in the prediction of well-being (Lent, 2004; Sheu & Lent, 2008). For example, cultural values or acculturation experiences may influence how an individual perceives support from the environment, and his or her preference for setting certain goals and values (Sheu & Lent, 2008; Tseng, 2004). It may, therefore, be valuable to add to model tests factors that reflect within-

group differences, which may avoid uniformity assumptions about group members (Lent, Brown, & Hackett, 1994). Incorporating within-group difference factors in testing the model may further expand our understanding of specific factors that may promote or impede the college adjustment of Asian Americans.

Research Questions and Hypotheses

The purpose of the current study is to extend the SCCT model of well-being to the college adjustment of Asian Americans. College adjustment will be operationalized as satisfaction in academic and social domains, both of which are considered developmentally appropriate and important for college students' life context (Lent, Singley et al., 2005). A cross-sectional design will be used to test the social cognitive predictions of domain satisfaction, with a few departures from the original model.

First, although the model posits a linkage between personality traits and well-being, the present study will explore only the relations between the social cognitive variables and satisfaction in social and academic domains. The omission of trait predictors is intended to focus on adjustment variables that may be relatively open to personal or environmental control (e.g., self-efficacy, goal progress, social support) and, therefore, may be used to inform interventions (Lent, 2004). Second, outcome expectations will not be included in the present study. This decision is based on the non-significant findings from previous studies. Finally, in addition to testing the social cognitive assumptions of the model, acculturation and enculturation constructs (as measured by behavioral engagement in the European American culture and in the Asian culture, respectively) will be included to explore aspects of within-group variation in the college adjustment of Asian American students.

The study's main social cognitive hypotheses are illustrated in Figure 2, which depicts the direct and indirect relationships proposed by the hypotheses.

Figure 2. *Model Depicting the Hypothesized Relations of the Social Cognitive Variables to College Adjustment in Asian American Students.*
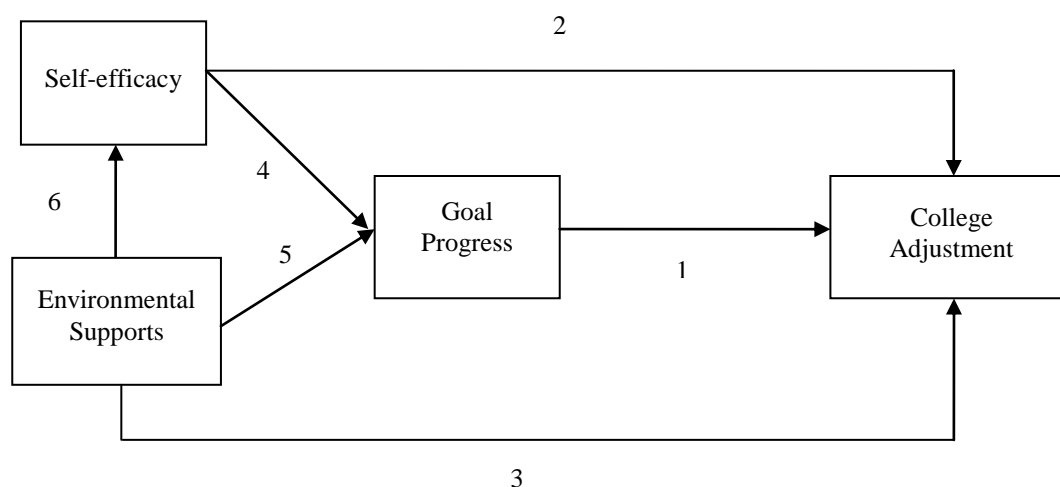
Direct correlations between the predictors and college adjustment. Given the assumption that domain-specific satisfaction derives partly from individuals' perception of their goal progress within specific domains in life, it is predicted that satisfaction in social and academic domains will each positively correlate with domain-specific goal progress (hypothesis 1). Apart from the perception of goal progress in each domain, it is predicted that individuals will gain satisfaction directly through self-efficacy regarding their abilities to perform goal-directed behaviors (hypothesis 2) and support from their environment (hypothesis 3). These hypotheses are consistent with the model's assumption that individuals are likely to be satisfied in a given domain when they perceive their environment as supportive of their goal pursuit and when they possess confidence in their ability to perform goal-oriented tasks.

Correlations among the predictors. Based on previous findings (Lent, Singley et al., 2005; Lent et al., 2007), it is assumed that domain-specific self-efficacy correlates with goal progress (hypothesis 4) and that environmental supports directly facilitate goal progress (hypothesis 5). Finally, environmental support is predicted to serve as a source of individual's self-efficacy (hypothesis 6).

Relation of Acculturation and Enculturation Variables to College Adjustment

The college enrollment of Asian Americans is growing steadily both in number and diversity (Ying et al., 2007). Previous studies have revealed differences in the college adjustment process of Asian American students compared to White Americans (e.g., Sue & Zane, 1985). Some researchers have cited the need to explore factors relating to within-group differences among Asian Americans, and have identified acculturation as one of the important constructs to investigate (Gloria & Ho, 2003; Miller, 2007). Thus, the present study will be the first to examine within-group differences in Asian Americans' college adjustment by studying acculturation variables within the context of social cognitive theory.

The majority of studies that have examined the acculturation-adjustment relation have adopted the unidimensional framework of acculturation (e.g., Abe & Zane, 1990). Most of these studies concluded that as individuals become more assimilated to the mainstream European American culture, they retain less of the values and behaviors of their native culture, yet they also demonstrate better psychosocial adjustment than those who are less acculturated. Nevertheless, findings based on the unidimensional framework of acculturation have been criticized as incomplete or misleading (Ryder et al., 2000). Recent studies using the bidimensional model of acculturation have yielded

inconsistent results regarding the relations of acculturation/enculturation and adjustment. Some studies have found that bicultural individuals, who demonstrate proficiency in both mainstream and native cultures, have better adjustment in terms of self-esteem (Kim & Omizo, 2005) and social relationships (Nguyen et al., 1999). Other studies have not found positive associations between enculturation and adjustment outcomes (e.g., Ryder et al., 2000).

Our current understanding of the acculturation-adjustment relationship may be constrained by measurement, methodological, and conceptual limitations in the previous acculturation research (see Miller, 2007). Thus, it may be premature to frame specific hypotheses regarding what roles the constructs of acculturation and enculturation (as indexed by behavioral engagement in European American and Asian cultures, respectively) play with respect to the college adjustment of Asian Americans. Hence, the second part of this study is considered exploratory. The following research questions are offered to direct exploration of acculturation and enculturation in relation to the other variables in this study:

1. Are acculturation or enculturation behaviors related to the adjustment outcomes of academic and social satisfaction?

2. Are acculturation or enculturation behaviors related to the social cognitive variables of academic and social self-efficacy, environmental supports, and goals progress?

3. Do acculturation or enculturation behaviors account for unique predictive variance in academic and social satisfaction, above and beyond the social cognitive predictors?

4. Do acculturation or enculturation behaviors moderate the relationships of (a) self-efficacy beliefs to domain satisfaction, (b) environmental supports to domain satisfaction, or (c) goal progress to domain satisfaction?

Chapter III: Method

Participants

Participants were 122 (68 female, 50 male, four did not identify their gender) college students who self-identified as Asian Indian (14.8%), Bangladeshi (0.8%), Chinese (32.0%), Filipino (5.7%), Japanese (2.5%), Korean (14.8%), Malaysian (0.8%), Pacific Islander (0.8%), Pakistani (0.8%), Taiwanese (9.8%), Thai (1.6%), or Vietnamese (9.8%); 5.7% did not report their ethnicity. Of these individuals, 12 (9.8%) identified as first generation (i.e., born in Asia or a country other than the U.S. and came to the U.S. as an adult), 33 (27.0%) as 1.5 generation (i.e., born in Asian or a country other than the U.S. and came to the U.S. as a child or adolescent), 67 (54.9%) as second generation (i.e., born in the U.S. and either one or both parents were born in Asian or countries other than the U.S.), 3 (2.5%) as third generation (i.e., born in the U.S. with both parents also born in the U.S.), 2 (1.7%) as fourth generation (i.e., born in the U.S., with both parents also born in the U.S., and at least one of their grandparents born in the U.S.), and 5 (4.1%) did not report their generational status. The average period of residence in the United States was 16.46 ($SD = 6.38$) years. The age of participants ranged from 18 to 31 ($M = 20.54$, $SD = 2.21$). Twenty-four (19.7%) participants were freshmen, 27 (22.1%) were sophomores, 37 (30.3%) were juniors, and 28 (23%) were seniors; 6 (4.8%) did not report their year in school. Their mean GPA was 3.41 ($SD = 0.41$).

An a priori power analysis was conducted using the G*Power 3.1 software (Faul, Erdfelder, Buchner, & Lang, 2009) for a multiple regression analysis with 14 predictor variables. Results of the analysis indicated that a sample size of 107 would

be required for a medium effect size ($f^2 = .15$; Cohen, 1988), with power ($\beta = .95$) and an error probability (α) of 0.05. Therefore, the current sample was deemed sufficient to detect at least a medium effect size.

Procedures

Participants were recruited from a large Mid-Atlantic university in one of two ways. First, a random sample of 600 self-identified Asian, Asian American, or Pacific Islander undergraduate students generated by the University registrar's office were contacted by e-mail to participate in an online study of Asian/Asian Americans' college experiences. In addition, recruitment letters were distributed to over 300 students in undergraduate psychology department courses, undergraduate courses in Asian Americans studies, and a student listserv of the Office of International Educational Services. Depending on the instructors, participants from the Asian American studies courses received varying amount of extra credits toward their final grades. Other participants were informed that participation in the study was voluntary and that no explicit compensation would be given upon completion of the questionnaire. All potential participants were directed to a secure online survey website maintained by surveymonkey.com. They were asked to provide their consent (see Appendix A) on the electronic form of the survey website before proceeding to the questionnaire. The time required to complete the survey ranged from 10 to15 minutes. Three email reminders were sent out to the lists of participants. These recruitment efforts resulted in a total of 263 respondents. Of these individuals, 61 reviewed the consent form and the description of the study but did not proceed to the study questionnaire. Those who either identified as graduate students ($n = 20$) or had

more than 5% incomplete response ($n = 60$) were excluded from the data analysis,

resulting in 122 participants in the present study. Missing item data on a particular

scale were replaced by the individual's mean score on the completed items for that

scale.

In addition to the structured measures, described below, participants were

presented with an open-ended question at the end of the online survey: "Looking

back over your time in college, what would you say are the most important factor(s)

that have affected your (a) academic and (b) social adjustment to college? By

adjustment, we mean feeling of "fitting in," doing well, or being satisfied with your

progress." Responses to this question were viewed as having the potential to provide

a complementary perspective on the process of college adjustment by Asian

American students. Coding and content analyses of participants' responses to the

open-ended question are presented in the Results section.

Measures

For each measure of the domain-specific social cognitive variables and

satisfaction developed by Lent, Singley et al. (2005), scale scores were obtained by

summing item responses and dividing by the number of items on the measure.

Higher scores indicate more positive experiences (e.g., greater social support,

stronger self-efficacy, greater academic/social satisfaction).

Academic Domain College Adjustment

Academic satisfaction. Academic satisfaction was assessed with a 7-item

measure asking participants to indicate their level of satisfaction with different

aspects of their academic experience along a 1 (*strongly disagree*) to 5 (*strongly*

agree) scale. A sample items is, "In general, I am satisfied with my academic life". The measure has yielded an adequate reliability estimate (α= .86 to .87) and has been correlated with measures of social domain satisfaction, positive affect, and overall life satisfaction (Lent, Singley et al., 2005).

Academic self-efficacy. Academic self-efficacy was assessed with a 12-item questionnaire tapping participants' confidence in their ability to perform well academically (5 items) and to cope with barriers or problems related to academic success (7 items). Examples of the items are: "cope with a lack of support from professors or your advisor" and "excel in your intended major over the next semester". Responses for the academic self-efficacy measure were obtained along a 10-point scale, ranging from *no confidence* (0) to *complete confidence* (9). Lent, Singley et al. (2005) reported an adequate internal consistency reliability estimates (α = .91) and correlations to measures of positive affect and academic-related outcomes consistent with the theory, including outcome expectations, academic goal progress, and academic resources (*r* ranged from .30 to .61).

Academic support. Academic support was assessed with a 9-item measure. Participants were asked to indicate how much they agree with a set of statements referring to available support in their intended major. Ratings were made along a 5-point scale ranging from 1 (*strongly disagr*ee) to 5 (*strongly agree*). A sample item includes, "get helpful assistance from a tutor, if I felt I needed such help". The internal consistency estimate for the measure in past research has ranged from .81 to .84, and the measure has been found to correlate with academic self-efficacy,

outcome expectations, goal progress, domain satisfaction, positive affect, and overall life satisfaction (*r* ranged from .30 to .45; Lent, Singley et al., 2005).

Academic goal progress. Academic goal progress was assessed with a 7-item measure. Participants were asked to indicate how much progress they think they are making toward their academic goals (e.g., "remain enrolled in your academic major"). Responses were obtained along a 5-point scale ranging from 1 (*no progress at all*) to 5 (*excellent progress*). The measure has yielded adequate internal consistency estimates (*α* ranged from .84 to .86) and correlated significantly with academic self-efficacy, outcome expectations, environmental resources, academic satisfaction, positive affect, and overall life satisfaction (*r* ranged from .30 to .61) in Lent, Singley et al.'s (2005) study.

Social Domain College Adjustment

Social satisfaction. Social satisfaction was assessed with a 6-item measure, asking participants how often they had positive social experiences over the past week, along a 1 (*not at all or never*) to 5 (*frequently or all the time*) scale. A sample item is, "…enjoyed talking with or being with friends or relatives?". The measure produced an adequate internal reliability estimate (α= .80) and moderately correlated with measures of overall life satisfaction and positive affect in a prior study by Lent, Singley et al. (2005).

Social self-efficacy. Social self-efficacy was assessed with a 12-item questionnaire reflecting participants' level of confidence in their ability to perform effectively in social situations along a 10-point scale from *no confidence* (0) to *complete confidence* (9). Examples of the items are: "start up a conversation with a

stranger" and "initiate social activities with friends". Using this scale, Lent, Singley et al. (2005) found an internal consistency estimate above .80. They also found that the measure correlated moderately to strongly with outcome expectations, social goal progress, environmental resources, positive affect, social domain satisfaction, and overall life satisfaction (*r* ranged from .35 to .68).

Social support. Social support was assessed with a 10-item measure. Participants were asked to indicate the degree to which they agree with statements regarding the sense of social connection they experience in their current relationships (e.g., "I have close relationships that provide me with a sense of belonging"). Responses were obtained along a 5-point scale ranging from *strongly disagr*ee (1) to *strongly agree* (5). The internal consistency estimate for this measure ranged from .88 to .92 in prior research, and the measure correlated as expected with measures of social self-efficacy, outcome expectations, goal progress, social domain satisfaction, positive affect, and overall life satisfaction (*r* ranged from .36 to .72; Lent, Singley et al., 2005).

Social goal progress. Social goal progress was assessed with a 7-item measure developed by Lent, Singley et al. (2005). Participants were asked to indicate how much progress they think they are making toward their social goals (e.g., finding other people who can support you in difficult times"). Responses were obtained along a 5-point scale ranging from 1 (*no progress at all*) to 5 (*excellent progress*). The measure has yielded adequate internal consistency (*a* ranged from .88 to .92), and was significantly associated with academic self-efficacy, outcome expectations,

environmental resources, academic satisfaction, positive affect, and overall life satisfaction in past research (*r* ranged from .32 to .72; Lent, Singley et al., 2005).

Cultural Variables

Acculturation/ Enculturation Behaviors. Participants' acculturation and enculturation with respect to behavioral engagement were assessed using a version of the Acculturation Rating Scale for Mexican Americans (ARSMA-II; Cuellar, Arnold, & Maldonado, 1995) that has been adapted for Asian Americans. The modified ARSMA-II (Lee et al., 2006) is a 30-item, bidimensional acculturation/enculturation scale that separately assesses an individual's acculturation to the Western culture (Western Orientation Scale [WOS]; 13 items) and enculturation to the Asian culture (Asian Orientation Scale [AOS]; 17 items). The items represent multiple life domains including language usage, ethnic identity, language preference in social activities, and social affiliation.

The ARSMA-II was modified for Asian Americans by changing the terms *Mexican* to *Asian/Asian American* and *Anglo* to *European/Caucasian* (Lee et al., 2006). Sample items for each scale are "I speak an Asian language"; "My friends now are of Caucasian origin". Participants will be asked to indicate the degree to which the items apply to them along a 5-point Likert-type scale (1 = *not at all*, 5 = *extremely often or almost always*). Items on the AOS and WOS were summed separately to generate two total subscale scores, with higher scores representing greater cultural orientation to either Western (WOS) or Asian (AOS) cultures. Research on the measure with Asian American college students has demonstrated

sufficient internal consistency estimates for both the acculturation ($\alpha = .75$ to .77) and enculturation subscales ($\alpha = .84$ to .87, Lee et al., 2006).

Separate factor analyses of the AOS and WOS revealed that each has a two-factor (language and social interaction) structure (Lee et al). The two AOS factors accounted for 48% of the total variance in enculturation; the two WOS factors accounted for 39% of the total variance in acculturation (Lee et al). Moreover, the modified ARSMA-II adequately represents the bidimensionality of the acculturation and enculturation constructs, as the AOS and WOS total item scores yielded a medium correlation ($r = -.34$) in a sample of 220 West Coast Asian American college students (Lee et al.). The original measure has also produced good test-retest reliability estimates over a one-week interval: $\alpha = .94$ for the acculturation scale and .83 for the enculturation scale (Cuellar et al., 1995).

Because the modified ARSMA-II was used to assess behavioral acculturation and enculturation in the present study, six items that intended to reflect ethnic identification (e.g., I like to identify myself as Asian) were not included in this study.

Chapter IV: Results

Exploratory Factor Analyses

Given the absence of psychometric data on the SCCT measures specifically with Asian American samples, an exploratory factor analysis was first conducted to examine the underlying factor structure of the responses to the SCCT items in each performance domain, including academic and social domain satisfaction, self-efficacy, environmental support, and goal progress. Because the social cognitive factors have been found to be intercorrelated in studies with largely European American samples (e.g., Lent, Singley et al., 2005), principal axis factoring procedures and oblimin oblique rotation were employed (c.f. Fabrigar, Wegener, MacCallum, & Strahan, 1999; Gorsuch, 1997). Eigenvalue, scree, percentage of variance, and interpretability criteria were used to determine the appropriate factor structure. After identifying the factors, internal consistency estimates and intercorrelations among the resulting scales were computed.

Following Gorsuch's (1997) recommendations, items were retained if they loaded highly on a given factor at or beyond .50. Where items loaded substantially on more than one factor (i.e., cross-loadings), items that produced factor loadings of above .50 on one factor with a difference of at least .10 between the highest loading and the next highest loadings were retained. Since item-factor correlations were high, mostly above .50, the sample size in the present study ($N = 122$) is probably sufficient, if not optimal, to produce stable factor structures (cf. Gorsuch, 1997). The resulting factors, item content, and item-factor loadings based on the structure matrix for the academic and social domains are presented in Tables 1 and 2, respectively.

Results of the factor analysis of the 35 academic domain items yielded seven factors with eigenvalues greater than 1.00. Examination of the scree plot of the eigenvalues suggested a five-factor solution to be most interpretable, accounting for 65% of the total variance. Four items were removed due to cross-loadings. The remaining 31 items and the eliminated items are presented in Table 1.

Table 1

Factor Loadings from Exploratory Factor Analysis on the items for SCCT Variables in the Academic Domain, Based on the Structure Matrix

Item	Factor				
	1	2	3	4	5
1. Academic Goal Progress					
Excelling at your academic major.	**.82**	.23	.42	-.35	.53
Completing all course assignments effectively.	**.73**	.23	.51	-.34	.54
Studying effectively for all of your exams.	**.82**	.23	.35	-.27	.42
Achieving/ maintaining high grades in all of your courses	**.85**	.25	.31	-.34	.51
*Remaining enrolled in your academic major.	.41	.39	.46	-.49	.72
*Completing academic requirements of your major satisfactorily.	.48	.22	.49	-.44	.64
*Learning and understanding the material in each of your courses.	.69	.23	.44	-.51	.62
2. Academic Environmental Support					
Feel support from important people in my life (e.g., teachers) for pursuing my intended major.	.10	**.68**	.23	-.35	.24
Have access to a "role model" (e.g., someone I can look up to and learn from by observing) in my academic major.	.35	**.66**	.13	-.18	.19

Table 1 continued.

	Factor				
Item	1	2	3	4	5
Feel that there are people "like me" in this academic field	.09	**.54**	.22	-.34	.20
Get helpful assistance from a tutor, if I felt I needed such help.	.12	**.60**	.03	-.16	.08
Get encouragement from my friends for pursuing my intended major.	-.08	**.63**	.06	-.35	.19
Get helpful assistance from my advisor.	-.07	**.55**	-.07	-.32	.15
Feel that my family members support the decision to major in my intended field.	-.22	**.53**	.18	-.37	.14
Feel that close friends or relatives would be proud of me for majoring in my intended field.	-.19	**.59**	.28	-.46	.19
Have access to a "mentor" who could offer me advice and encouragement.	.16	**.77**	.10	-.33	.26
3. Academic Coping Self-Efficacy					
Cope with a lack of support from professors or your advisor.	.25	-.06	**.56**	-.07	.25
Complete a degree despite financial pressures.	.26	.14	**.67**	-.16	.27
Continue on in your intended major even if you did not feel well-liked by your classmates or professors.	.12	.04	**.76**	-.21	.21
Find ways to overcome communication problems with professors or teaching assistants in your courses.	.19	.16	**.74**	-.28	.28
Balance the pressures of studying with the desire to have free time for fun and other activities.	.33	.29	**.63**	-.35	.41
Continue on in your intended major even if you felt that, socially, the environment in these classes was not very welcoming to you.	.06	.09	**.84**	-.15	.32
Find ways to study effectively for your courses despite having competing demands for your time.	.49	.36	**.70**	-.39	.48

Table 1 continued.

Item	Factor				
	1	2	3	4	5
4. Academic Satisfaction	.04	.33	.22	**-.70**	.47
I feel satisfied with the decision to major in my intended field.					
I am comfortable with the educational atmosphere in my major field	.18	.48	.27	**-.65**	.36
For the most part, I am enjoying my coursework	.32	.37	.20	**-.77**	.44
I am generally satisfied with my academic life	.47	.38	.33	**-.69**	.56
I enjoy the level of intellectual stimulation in my courses	.06	.31	.20	**-.80**	.29
I feel enthusiastic about the subject matter in my intended major	.08	.32	.25	**-.78**	.37
I like how much I have been learning in my classes	.16	.31	.23	**-.87**	.35
5. Academic Task Self-Efficacy					
Remain enrolled in your intended major over the next semester	.19	.25	.31	-.43	**.83**
Remain enrolled in your intended major over the next TWO semesters	.20	.20	.21	-.37	**.84**
EXCEL in your intended major over the next semester	.54	.17	.42	-.33	**.82**
EXCEL in your intended major over the next TWO semesters	.51	.19	.45	-.34	**.83**
*Complete the upper level required courses in your intended major with overall grade point average of B or better	.60	.05	.37	-.23	.63

Note. N = 122. Kaiser-Meyer-Olkin index = .95. A five-factor solution accounted for 59.19% of the variance.
* eliminated items

The factors were labeled as (a) academic goal progress (4 items, α = .92), (b) academic environment support (9 items, α = .85), (c) academic coping self-efficacy (7 items, α = .87), (d) academic satisfaction (7 items, α = .90), and (e) academic task

self-efficacy (4 items, $a = .90$). The five-factor solution derived from the factor

analysis was generally consistent with the factor structure of the original academic

domain scales (Lent, Singley et al., 2005). However, the academic self-efficacy items

loaded on two distinct, though interrelated factors: *academic task self-efficacy*, which

consists of items that reflect individuals' confidence in excelling in their college

majors and maintaining their enrollment; and *academic coping self-efficacy*, which

consists of items that reflect individuals' confidence in their ability to cope with

challenging academic conditions.

Results of the factor analysis of the 33 social domain items yielded six factors

with eigenvalues greater than 1.00. Examination of the scree plot of the eigenvalues

suggested a five-factor solution to be most interpretable, accounting for 68% of the

total variance. Eight items were removed due to cross-loadings. The remaining 25

items are presented in Table 2.

Table 2

Factor Loadings from Exploratory Factor Analysis on the items for SCCT Variables

in the Social Domain, Based on the Structure Matrix

Item	Factor				
	1	2	3	4	5
1. Social Goal Progress					
Developing a satisfying social life	**.88**	.56	.42	.47	-.36
Making the "right" amount of friends (i.e., right for you)	**.85**	.49	.41	.50	-.33
Finding other people who can support you in difficult times	**.80**	.36	.50	.49	-.40
Table 2 continued.					

| | Factor | | | | |
Item	1	2	3	4	5
Keeping up contacts with social groups that you belong to	**.81**	.61	.37	.48	-.27
Helping to maintain harmony within social groups that you belong to	**.82**	.51	.34	.51	-.27
Attending to the well-being of friends	**.83**	.49	.43	.50	-.27
2. Social Self-Efficacy					
Work out conflicts or disagreements with a friend	.38	**.55**	.39	.10	-.02
Maintain relationships with old friends who do not live nearby	.40	**.52**	.42	.23	-.03
Make new friends	.62	**.81**	.35	.36	-.33
Start up a conversation with a stranger	.45	**.91**	.23	.31	-.15
Get to know new people at a social event	.55	**.92**	.27	.31	-.21
Help other people to feel at ease in a new social situation	.45	**.80**	.39	.29	-.15
Disclose information about yourself to a new acquaintance	.43	**.72**	.41	.45	-.27
Keep a conversation going with someone you've just met	.43	**.84**	.32	.23	-.14
*Initiate social activities with friends	.66	.70	.48	.35	-.30
*Share painful feelings with someone you feel close to you	.58	.36	.62	.39	.05
*Provide comfort to a friend who is in distress	.54	.59	.68	.27	-.11
*Ask for support from a friend when you could use support	.63	.52	.59	.30	-.21
3. Social Support (bond/closeness)					
I feel a strong emotional bond with at least one other person	.30	.33	**.76**	.31	-.38

Table 2 continued.

Item	Factor				
	1	2	3	4	5
There are people I enjoy spending time with	.40	.33	**.55**	.16	-.26
4. Social Satisfaction					
… enjoyed talking with or being with friends or relatives?	.51	.24	.35	**.83**	-.33
… looked forward to getting together with friends or relatives?	.54	.22	.29	**.80**	-.34
… made social plans with friends or relatives for Future activities?	.53	.35	.37	**.76**	-.24
… enjoyed talking with other students, co-workers, or neighbors?	.41	.35	.15	**.71**	-.15
*… felt your relationships with your friends or relatives were without major problems or conflicts?	.61	.33	.24	.51	-.16
* … been generally satisfied with your social life?	.78	.35	.42	.57	-.30
5. Social Support (access/belonging)					
I have easy access to people who enjoy the same social activities I do	.56	.42	.52	.43	**-.69**
I feel part of a group of people who share my attitudes and beliefs	.55	.39	.47	.50	**-.65**
I have close relationships that provide me with a sense of belonging	.61	.33	.52	.50	**-.74**
* I have close personal relationship with other people	.65	.42	.67	.43	**-.29**
* Other people view me as competent in social situations	.45	.54	.34	.23	-.44
* I have friends nearby who share my interests and concerns	.66	.38	.63	.53	-.67
* There are people who admire my social skills	.67	.58	.49	.36	-.37

Note. $N = 122$. Kaiser-Meyer-Olkin index = .95. A five-factor solution accounted for 63.14% of the variance.

* eliminated items

The resulting factors were labeled as (a) social goal progress (7 items, $\alpha =$ .95), (b) social self-efficacy (8 items, $\alpha = .90$), (c) social support – emotional bond/closeness (3 items, $\alpha = .74$), (d) social support – sense of group belonging (3 items, $\alpha = .87$), and (e) social satisfaction (4 items, $\alpha = .86$). The five-factor solution derived from the factor analysis was largely consistent with the factor structure of the original social domain scales (Lent, Singley et al., 2005). However, the social support items loaded on two distinct, though interrelated factors: *social support (bond)*, which consists of items that reflect individuals' perceived closeness and emotional bond with others; and *social support (belonging)*, which consists of items that reflect individuals' sense of belonging and access to social support.

After identifying the items on each factor-derived scale, scale scores were computed by summing the item responses and then dividing by the number of items on a given scale. Means, standard deviations, internal consistency, and bivariate correlations among the variables are presented in Table 3.

Table 3

Means, Standard Deviations, Range, Internal Consistency, and Bivariate Correlations Among the Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	*M*	*SD*	α	Range
1. ASATIS	--												3.81	.80	.90	1.29–5.00
2. SOCSATIS	.21*	--											4.00	.76	.86	1.00–5.00
3. AGOALPRO	.45**	-.02	--										3.68	.91	.92	1.25–5.00
4. GACAD-SE	.50**	.04	.57**	--									8.50	1.87	.90	1.00–10.00
5. ACADCOPE-SE	.35**	.13	.49**	.45*	--								7.02	1.81	.87	2.29 –10.00
6. ACADSUPP	.48**	.26**	.25**	.26**	.23*	--							3.77	.71	.85	1.56 –5.00
7. SOCGOALPRO	.25**	.63**	.20*	.09	.30**	.24**	--						3.69	.91	.95	1.00 –5.00
8. SOC-SE	.24**	.42**	.23*	.21*	.40**	.29**	.63**	--					7.14	1.85	.90	2.50 –10.00
9. SUPP-BOND	.27**	.36**	.12	.18*	.23*	.44**	.46**	.37**	--				4.35	.69	.74	2.33 –5.00
10. SUPP-BELONG	.17	.58**	.08	.15	.23*	.41**	.68**	.49**	.53**	--			4.02	.83	.87	1.00 –5.00
11. WOS	.07	.35**	.03	.07	.14	.15	.39**	.32**	.36**	.37**	--		4.18	.50	.79	2.36 –5.00
12. AOS	.19*	.03	.00	.06	-.05	.21*	.04	.04	.13	-.04	-.20*	--	3.11	.83	.91	1.23 –5.00

NOTE: ASATIS = academic satisfaction; SOCSATIS = social satisfaction; AGOALPRO = academic goal progress; GACAD-SE = general academic self-efficacy; ACADCOPE-SE = Academic coping self-efficacy; ACADSUPP = academic environment support; SOCGOALPRO = social goal progress; SOC-SE = social self-efficacy; SUPP-BOND = social support (bonding); SUPP-BELONG = social support (belonging); WOS = acculturation to Western behaviors; AOS = enculturation to Asian behaviors

*p < .05. **p < .01. ***p < .001.

Hypotheses regarding the relation of each predictor to domain satisfaction as well as relations among the predictor variables are as follow (also see Figure 2):

Hypothesis 1: Domain-specific goal progress will be positively related to domain satisfaction

Hypothesis 2: Domain-specific self-efficacy will be positively related to domain satisfaction

Hypothesis 3: Domain-specific environmental support will be positively related to domain satisfaction

Hypothesis 4: Domain-specific goal progress will be positively related to domain-specific self-efficacy

Hypothesis 5: Domain-specific goal progress will be positively related to domain-specific environmental support

Hypothesis 6: Domain-specific self-efficacy will be positively related to domain-specific environmental support

Relationship of the Social Cognitive Predictors to Academic Satisfaction

As shown in Table 3, the results generally supported the hypothesized correlations of the social cognitive predictors to academic satisfaction. A significant and medium to strong correlation was found between academic goal progress and academic satisfaction (Hypothesis 1; $r = .45$, $p < .01$). The more progress an individual has made toward his or her academic goals, the more satisfied he or she reported being in the academic realm. There was also a strong correlation between academic task self-efficacy and academic satisfaction (Hypothesis 2a; $r = .50$, $p < .01$) and a moderate correlation between academic coping self-efficacy and academic satisfaction (Hypothesis 2b; $r = .35$, $p < .01$). In other words, higher confidence in one's ability to complete key academic tasks and to

cope with academic challenges was related to higher academic satisfaction. Likewise, academic support was strongly correlated with academic satisfaction (Hypothesis 3; $r = .48$, $p < .01$). That is, when individuals perceived greater support for pursuing their intended major, they also experienced higher academic satisfaction.

Following SCCT's predictions of the correlations among the social cognitive predictors, findings confirmed that academic goal progress related significantly to academic task self-efficacy, academic coping efficacy, and environmental support, with moderate to high intercorrelations (Hypotheses 4 and 5; rs of .57, .49, and .26, respectively). Consistent with expectations, environmental support was significantly correlated with both academic task self-efficacy and coping efficacy (Hypothesis 6; rs of .26 and .23, respectively), though only at a modest level.

To examine the collective and unique contributions of the social cognitive variables to the prediction of academic satisfaction, a hierarchical regression analysis was conducted (see Table 4).

Table 4

Hierarchical Regression Analyses Predicting Academic and Social Satisfaction

Dependent variable/predictor	R	ΔR^2	ΔF	B	t
DV: Academic Satisfaction					
Step 1	.45	.21	31.01***		
Goal progress				.45	5.57***
Step 2	.54	.09	7.58**		
Goal progress				.22	2.23*
Academic self-efficacy				.33	3.39**
Academic coping self-efficacy				.10	1.04
Step 3	.64	.11	21.84***		
Goal progress				.18	1.95 [a]
Academic self-efficacy				.28	3.07**
Academic coping self-efficacy				.06	.70
Academic support				.35	4.67***

Table 4 continued.

Dependent variable/predictor	R	ΔR²	ΔF	B	t
DV: Social Satisfaction					
Step 1	.63	.40	79.45***		
Goal progress				.63	8.91***
Step 2	.63	.00	.34		
Goal progress				.59	5.89***
Social self-efficacy				.06	.59
Step 3	.66	.04	4.24*		
Goal progress				.43	3.88***
Social self-efficacy				.01	.14
Social support – bond				.01	.10
Social support – belong				.27	2.73**

[a]$p = .053$, *$p < .05$, **$p < .01$, ***$p < .001$

Predictors were entered based on the hypothesized relationships in the SCCT model (Lent, 2004), with goal progress being entered first at step 1, followed by self-efficacy (step 2) and environmental support (step 3). Academic goal progress accounted for a large percentage (21%) of the variance in academic satisfaction at step 1, academic task self-efficacy and coping self-efficacy together accounted for an additional 9% of the variance at step 2, and environmental support accounted for an additional 11% of the variance at step 3. Together, the four predictors explained a large percentage (41%) of the variance in academic satisfaction. However, with all four predictors in the equation at step 3, only academic task self-efficacy and academic support accounted for unique variation in academic satisfaction, with significant beta weights of .28 and .35, respectively. The findings that goal progress was only marginally predictive of academic satisfaction ($\beta = .18$, $p = .053$) and that academic coping self-efficacy did not explain significant unique variance were not consistent with expectations.

Relationship of the Social Cognitive Predictors to Social Satisfaction

The correlations in Table 3 supported the hypothesized relationships of the social cognitive predictors to social satisfaction. Specifically, social goal progress and social

self-efficacy were found to be moderately to strongly correlated with social satisfaction (Hypotheses 1 and 2; rs = .63 and .42, $p < .01$, respectively). In other words, individuals with high confidence in their ability to perform effectively in social situations and those who perceive significant progress in their social goals are more likely to be satisfied with their social lives. Likewise, significant correlations were found between social satisfaction and the two social support indicators. Specifically, there was a moderate association between social support (bond) and social satisfaction (Hypothesis 3a; $r = .36$, $p < .01$). In other words, the stronger the emotional bond or closeness one enjoys with others, the greater the social domain satisfaction. In addition, social support (belonging) was strongly related to social satisfaction (Hypothesis 3b; $r = .58$, $p < .01$). Individuals who have a stronger sense of belonging or access to a social group reported greater social satisfaction.

Findings of intercorrelations among the social cognitive variables were also consistent with hypotheses. Social goal progress was strongly related to social self-efficacy (Hypothesis 4; $r = .63$, $p < .01$) and the two indicators of social environmental support, social bond and social belonging (Hypothesis 5; rs of .46, .68, $p < .01$, respectively). Social self-efficacy, as predicted, was found to be moderately to strongly associated with both indicators of social support, emotional bond and sense of belonging (Hypothesis 6; rs of .37, .49, $p < .01$, respectively).

To explore the joint and unique contributions of the social cognitive variables in predicting social satisfaction, a hierarchical regression analysis was performed, with social goal progress being entered first at step 1, followed by social self-efficacy (step 2) and the two environmental support indicators – social bond and social belonging (step 3). The findings, presented in Table 4, were only partly consistent with hypotheses. Social

goal progress accounted for a large percentage (40%) of the variance in social satisfaction at step 1, though social self-efficacy did not contribute significantly to the model at the second step. Finally, at step 3, the two environmental support indicators, social bond and social belonging, accounted for an additional 4% of the variance. Overall, the set of predictors accounted for a large percentage (44%) of the variance in social satisfaction. Contrary to expectations, however, with all predictors in the equation at step 3, only goal progress and social belonging (rather than social bond) accounted for unique variance in social satisfaction, with beta weights of .43 and .27 respectively.

Exploration of Acculturation/Enculturation in relation to the Social Cognitive Variables and Domain Satisfaction

Question 1: Are acculturation/enculturation behaviors related to academic and social satisfaction?

Question 2: Are acculturation/enculturation behaviors related to the social cognitive variables of academic and social self-efficacy, environmental support, and goal progress?

Questions one and two were examined using bivariate correlation coefficients. Results (see Table 3) indicated that acculturation behaviors were moderately associated with social satisfaction ($r = .35$, $p < .01$), social goal progress ($r = .39$, $p < .01$), social self-efficacy ($r = .32$, $p < .01$), and the two environmental support variables, social bond and social belonging (rs = .36 and .37 respectively, $p < .01$). However, acculturation behaviors were not significantly related to academic satisfaction or any of the academic domain social cognitive variables. Enculturation behaviors were found to correlate significantly yet modestly only with academic satisfaction ($r = .19$, $p < .05$) and academic

environmental support ($r = .21, p < .05$). Enculturation behaviors were not significantly

related to social satisfaction or any of the social domain social cognitive variables.

Taken together, the results suggested a distinct pattern of relations of

acculturation and enculturation behaviors to the social cognitive variables and to domain-

specific satisfaction. Specifically, acculturation behaviors related significantly only to the

social cognitive variables and satisfaction in the social domain, whereas enculturation

behaviors related significantly only to perceived environmental support and satisfaction

in the academic domain. In other words, behavioral engagement in the mainstream

European culture was associated with aspects of social adjustment among Asian

American college students, while their engagement in the Asian culture was differentially

associated with perceived support and satisfaction in the academic realm.

Question 3: Do acculturation/enculturation behaviors account for unique predictive

variance in academic and social satisfaction, above and beyond the social cognitive

predictors?

Question 4: Do acculturation/enculturation behaviors moderate the relationships of (a)

self-efficacy beliefs to domain satisfaction, (b) environmental supports to domain

satisfaction, or (c) goal progress to domain satisfaction

Prior to the analyses addressing these questions, the predictor variables and the

moderators (acculturation/enculturation behaviors) were transformed using mean-

centering procedures to reduce potential problems with multicollinearity. This was done

by subtracting the sample mean from participants' raw scores on each variable (Aiken &

West, 1991; Cohen & Cohen, 1983). Interaction terms, consisting of the cross-products

of each predictor and moderator (e.g., self-efficacy x acculturation), were then computed.

Examination of the variance inflation factor (*VIF*; range $= 1.10 - 3.68$) and tolerance

(range = .28 − .91) of the resulting scores suggested that multicollinarity had been

satisfactorily contained (Tabachinick & Fidell, 2001).

     Hierarchical multiple regression analyses were next conducted to predict

academic satisfaction and social satisfaction from the sets of predictor and moderator

variables. For each regression model, domain-specific social cognitive variables (goal

progress, self-efficacy, environmental support) were entered as a set in Step 1, the mains

effects of acculturation and enculturation were entered at Step 2, and all of the interaction

terms were entered at the final step of the equation. Results, presented in Tables 5 and 6,

indicated that the set of acculturation and enculturation main effects did not explain

significant unique variance in either academic ($\Delta R^2 = .01$, $p > .05$) or social satisfaction

($\Delta R^2 = .01$, $p > .05$) after controlling for the social cognitive predictors. Similarly, the set

of interaction terms did not account for significant additional variance in either academic

($\Delta R^2 = .07$, $p > .05$) or social satisfaction ($\Delta R^2 = .06$, $p > .05$). In relation to the research

questions, this pattern of findings suggests that acculturation and enculturation (a) did not

uniquely predict either satisfaction criterion above and beyond the social cognitive

variables (Question 3), or (b) moderate the relations of the social cognitive variables to

the criterion variables (Question 4).

Table 5.

Hierarchical Regression Analyses of Acculturation/Enculturation in Predicting

Academic Satisfaction

Dependent variable/predictor	R	ΔR^2	ΔF	B	t
DV: Academic Satisfaction					
Step 1	.64	.41	20.07***		
Goal progress				.19	2.01*
Academic self-efficacy				.27	3.02**
Academic coping self-efficacy				.06	.66
Academic support				.35	4.70***
Step 2	.65	.01	1.09		
Goal progress				.19	2.06*
Academic self-efficacy				.26	2.92**
Academic coping self-efficacy				.07	.79
Academic support				.33	4.16***
Acculturation (WOS)				.01	.18
Enculturation (AOS)				.11	1.46
Step 3	.70	.07	1.72		
Goal progress				.21	2.28*
Academic self-efficacy				.24	2.55*
Academic coping self-efficacy				.14	1.54
Academic support				.27	3.24**
Acculturation (WOS)				.07	.88
Enculturation (AOS)				.12	1.54
WOS X Goal progress				.08	.79
WOS X Academic self-efficacy				.04	.34
WOS X Academic coping self-efficacy				.04	.36
WOS X Academic support				- .21	-2.66**
AOS X Goal progress				- .08	-.77
AOS X Academic self-efficacy				- .11	-1.05
AOS X Academic coping self-efficacy				.14	1.45
AOS X Academic support				- .00	-.01

[a]$p = .053$, *$p < .05$, **$p < .01$, ***$p < .001$

Table 6.

Hierarchical Regression Analyses of Acculturation/Enculturation in Predicting

Social Satisfaction

Dependent variable/predictor	R	ΔR^2	ΔF	B	t
DV: Social Satisfaction					
Step 1	.66	.44	22.78***		
Goal progress				.44	4.06***
Social self-efficacy				.01	.13
Social support - bond				.01	.09
Social support - belonging				.27	2.72**
Step 2	.67	.01	.73		
Goal progress				.42	3.84**
Social self-efficacy				.00	.03
Social support - bond				- .01	-.17
Social support - belonging				.27	2.62*
Acculturation (WOS)				.10	1.20
Enculturation (AOS)				.02	.25
Step 3	.71	.06	1.50		
Goal progress				.39	3.47**
Social self-efficacy				.03	.31
Social support – bond				-.07	-.74
Social support - belonging				.21	1.91
Acculturation (WOS)				.13	1.46
Enculturation (AOS)				.02	.21
WOS X Goal progress				.15	1.13
WOS X Social self-efficacy				-.17	-1.56
WOS X Social support - bond				-.05	-.43
WOS X Social support - belonging				.04	.28
				.33	2.723**
AOS X Goal progress				-.08	-.79
AOS X Social self-efficacy				-.21	-2.01*
AOS X Social support - bond				-.13	-1.00
AOS X Social support - belonging					

[a]$p = .053$, *$p < .05$, **$p < .01$, ***$p < .001$

Supplementary Analysis #1: Examining the Social Cognitive Variables as Mediators of the Relations of Acculturation and Enculturation to Domain Satisfaction

Given the differential pattern of relations of the acculturation and enculturation behaviors to domain-specific satisfactions, mediation analyses were conducted to elucidate possible indirect links of the acculturation/enculturation behaviors to academic and social satisfaction. Based on results from the bivariate correlation analyses, academic environmental support, academic goal progress, academic task, and academic coping self-efficacy were tested as mediators of the relation between enculturation and academic satisfaction, whereas social support (bond), social support (belonging), social goal progress, and social self-efficacy were tested as mediators of the relation between acculturation and social satisfaction.

The mediating relationships of the social cognitive variables were examined via a series of regression models as recommended by Baron and Kenny (1986). First, the independent variable (acculturation or enculturation) was regressed on the mediator (self-efficacy, goal progress, support); second, the independent variable (acculturation or enculturation) was regressed on the dependent variable (domain satisfaction); third, both the mediator and the independent variables were regressed on the dependent variable (domain satisfaction).

According to Barron and Kenny (1986), three conditions must be met in order to conclude that mediation is present. First, there must be a significant correlation between the predictor variable and the criterion variable (path c). Second, the predictor must be significantly correlated with the mediator (path a). Third, the mediator must be significantly related to the criterion variable (path b), controlling for the main effects of

the predictor variable on the criterion variable (see figure 3). Full mediation is established when the main effects of the predictor on the criterion variable no longer exist after entering the mediator into the model (i.e., path c' does not differ significantly from 0), whereas partial mediation is established when the main effects of the predictor on the criterion variable is reduced in the presence of the mediator but remains significantly greater than 0 (Frazier, Tix, & Baron, 2004).

Figure 3. *Diagram of Paths in Mediation Models.*
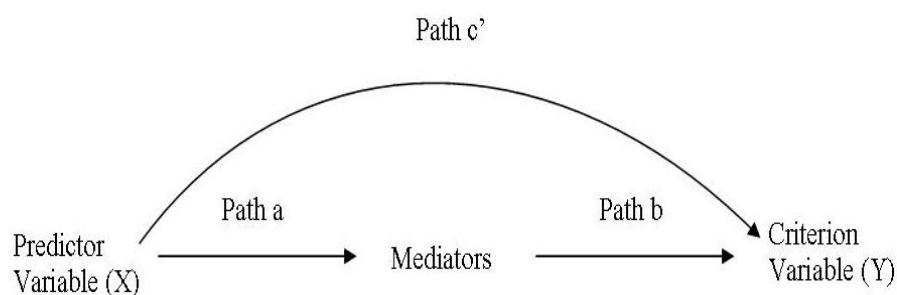
Results of the mediation analyses, presented in Tables 7 and 8, indicated that the effects of acculturation and enculturation on the criterion variables were partially mediated by one or more of the social cognitive variables. Specifically, the indirect effect of enculturation behaviors on academic satisfaction was found to be partially mediated by academic support ($\beta = .09$, $SE = .08$, $CI = - .07, .25$). In addition, the indirect effect of acculturation behaviors on social satisfaction was found to be partially mediated by social self-efficacy ($\beta = .24$, $SE = .13$, $CI = .11, .62$), social goal progress ($\beta = .12$, $SE = .12$, $CI = -.04, .42$), social support (bond) ($\beta = .26$, $SE = .14$, $CI = .12, .66$), and social support (belonging) ($\beta = .16$, $SE = .12$, $CI = .00, .48$). Figure 4 presents the main effects of the

acculturation/enculturation behaviors on the domain satisfaction before and after (in parentheses) the social cognitive variables were entered into the model.

Figure 4. *Mediator Effects of the Social Cognitive Variables on the relations of the Acculturation/Enculturation Behaviors to Domain Satisfactions.*

Table 7. *Mediator Effects of the Social Cognitive Variables on the relations of the*

Acculturation/Enculturation Behaviors to Academic Satisfaction

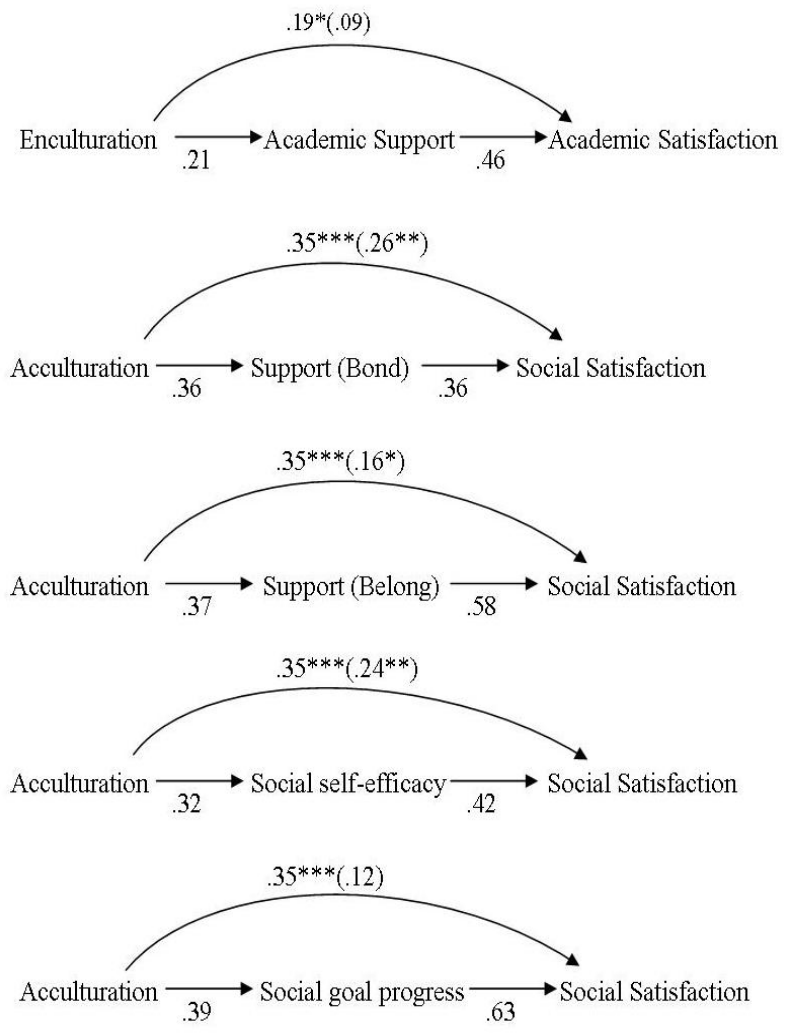| Testing steps in mediation model	B	SE B	95% CI	β
Academic support				
Step 1 (Path c)				
DV: academic satisfaction				
IV: enculturation	.19	.09	2.68, 3.79	.19*
Step 2 (Path a)				
DV: academic support				
IV: enculturation	.18	.08	2.71, 3.69	.21*
Step 3 (Paths b and c')				
DV: academic satisfaction				
IV: enculturation	.09	.08	-.07, .25	.09
Mediator: academic support	.53	.09	.34, .71	.46***
Academic task self-efficacy				
Step 1 (Path c)				
DV: academic satisfaction				
IV: enculturation	.19	.09	2.68, 3.79	.19*
Step 2 (Path a)				
DV: academic task self-efficacy				
IV: enculturation	.14	.21	-.27, .56	.06
Academic coping self-efficacy				
Step 1 (Path c)				
DV: academic satisfaction				
IV: enculturation	.19	.09	2.68, 3.79	.19*
Step 2 (Path a)				
DV: academic coping self-efficacy				
IV: enculturation	-.12	.20	-.52, .28	-.05
Academic goal progress				
Step 1 (Path c)				
DV: academic satisfaction				
IV: enculturation	.19	.09	2.68, 3.79	.19*
Step 2 (Path a)				
DV: academic goal progress				
IV: enculturation	.01	.10	-.20, .20	.004

*p < .05, **p < .01, ***p < .001

Table 8. *Mediator Effects of the Social Cognitive Variables on the relations of the Acculturation/Enculturation Behaviors to Social Satisfaction*

Testing steps in mediation model	*B*	*SE B*	95% CI	*β*
Social self-efficacy				
Step 1 (Path c)				
DV: social satisfaction				
IV: acculturation	.53	.13	.28, .79	.35***
Step 2 (Path a)				
DV: social self-efficacy				
IV: acculturation	1.20	.32	.56, 1.84	.32***
Step 3 (Paths b and c')				
DV: social satisfaction				
IV: acculturation	.36	.13	.11, .62	.24**
Mediator: social self-efficacy	.14	.04	.07, .21	.34***
Social goal progress				
Step 1 (Path c)				
DV: social satisfaction				
IV: acculturation	.53	.13	.28, .79	.35***
Step 2 (Path a)				
DV: social goal progress				
IV: acculturation	.71	.15	.41, 1.01	.39***
Step 3 (Paths b and c')				
DV: social satisfaction				
IV: acculturation	.19	.12	-.04, .42	.12
Mediator: social goal progress	.49	.06	.36, .61	.58***
Social support - bond				
Step 1 (Path c)				
DV: social satisfaction				
IV: acculturation	.53	.13	.28, .79	.35***
Step 2 (Path a)				
DV: social bond				
IV: acculturation	.50	.12	.27, .74	.36***
Step 3 (Paths b and c')				
DV: social satisfaction				
IV: acculturation	.39	.14	.12, .66	.26**
Mediator: social bond	.23	.10	.09, .48	.26**
Social support – belong				
Step 1 (Path c)				
DV: social satisfaction				
IV: acculturation	.53	.13	.28, .79	.35***
Step 2 (Path a)				
DV: social belong				
IV: acculturation	.62	.14	.34, .90	.37***
Step 3 (Paths b and c')				
DV: social satisfaction				
IV: acculturation	.24	.12	.00, .48	.16*
Mediator: social belong	.47	.07	.33, .62	.52***

*p < .05, **p < .01, ***p < .001

Supplementary Analysis #2: Content Analysis of Factors Perceived to Influence College Adjustment

At the end of the online survey, participants were asked to respond in writing to an open-ended question regarding their overall college adjustment experience: "Looking back over your time in college, what would you say are the most important factor(s) that have affected your (a) academic and (b) social adjustment to college? By adjustment, we mean feeling of "fitting in," doing well, or being satisfied with your progress."

Research team. The research team included three Asian American graduate students: one third year female doctoral student in school psychology, one third year female doctoral student in counseling psychology (the author), and one fourth year male doctoral student in counseling psychology.

Category development and coding. Participants' responses to the open question were subjected to content analysis following procedures adapted from Frankel and Wallen (2003). First, participants' responses were unitized by the first author to identify thought units within an individual response. Second, the first author reviewed all participants' responses and developed categories and subcategories that emerged from participants' responses. Third, response categories and subcategories were presented and reviewed by the research team members. Any categories or subcategories that were ambiguous were discussed and clarified, resulting in modification of the definition and examples of each category and subcategory. Next, twenty sets of responses were randomly selected for a 60-minute coder training provided by the first author, during which team members read aloud and discussed each response until consensus was reached on the category and subcategory placement.

In the coding phase, the two team members coded all participants' responses independently, placing each thought unit into the most appropriate category and subcategory. The coding consistency was then evaluated by the first author. The pair were asked to resolve any discrepancies in coding through mutual consensus of the category and subcategory placement.

Description of the content analysis participants. Of the 122 participants in the study, 96 (58 female, 37 male, 1 did not identify gender) provided responses to the open question. Eighteen (18.8%) self-identified as freshmen, 18 (18.8%) as sophomores, 33 (34.4%) as juniors, 23 (24.0%) as seniors, and four (4.2%) did not report their year in school. Of these individuals, 8 (8.3%) identified as first generation (i.e., born in Asia or a country other than the U.S. and came to the U.S. as an adult), 26 (27.1%) as 1.5 generation (i.e., born in Asian or a country other than the U.S. and came to the U.S. as a child or adolescent), 53 (55.2%) as second generation (i.e., born in the U.S. and either one or both parents were born in Asian or countries other than the U.S.), 2 (2.1%) as third generation (i.e., born in the U.S. with both parents also born in the U.S.), 2 (2.1%) as fourth generation (i.e., born in the U.S., with both parents also born in the U.S., and at least one of their grandparents born in the U.S.), and 4 (4.2%) did not report their generational status. The average period of residence in the United States was 17.09 ($SD =$ 5.51) years. The age of participants ranged from 18 to 28 ($M = 20.53$, $SD = 2.04$). Their mean GPA was 3.39 ($SD = 0.41$).

A total of 252 response units were identified based on the participants' responses. Thirty nine (15.5%) response units specifically addressed factors related to social adjustment, 63 (25.0%) specifically addressed factors related to academic adjustment,

and 150 (59.5%) addressed factors related to general college adjustment across academic and social domains.

Perceived influence on academic adjustment. The first part of the open question concerned students' adjustment to the academic realm. Table 9 presents the categories, subcategories, their definitions, response examples, and the frequency of each category and subcategory.

The most frequently mentioned source of academic adjustment was social support, representing 54.2% ($n = 63$) of participants' responses. Subcategories of social support included support received from peers and friends (5.9%), family members (15.9%), and professors and teachers (17.5%). The second most frequently reported factor (35% of the total responses) was personal resources, such as the perception of self-control and confidence in overcoming academic challenges. Of the subcategories of personal resources, 15.9% of participants' responses referred to academic strategies and skills, such as good time management or healthy lifestyle; 9.5% referred to personality traits, self-motivation, or positive attitudes. The third main response category was institutional support (11.1%), including access to a good learning environment and academic resources (e.g., lectures, academic events, fairs).

Table 9.

Categories and Subcategories for Factors Affecting Academic Adjustment

Categories and Subcategories	Definition/ Examples	N= 63	%
Social Support	Refer to participants' perceived support from the environment or other relationships	34	54.2
Friends/peers/upperclassmen	*"study with friends"*	10	15.9
Family	*"my parents motivate me to complete college"*	10	15.9
Professors/Teaching assistants/Instructors/Advisors	*"look out for professional opinions and advices from my professors"*	11	17.5
General	*"People"; "Hinduism and faith"*	3	4.8
Personal Resources	Refer to participants' sense of control and confidence in their academic adjustment	22	34.9
Past performance/experience	*"took honors/AP classes in high school"*	3	4.8
Academic Interests	*"having strong passion for learning"; "my interest in the subject"*	3	4.8
Traits/Motivation/Attitudes	*"Independence", "self-motivation", "my outlook on my future"; "Freedom to pursue whatever I wanted to"*	6	9.5
Strategies/skills	*"good time management"; "know what my priorities are"; "maintain a healthy lifestyle"*	10	15.9
Institutional Support	Refer to institutional environment, departmental resources, or academic curriculum	7	11.1
Department/Program/Academic environment	*"Lectures", "academic opportunities (events, fair)"; "good study environment"*	5	7.9
Other	e.g., "community", "technology support"	2	3.2

Perceived influence on social adjustment. The second part of the open question concerned students' adjustment to the social domain. Table 10 presents the categories, subcategories, their definitions, response examples, and the frequency of each category and subcategory.

Table 10.

Categories and Subcategories for Factors Affecting Social Adjustment

Categories and Subcategories	Definition/ Examples	N = 39	%
Personality		11	28.2
Extroversion/Introversion	*"being more extroverted", "spend more time outside room"; "willingness to meet new people"*	6	15.4
Interpersonal qualities	*"humor….allows me to connect to both Asians and non-Asian peers"; "initiative to maintain friendship";"social skills"*	5	12.8
Group membership and social context	Refer to participants' experiences being part of a group or organization or perceptions of the campus social environment	6	15.4
Organizations/programs	*"cultural organizations", "join sorority and other campus organizations of interest";"College Park Scholars Program"*	3	7.7
Residential environment	*"living in a dorm has allowed me to meet other people"*	3	7.7
Culture-relevant	Refer to factors related to campus diversity and acculturation *"it has been difficult to strike a balance of new and old culture for me"; "my high school experience that taught me racial awareness"*	3	7.7

Table 10 continued.

Categories and Subcategories	Definition/ Examples	N = 39	%
Social Bonding	Refer to participants' experiences in forming friendships, looking for people who are similar to them	19	48.7
Relationship Building	*"making new friends"; "having a wide group of friends*	10	25.6
Similarities	*"finding my niche"; "bonding with people of same ethnicity/faith/beliefs/values"*	6	15.4
General	*"school events"; find my own motivation for myself"*	3	7.7

The most frequently mentioned category (48.7% of all responses, *n* = 39) was social bonding, which refers to participants' experiences with making friends and interacting with others perceived to be similar to themselves. Specifically, 25.6% of the responses mentioned forming new friendships as an important factor facilitating their social adjustment; having friends who share a similar background, beliefs, or values was mentioned in 15.4% of the responses. The second most mentioned category was personality, representing 28.2% of the responses. Subcategories of personality responses included participants' perception of their extroversion and introversion (15.4%) or other interpersonal qualities (12.8%). The third most mentioned category was group membership and social context, representing 15.4% of the responses. Two subcategories were identified, each of which accounted for (7.7%) of the total responses: On-campus residential facilities and memberships in student organizations and interest groups. Finally, 7.7% of the responses mentioned, although less frequently, culture-related factors

(e.g., campus diversity, acculturation), which composed a fourth category of social adjustment.

     Perceived influence on adjustment, domain-unspecified. The majority of the response units either referred to generally relevant (i.e., cross-domain) adjustment factors or did not specify the domain under consideration. These responses were regarded as general adjustment influences. Table 11 presents the categories, subcategories, their definitions, response examples, and the frequency of each category and subcategory,

Table 11. *Categories and Subcategories for Factors Affecting Academic and/or Social Adjustment*

Categories and Subcategories	Definition/ Examples	N = 150	%
Social Support	Refer to participants' perceived support from friends, peers, family, and faculty	65	43.3
		34	22.7
Friends/Peers/Upperclassmen	*"Influence of friends"; "spending time with friends"*		
Family	*"my older sister, who has gone through the same experiences and is able to advise me"; "having support from my family"*	11	7.3
Professors/Instructors/Advisors		5	3.3
Social bonding/Group membership	*"Being part of a varsity athletic team was the biggest factor academically and socially";"identifying a group of people who share the same background"*	9	6.0
General	"social activities", "the people around me"	6	4.0

Table 11 continued.

Categories and Subcategories	Definition/ Examples	N = 150	%
Personal Resources	Refer to attitudes, motivation, acculturation, and skills related to participants' social adjustment	73	48.7
Positive attitudes/Strengths	*"make sure that you believe in yourself"; "I am my own motivator to do well in college"; "I get out of my comfort zone to try new things"*	10	6.7
Culture-related	*"cultural adjustment, racial tolerance, cultural experience"*	10	6.7
Skills/Strategies	*"I need to learn to balance school and social life"; "Finding people on campus that I already know to help make the adjustment and get introduced to new friends"; "my study habits"*	36	24.0
Past experience/performance experience	*"school involvement"; "my high school experience"; "my grades"*	7	4.7
Other	*"being in a supportive church"; "being myself"*	10	6.7
Institutional Support and Campus Resources	Factors related to campus resources and institutional support	12	8
Living-learning environment	*"living in a similar academic interest dorm"; "getting involved in community living-learning programs"*	4	2.7
Programs/Student organizations/Extra-curricular activities	*"getting involved with extracurricular activities of different varieties"; "Asian cultural clubs"; "College Park Scholars Program"*	8	5.3

The most frequently mentioned category was personal resources, representing

48.7% (*n* = 73) of all responses. Five subcategories of personal resources were

identified: (a) skills and strategies such as work-life balance and identifying appropriate

resources (24%); (b) culture-related (referring to cultural adjustment or diversity experiences; 6.7%); (c) having positive attitudes and a focus on personal strengths (6.7%); (d) past experience/ performance experience (4.7%); and (e) other (6.7%).

The second most frequently mentioned category was social support (43.3%, $n =$ 65 of responses). Among the five subcategories of social support, support from friends and peers were most commonly reported, representing 22.7% ($n = 34$) of the total response units, followed by family support (7.3%, $n = 11$) and social bonding/group membership (6%, $n = 9$). The third most frequently mentioned category was labeled "institutional support and campus resources", representing 8% ($n = 12$) of total responses. Sub-categories included mentions of the living learning environment (2.7%, $n = 4$) or involvement in extra-curricular activities and student organizations (5.3%, $n = 8$) supported by the University.

Chapter V: Discussion

The rapid increase of Asian Americans in higher education and the growing body of research that challenges the "model minority" myth of Asian Americans as a high-functioning group call for special attention to Asian Americans' adjustment in college (Gloria & Ho, 2003; Leong, 1986). The purpose of the present study was to extend understanding of factors related to the college adjustment of Asian and Asian Americans through a theory-based investigation using the SCCT model of well-being. In the present study, college adjustment outcomes were indicated by satisfaction experienced by students in the academic and social domains. Following the social cognitive theory of well-being (Lent, 2004), self-efficacy, environmental support, and goal progress were proposed as predictors of domain-specific satisfaction outcomes. In addition to testing social cognitive hypotheses regarding domain satisfaction, the study included an exploratory focus, examining the relations of two cultural variables (acculturation and enculturation behaviors) to the social cognitive variables and to domain satisfaction.

SCCT Prediction of the Academic and Social Domain Satisfaction of Asian American College Students

The present findings are generally consistent with previous studies of the SCCT model of satisfaction, which were primarily conducted with European American and European samples (e.g., Lent, Singley et al., 2005; Sheu & Lent, 2008; Lent, Taveira, et al., 2009). Results of the hierarchical multiple regression analysis generally support the utility of the social cognitive model in the prediction of academic and social satisfaction. Overall, the social cognitive model accounted for a substantial percentage (41-44%) of the variance in the criterion variables. Similarly, intercorrelations among the social

cognitive variables that were found in previous studies were also supported by the present findings. Goal progress was moderately to strongly related to self-efficacy and environmental support in both the academic and social domain. In addition, environmental support was found to be moderately correlated with self-efficacy in both domains. These findings provide preliminary empirical support for the cross-cultural validity of the SCCT model with Asian American students.

In predicting academic satisfaction, the present findings extend those of prior studies (e.g., Lent, Singley et al., 2005) by demonstrating the differential predictive utility of the two academic self-efficacy indicators. Specifically, it was found that greater academic task self-efficacy, rather than coping self-efficacy, was predictive of higher academic satisfaction. Consistent with prior findings, greater environmental support was also predictive of higher academic satisfaction (Lent, Singley et al., 2005). Contrary to expectations, the goal progress to academic satisfaction link was only marginally significant when all predictors were included in the regression equation. This inconsistent finding may perhaps be explained by the relatively small sample size (and, therefore, limited statistical power) of the present study in detecting the small effect of goal progress on academic satisfaction.

In predicting social domain satisfaction, the present findings extend those of previous studies by showing the differential utility of different aspects of social support in predicting social satisfaction. Although social support only accounted for a small percentage (4%) of additional variance beyond the other predictors, the findings suggest that higher perceived social belonging predicts greater social satisfaction. Social self-efficacy, contrary to empirical findings, did not contribute uniquely to the model in predicting social satisfaction (Lent, Singley et al., 2005, 2007).

Unlike Lent, Singley et al. (2005)'s study, in which goal progress was found to be a reliable predictor for both social and academic satisfaction, our findings indicated that goal progress was only marginally significant in predicting academic satisfaction. In contrast, social support was found to be a reliable predictor of both academic and social domain satisfaction in the present study. These findings are consistent with past findings indicating the important role that social support plays in the college adjustment of Asian Americans (Gloria & Ho, 2003; Yeh & Wang, 2000).

In summary, results of the present study support the notion that there are pancultural factors that predict the social and academic satisfaction of Asian Americans. They also suggest that social support may serve as a culture-relevant predictor of Asian Americans' well-being across different domains of adjustment. Future research is needed to examine further both the universal and culture-specific factors related to domain adjustment across Asian American and non-Asian American samples.

Relation of Acculturation and Enculturation to the Social Cognitive Variables and Domain Satisfaction

Consistent with prior findings, the present results showed that higher acculturation was predictive of greater social adjustment (Nguyen et al., 1999; Ryder et al., 2001). In addition, a distinctive pattern of bivariate correlations was found between acculturation and enculturation and the adjustment outcomes. Specifically, only enculturation exhibited significant correlations with environmental support and satisfaction in the academic domain, whereas only acculturation exhibited significant correlations with the social cognitive variables (self-efficacy, social support, and goal progress) and satisfaction in the social domain. This distinct pattern of relationships was also consistent with Nguyen et al.'s findings, in which behavioral involvement in

Western and Asian cultures were associated differentially with various indices of adjustment.

The present findings also extend prior knowledge of the culture-adjustment link by suggesting that the cultural variables were related to domain satisfaction indirectly, rather than directly, through the social cognitive predictors. Specifically, the findings are consistent with a model in which greater engagement in the Asian culture leads to higher academic satisfaction partially through enhanced perceived environmental support in the academic domain. Given the shared educational values among many Asian ethnic groups, it is possible that for Asian Americans, interacting with people who share similar cultural background may enhance their perceived support for their academic pursuit, which in turn leads to greater perception of self-efficacy, goal progress, and satisfaction in the academic domain.

In addition, the findings suggest that greater involvement in the mainstream European culture leads to higher social satisfaction partly through increased goal progress, enhanced social self-efficacy, and a greater sense of social belonging. Given the predominantly European American social context of the university at which this study was conducted, it is possible that for Asian Americans, being actively involved in the social settings of the mainstream culture (e.g., joining a fraternity or sorority) may create more opportunities for them to establish friendships or become members of student groups and organizations, which in turn increases perceived levels of self-efficacy regarding one's ability to negotiate different social situations, goal progress, and satisfaction with one's social life.

In sum, the present findings suggest the nature of the role that the cultural variables of acculturation and enculturation may play relative to the domain satisfaction

of Asian American students. Rather than directly promoting satisfaction, these variables may play an important indirect role by promoting favorable levels of environmental support, goal progress, and self-efficacy (Lent, 2004; Sheu & Lent, 2008).

Content Analysis of Factors Affecting College Adjustment of Asian Americans

Complementing the hypothesis testing aspect of the study, the content analysis results offer a useful "triangulating" perspective on factors that may be relevant to the academic, social, and general college adjustment of Asian and Asian American college students. Prior research has tended to rely on quantitative methods to examine variables related to college adjustment of Asian Americans (e.g., Gloria & Ho, 2003).

Consistent with the quantitative findings, social support emerged as a particularly notable route to academic and social adjustment. Specifically, participants perceived that support from friends and family appeared to be an important factor affecting their academic adjustment, whereas social bonding, group membership, and perceptions about the social context (e.g., diversity, residential environment) were frequently mentioned as aiding social adjustment.

Another frequently mentioned category that emerged in the content analysis was personal resources, referring to factors related to participants' levels of confidence and sense of control related to their college adjustment. In particular, social skills and academic strategies, positive attitudes, and personality traits such as extroversion were seen by participants as facilitating their college adjustment. These findings highlight the value of future research examining the roles of personality traits and other psychological variables in the college adjustment of Asian Americans.

Limitations and Future Research Directions

The present study is limited in several respects. First, the present study is cross-sectional in nature. Thus, the findings only offer general support for the hypothesized relations among the predictor and criterion variables. The results should not be taken as evidence for causality given the cross-sectional nature of the study's design. Longitudinal data could shed greater light on the temporal predominance of the social cognitive variables relative to domain satisfaction, and experimental research could best test causal relations among the predictor and dependent variables.

Second, it should be noted that the sample consisted predominantly of second generation Asian Americans of Chinese and Korean descent. The generalizability of the findings to other groups of Asian Americans is unclear. Unfortunately, the sample did not contain large enough groups of particular Asian ethnic students, which precluded testing the model across ethnic groups or generational status. This is an important limitation. Future research is, therefore, needed to examine the issue of possible within-group variability with respect to the social cognitive model and the cultural variables in Asian and Asian American students. Such research would extend understanding of the range of the model's cultural validity. In addition, given the relatively small sample size, it is possible that the obtained factor structure may prove unstable, and thus not replicate in other samples of Asian American college students. Future studies, with larger samples of Asian American students, are therefore needed to cross-validate the current findings.

Third, the present study may have been limited by the ways in which it operationalized culture. For example, including other aspects of acculturation (e.g., values, identification) may help to clarify the role of culture in predicting college adjustment. Likewise, the study contained only a single approach to operationalizing

college adjustment, namely, domain satisfaction. It would be useful for future research to examine additional dimensions of adjustment, such as perceived stress. Including behavioral indicators of adjustment (e.g., grades, retention, involvement in student organizations) would also be valuable. Fourth, the present study relied exclusively on participants' self-report and, thus, the findings may have been affected by mono-method and mono-source bias.

Finally, the SCCT model of well-being (Lent, 2004) tested in the present study contained only a subset of the model's variables. In particular, because the study was intended to focus on those variables, like goal progress, that are likely to be most susceptible to personal agency (Lent, 2004), personality traits were not included as predictor variables. However, as suggested by the current content analysis, personality traits may also help to determine Asian Americans' domain satisfaction. Future research might, therefore, focus on the independent and joint predictive contribution of traits and social cognitive variables in explaining academic and social satisfaction.

Implications for Practice

The present findings provide tentative implications for college student personnel and mental health professionals working with Asians and Asian American college students. First, given the substantial role that social support may play in the college adjustment of Asian Americans, it might be beneficial to focus on student organizations and social groups as a way to aid such students to establish a social support network. For example, peer counselors or student mentors may be employed to help students build meaningful connections with other students. Experiences designed to promote personal resources (e.g., self-confidence, sense of control) and behavioral strategies may also be offered via prevention programs. For example, freshmen orientation activities might

focus on skills related to time management, maintaining a healthy lifestyle, and navigating the sort of campus resources frequently cited by the present participants as beneficial to their adjustment process. Finally, given the minority status of Asian American students at most large state university settings, it may be valuable to foster multicultural awareness and appreciation through living-learning programs and other social-cultural activities.

Appendix A

Informed Consent Form

Investigator Identification: This study is being conducted by Kayi Hui, under the supervision of Dr. Robert W. Lent, Department of Counseling and Personnel Services, at the University of Maryland, College Park.

Study Description: The purpose of this study is to better understand the factors that help Asian/ Asian American students to adjust to their college environment. The results of this study may be helpful to inform counselors and college student personnel to assist future Asian/Asian American students who are preparing to go to college.

You will be asked to complete a brief survey today, which should require about 15 to 20 minutes of your time. The survey will ask you about your academic and social experiences in college.

Possible Risks and Benefits: There are no known risks associated with participating in this study. Although there is no explicit personal benefit from filling out the questionnaire, the results of the study may help the investigators understand more about the personal and social factors that allow Asian/Asian American students to adapt to their college environment. Through improved understanding of these factors, we hope to inform practitioners in developing interventions that would benefit future Asian/Asian American students.

Participant Information: Participation is completely voluntary. You may decide not to participate in the study at any time without penalty by closing the window. You may also choose to not answer any question(s) that you do not wish to, for any reason.

Confidentiality: At the end of the survey, you will be asked to enter your first and last name as well as email address should you wish to receive credit for your research participation.   However, to protect your confidentiality, your name and contact information will be separated from your survey responses. Report of participants in the data will only contain statistical summaries for the group instead of information about individual participants. All data will be stored in password-protected computer files.

Questions or Concerns: If you have any questions about this study, please contact Kayi Hui at kayihui@umd.edu. If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (email) irb@deans.umd.edu; (telephone) 301-405-0678.

Electronic Consent: Please indicate your choice below. Clicking on the "Continue" button below indicates that you are **at least 18 years old** and have read and understand the terms of this study and thus voluntarily agree to participate. If you do NOT wish to participate in the study, please decline participation by closing the window.

Appendix B

Academic Adjustment Questionnaire

Academic Self-efficacy Scale

Part I. Instructions: The following is a list of major steps along the way to completing an undergraduate degree at the University of Maryland. Please indicate how much confidence you have in your ability to complete each of these steps in relation to the academic major that you are most likely to pursue. Use the 0-9 scale below to indicate your degree of confidence

How much confidence do you have in your ability to:	No Confidence at all				Some Confidence				Complete Confidence	
1. Remain enrolled in your intended major over the next semester	0	1	2	3	4	5	6	7	8	9
2. Remain enrolled in your intended major over the next two semesters	0	1	2	3	4	5	6	7	8	9
3. Excel in your intended major over the next semester	0	1	2	3	4	5	6	7	8	9
4. Excel in your intended major over the next two semesters	0	1	2	3	4	5	6	7	8	9
5. Complete the upper level required courses in you intended major with overall grade point average of B or better	0	1	2	3	4	5	6	7	8	9

Part II. <u>Instructions</u>: Here we are interested in knowing how well you believe you could cope with each of the following barriers, or problems, that students could possibly face in pursuing an undergraduate degree. Please indicate your <u>confidence in your ability to cope with, or solve, each of the following problem situations</u>.

How much confidence do you have in your ability to:	No Confidence at all				Some Confidence				Complete Confidence	
1. Cope with a lack of support from professors or your advisor	0	1	2	3	4	5	6	7	8	9
2. Complete a degree despite financial pressures	0	1	2	3	4	5	6	7	8	9
3. Continue on in your intended major even if you did not feel well-liked by your classmates or professors	0	1	2	3	4	5	6	7	8	9
4. Find ways to overcome communication problems with professors or teaching assistants in your courses	0	1	2	3	4	5	6	7	8	9
5. Balance the pressures of studying with the desire to have free time for fun and other activities	0	1	2	3	4	5	6	7	8	9
6. Continue on in your intended major even if you felt that, socially, the environment in these classes was not very welcoming to you	0	1	2	3	4	5	6	7	8	9
7. Find ways to study effectively for your courses despite having competing demands for your time	0	1	2	3	4	5	6	7	8	9

Academic Support Scale

<u>Instructions</u>: Many factors can either support or hinder students' academic and social adjustment. Here we are interested in learning about the types of situations that may <u>support</u> your progress in your intended major. Using the 1-5 scale, please indicate how much you agree or disagree with each of the following statements.

At the present time, I …	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
1. Have access to a "role model" (e.g., someone I can look up to and learn from by observing) in my academic major	1	2	3	4	5
2. Feel support from important people in my life (e.g., teachers) for pursuing my intended major	1	2	3	4	5
3. Feel that there are people "like me" in this academic field	1	2	3	4	5
4. Get helpful assistance from a tutor, if I felt I needed such help	1	2	3	4	5
5. Get encouragement from my friends for pursuing my intended major	1	2	3	4	5
6. Get helpful assistance from my advisor	1	2	3	4	5
7. Feel that my family members support the decision to major in my intended field	1	2	3	4	5
8. Feel that close friends or relatives would be proud of me for majoring in my intended field	1	2	3	4	5
9. Have access to a "mentor" who could offer me advice and encouragement	1	2	3	4	5

Academic Goal Progress Scale

Instructions: Now we would like for you to rate each of the same goal statements in terms of how much progress you are making toward each one at this point in time. That is, indicate how effectively you feel you are meeting or working toward each goal at present, regardless of how important the goal is for you.

How much progress are you making toward each of these goals at this point in time (i.e., so far this semester):	No Progress At All	A Little Progress	Fair Progress	Good Progress	Excellent Progress
1. Excelling at your academic major	1	2	3	4	5
2. Completing all course assignments effectively	1	2	3	4	5
3. Studying effectively for all of your exams	1	2	3	4	5
4. Remaining enrolled in your academic major	1	2	3	4	5
5. Completing academic requirements of your major satisfactorily	1	2	3	4	5
6. Achieving/ maintaining high grades in all of your courses	1	2	3	4	5
7. Learning and understanding the material in each of your courses	1	2	3	4	5

Academic Satisfaction Scale

<u>Instructions</u>: Using the scale below, indicate your level of agreement with each of the following statements.

How much do you agree or disagree with the following statement	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. I feel satisfied with the decision to major in my intended field	1	2	3	4	5
2. I am comfortable with the educational atmosphere in my major field	1	2	3	4	5
3. For the most part, I am enjoying my coursework	1	2	3	4	5
4. I am generally satisfied with my academic life	1	2	3	4	5
5. I enjoy the level of intellectual stimulation in my courses	1	2	3	4	5
6. I feel enthusiastic about the subject matter in my intended major	1	2	3	4	5
7. I like how much I have been learning in my classes	1	2	3	4	5

Appendix C

Social Adjustment Questionnaire
Social Self-efficacy Scale

Instructions: Please indicate how much <u>confidence</u> you have in your ability to perform each of the following behaviors in social situations. Use the 0-9 scale below to indicate your degree of confidence.

How much confidence do you have in your ability to:	No Confidence at all				Some Confidence			Complete Confidence		
1. Make new friends	0	1	2	3	4	5	6	7	8	9
2. Start up a conversation with a stranger	0	1	2	3	4	5	6	7	8	9
3. Get to know new people at a social event	0	1	2	3	4	5	6	7	8	9
4. Help other people to feel at ease in a new social situation	0	1	2	3	4	5	6	7	8	9
5. Disclose information about yourself to a new acquaintance	0	1	2	3	4	5	6	7	8	9
6. Keep a conversation going with someone you've just met	0	1	2	3	4	5	6	7	8	9
7. Initiate social activities with friends	0	1	2	3	4	5	6	7	8	9
8. Work out conflicts or disagreements with a friend	0	1	2	3	4	5	6	7	8	9
9. Share painful feelings with someone you feel close to you	0	1	2	3	4	5	6	7	8	9
10. Maintain relationships with old friends who do not live nearby	0	1	2	3	4	5	6	7	8	9
11. Provide comfort to a friend who is in distress	0	1	2	3	4	5	6	7	8	9
12. Ask for support from a friend when you could use support	0	1	2	3	4	5	6	7	8	9

Social Support Scale

Instructions: In answering the following set of questions, think about your <u>current</u> relationships with friends, family members, community members, co-workers, and so on. Please indicate to what extent you agree that each statement describes your current relationships with other people.

How much do you agree or disagree with the following statements:	Strongly Disagree	Disagree	Unsure	Agree	Strongly Agree
1. I have close personal relationships with other people	1	2	3	4	5
2. I have easy access to people who enjoy the same social activities I do	1	2	3	4	5
3. Other people view me as competent in social situations	1	2	3	4	5
4. I feel part of a group of people who share my attitudes and beliefs	1	2	3	4	5
5. I have close relationships that provide me with a sense of belongings	1	2	3	4	5
6. I have friends nearby who share my interests and concerns	1	2	3	4	5
7. I feel a strong emotional bond with at least one other person	1	2	3	4	5
8. There are people who admire my social skills	1	2	3	4	5
9. I have a feeling of intimacy (closeness) with at least one other person	1	2	3	4	5
10. There are people I enjoy spending time with	1	2	3	4	5

Social Progress Scale

Instructions: Now we would like for you to rate each of the same goal statements in terms of how much progress you are making toward each one at this point in time. That is, indicate how effectively you feel you are meeting or working toward each goal at present, regardless of how important the goal is for you.

How much progress are you making toward each of these goals at this point in time:	No Progress At All	A Little Progress	Fair Progress	Good Progress	Excellent Progress
1. Developing a satisfying social life	1	2	3	4	5
2. Making the "right" amount of friends (i.e., right for you)	1	2	3	4	5
3. Finding other people who can support you in difficult times	1	2	3	4	5
4. I am generally satisfied with my academic life	1	2	3	4	5
5. Keeping up contacts with social groups that you belong to	1	2	3	4	5
6. Helping to maintain harmony within social groups that you belong to	1	2	3	4	5
7. Attending to the well-being of friends	1	2	3	4	5

Social Satisfaction Scale

Instructions: Please indicate how often the following statements have been true for you over the past week.

During the past week, how often have you …	Not at all or never	Rarely	Sometimes	Often or most of the time	Frequently or all the time
1. … enjoyed talking with or being with friends or relatives?	1	2	3	4	5
2. … looked forward to getting together with friends or relatives?	1	2	3	4	5
3. … made social plans with friends or relatives for future activities?	1	2	3	4	5
4. … enjoyed talking with other students, co-workers, or neighbors?	1	2	3	4	5
5. … felt your relationships with your friends or relatives were without major problems or conflicts?	1	2	3	4	5
6. … been generally satisfied with your social life?	1	2	3	4	5

Appendix D

Acculturation/Enculturation Scale for Asian Americans (Modified ARSMA-II)

Name:
Male/ Female:
Age:
Date of Birth:
Marital Status:

What is your religious preference?

(a)   Last grade you completed in school (circle your choice)

> 1. Elementary -6
> 2. 7-8
> 3. 9-12
> 4. 1-2 years of college
> 5. 3-4 years of college
> 6. College graduate and higher

(b)   In what country?

Instructions: Circle the generation that best applies to you? Circle only one.

1. 1st generation = you were born in Asia or other country.
2. 2nd generation = you were born in USA; either parent born in Asia or other country
3. 3rd generation = you were born in USA, both parents born in USA and all grandparents born in Asia or other country.
4. 4th generation = you and your parents born in USA and at least one grandparent born in Asia or other country with remainder born in the USA.
5. 5th generation = you and your parents born in the USA and all grandparents born in the USA.

Instructions: Circle a number between 1-5 next to each item that best applies

> 1 = Not at all
> 2 = Very little or not very often
> 3 = Moderately
> 4 = Much or very often
> 5 = Extremely often or almost always

> _____   1. I speak an Asian language
>
> _____   2. I speak English

_____ 3. I enjoy speaking an Asian language

_____ 4. I associate with Caucasians

_____ 5. I associate with Asians and/or Asian Americans

_____ 6. I enjoy listening to Asian language music

_____ 7. I enjoy listening to English music

_____ 8. I enjoy Asian language TV

_____ 9. I enjoy English language movies

_____ 10. I enjoy English language movies

_____ 11. I enjoy Asian language movies

_____ 12. I enjoy reading in an Asian language (e.g., books)

_____ 13. I enjoy reading in the English language (e.g., books)

_____ 14. I write in an Asian language (e.g., letters)

_____ 15. I write in the English language (e.g., letters)

_____ 16. My thinking is done in the English language

_____ 17. My thinking is done in an Asian language

_____ 18. My contact with an Asian country has been

_____ 19. My contact with the USA has been

_____ 20. My father identifies or identified himself as Asian

_____ 21. My mother identifies or identified herself as Asian

_____ 22. My friends, while I was growing up, were of Asian origin

_____ 23. My friends, while I was growing up, were of Caucasian origin

_____ 24. My family cooks Asian foods

_____ 25. My friends now are of Caucasian origin

_____ 26. My friends now are of Asian origin

_____ 27. I like to identify myself as Caucasian

_____ 28. I like to identify myself as Asian American

_____ 29. I like to identify as Asian

_____ 30. I like to identify myself as American

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