BICULTURALISM AND PERSONALITY AS PREDICTORS OF SUBJECTIVE WELL-BEING IN CHINESE AMERICANS

By

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To the Faculty of Washington State University:

The members of the Committee appointed to examine the dissertation of AMY LA find it satisfactory and recommend that it be accepted.

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BICULTURALISM AND PERSONALITY AS PREDICTORS OF SUBJECTIVE WELL-BEING IN CHINESE AMERICANS

Abstract

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This study examined how personality and bicultural identity integration influence Chinese Americans’ emotional well-being and life satisfaction. Participants were 310 Chinese American adults who completed the Cross-Cultural (Chinese) Personality Assessment Inventory-2 (CPAI-2; Cheung, Leung, Song, & Zhang, 2001a), the Bicultural Identity Integration Scale-Version 1 (BIIS-1; Benet-Martinez, 2003a), the Satisfaction With Life Scale (SWLS; Diener et al., 1985), and the Positive Affect (10 items) and Negative Affect (10 items) scales of the Positive and Negative Affect Schedule -Expanded Form (PANAS-X; Watson & Clark, 1994).

Hypothesis 1 was partially supported and indicated that both perceived cultural distance (i.e., perceiving one’s two cultural identities as separate and dissociated) and perceived cultural conflict (i.e., feeling torn between one’s two cultural), as measured by the BII-Distance and BII-Conflict scales, respectively, were negatively correlated with subjective well-being (SWB), a composite of life satisfaction and positive and negative affect. However, contrary to expectations, cultural conflict, as compared to cultural distance, did not have a stronger relationship with SWB. In Hypothesis 2, only cultural distance added unique prediction of life satisfaction beyond the personality traits, and neither cultural conflict nor distance contributed unique prediction of positive or negative affect beyond the personality traits. Hypothesis 3 was not supported because BII-Conflict did not mediate the relationship between CPAI-2
Dependability and SWB in factor or scale-level analyses. Hypotheses 4 and 5 were supported because the extraversion-related scales of CPAI-2 Social Potency and the agreeableness-related scales of CPAI-2 Accommodation had both direct effects on SWB and indirect effects on SWB via BII-Distance. Additionally, Hypothesis 6 was supported because the openness-related scales of Social Potency had only indirect effects on SWB via BII-Distance as a mediator. Finally, neither Hypotheses 7 nor 8 was supported, because there were no generational differences in bicultural identity integration or endorsement of Chinese traits associated with the Interpersonal Relatedness dimension. Interpretation of the findings, applied and theoretical implications, and future directions for research are discussed. Overall, the study demonstrated the importance of integrating personality traits and aspects of bicultural identity integration in understanding the subjective well-being of Chinese Americans.
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Dedication

This dissertation is dedicated to my parents and younger brothers. I want to thank my mother and father for supporting me with what they can and for allowing me to pursue what I want in life. I also want to thank my two brothers for their support and I hope that my work can inspire them to reach their endeavors.
CHAPTER ONE
INTRODUCTION

Today’s society is rapidly changing and the faces in the United States are becoming more and more diverse. With the rapid growth of ethnic minority groups, their members will no longer be in the minority by 2020. By that time, the majority culture will be comprised predominantly of ethnic minority individuals (D’Andrea & Daniels, 1997). The United States is becoming more multicultural. One out of every four individuals living in the United States has lived in another country before moving to the United States. Thus, most of these individuals have internalized more than one culture (Benet-Martinez & Haritatos, 2005). In addition to different immigrant groups, there are also U.S.-born ethnic and cultural minorities. These individuals identify with their ethnic cultures in addition to the dominant culture, usually because of the influence of their immigrant parents or grandparents.

As the prevalence of multiculturalism or biculturalism continues to increase, there is a growing need for psychological research on the experiences of multicultural or bicultural individuals (Haritatos & Benet-Martinez, 2002). In particular, the study of biculturalism is comparatively new and there is little consensus among researchers on how bicultural identities are negotiated either cognitively or interpersonally (LaFromboise, Coleman, & Gerton, 1993). The study of bicultural/multicultural identities has exciting implications for the field of psychology, especially for social-personality psychology, because the issue of how individuals develop a healthy sense of national, cultural, ethnic, racial, political, and group membership becomes particularly meaningful in situations of cultural clash, mixing, and integration (Baumeister, 1986; Miramontez, Benet-Martinez, & Nguyen, 2008; Phinney, 1999).

Specifically, greater knowledge of the impact of biculturalism on individuals’ lives would be
invaluable, such as whether biculturalism serves as a protective buffer facilitating psychological well-being. The following quote cited by Benet-Martinez and Haritatos (2005) captures the essence of biculturalism (p. 1016):

Biculturalism seems to me to be a dichotomy and a paradox; you are both cultures and at the same time, you are neither.

-19-year-old first generation Chinese American

In previous studies, researchers have related levels of cultural exposure and experience with aspects of psychological functioning in immigrant and ethnic minority groups. Tsai and colleagues (2000) suggested that studying within-group variation in a particular cultural or ethnic group is important for three reasons. First, such studies examine how individuals subjectively experience their culture, thereby revealing psychological mechanisms by which cultural variables affect psychological functioning. Second, responses to acculturation and ethnic-identity instruments vary for different individuals within a given cultural group. Finally, these findings are potentially relevant to clinical interventions with ethnic minority populations.

For my study, Chinese Americans are emphasized because they are the largest Asian group in the United States (Tsai, Ying, & Lee, 2000) and account for approximately one in four Asian Americans (Shinagawa & Kim, 2008). In 2006, Chinese Americans numbered 3,497,484, constituting 1.2 percent of the entire U.S. population (Shinagawa & Kim, 2008). There has been a growing interest in Chinese psychology since the 1990s (Cheung, 2000). The Chinese population also constitutes approximately one-fifth of the world population. In addition, during the past two decades, many more Chinese have become psychologists, including Chinese American psychologists in the U.S. as well as overseas and locally-trained psychologists in China, Hong Kong, Taiwan, and Singapore (Cheung, 2000).
The focus of my study was within-group variation in bicultural identity integration and subjective well-being (SWB) in the population of Chinese Americans. Waves of Chinese immigrants continue to migrate to the United States from China, Hong Kong, Taiwan, and other overseas Chinese communities seeking political refuge, educational attainment, and reunification with family members (Tsai et al., 2000). Hence, there is great variation among Chinese Americans in their experience of, and exposure to, Chinese and American cultures. Being Chinese and being American can be two distinct cultural orientations. It is possible for Chinese Americans to be both highly enculturated in the Chinese culture and highly acculturated to the American culture. For that reason, bidimensional models of acculturation are more appropriate than unidimensional models, which treat acculturation and enculturation as bipolar opposites (Berry, 1990; LaFromboise et al., 1993). The process of investigating how Chinese Americans cope, negotiate, and maintain their dual identities can provide a plethora of information to improve relevant services and policies in our society.

Because little is known about how Chinese American biculturals negotiate and maintain their dual cultural identities, the construct of Bicultural Identity Integration (BII) is a promising framework for exploring their bicultural identities (Benet-Martinez & Haritatos, 2005; Benet-Martinez, Leu, Lee, & Morris, 2002). Benet-Martinez and colleagues (2002) defined BII as the degree to which “biculturals perceive their mainstream and ethnic cultural identities as compatible and integrated vs. oppositional and difficult to integrate” (p. 9). Specifically, the BII construct focuses on biculturals’ subjective perceptions of how much their dual cultural identities intersect or overlap. Benet-Martinez and Haritatos (2005) found that individuals who are high in BII find it easier to integrate both cultures in their daily lives, which would presumably facilitate positive adjustment. In contrast, biculturals who are low in BII report difficulty in combining
both cultures into a cohesive sense of identity. They are sensitive to specific tensions between the two cultural orientations and view such incompatibility as a source of internal conflict (Benet-Martinez & Haritatos, 2005; Phinney & Devich-Navarro, 1997). These individuals also struggle with choosing one culture (Benet-Martinez & Haritatos, 2005).

The construct of BII also embodies both cultural distance and conflict and they are associated with different personality traits. Benet-Martinez and Haritatos (2005) defined cultural conflict as feeling torn between one’s two cultural identities versus feeling that they are compatible, whereas cultural distance is perceiving one’s two cultural identities as separate and dissociated versus hyphenated or fused. Benet-Martinez and Haritatos (2005) found that cultural distance is predicted by having a close-minded disposition, whereas cultural conflict is predicted by a neurotic disposition. Therefore, having an integrated bicultural identity can reduce inner conflict and may facilitate cohesion in the self, which may then lead to psychological well-being.

In addition to bicultural identity, personality can also contribute to psychological well-being.

Personality Models

In cross-cultural psychology, whether to import assessment instruments or develop indigenous measures is a classic dilemma and refers to the emic-etic issue (Yang & Bond, 1990). Historically, psychologists have translated relevant measures into the local language, administered them to comparable groups, and then made comparative statements about the psychological constructs. This approach assumes the universal or etic status of the underlying construct and “imposes” it in other cultures, which has been labeled an imposed etic approach (Yang & Bond, 1990).

The Five Factor Model (FFM) is regarded as a culturally-universal model of personality with the following five major dimensions: Neuroticism (N), Extraversion (E), Openness to
Experience (O), Agreeableness (A), and Conscientiousness (C) (McCrae, 2004). While the FFM has been supported across different cultures, Cheung and colleagues (2001b) argued that the trait structure identified by Costa and McCrae (1992) could not be completely replicated in a Chinese sample. The personality structure of the Chinese population is considered significantly different from Western cultures and personality measures need to take into account these cultural differences. Furthermore, in the Chinese context, the Openness to Experience dimension might be conceptualized to include an interpersonal aspect that involves reaching out to others in social endeavors (Cheung, Cheung, Zhang, Leung, Leong, & Yeh, 2008). Accordingly, cross-cultural psychologists have argued for the use of indigenously derived measures (Cheung, 2007). In studies of Chinese personality, the Chinese Personality Assessment Inventory (CPAI; Cheung et al., 1996) was developed to address this need. The CPAI-2 appears to be an appropriate, culture-relevant instrument when working with Chinese populations in the field of psychology and researchers have demonstrated some clinical applications with the CPAI/CPAI-2.

**Personality and Subjective Well-being**

The research on subjective well-being (SWB) focuses on how and why people experience their lives in positive ways (Diener, 1984). Many researchers have turned their interest to the examination of personality variables as predictors of well-being (DeNeve & Cooper, 1998). Personality traits contribute to different components of SWB. For instance, neuroticism may be the strongest predictor of life satisfaction, happiness, and negative affect, whereas positive affect can be predicted equally well by extraversion and agreeableness. Extraversion and agreeableness can foster good relationships, which in turn can increase positive affect. Compared to the other Big Five traits, openness to experience can increase both positive and negative emotions (McCrae & Costa, 1991). To integrate research on personality and SWB in my study, it was
beneficial to explore if these relationships between personality and SWB replicated in Chinese Americans.

In summary, there is a growing interest in studying biculturalism, specifically bicultural identities, because of its psychological benefits and clinical implications. As noted earlier, Chinese American biculturals can simultaneously be enculturated in their Chinese culture and be acculturated to the American culture. How these individuals conceptualize, navigate, and cope with their dual identities can provide researchers and clinicians with valuable insight about how to apply and implement relevant health services, programming, and policies in our multicultural society. While previous research has examined personality factors and cultural variables in SWB, there is a need to integrate both cultural variables (in this case, bicultural identity) and indigenous personality dimensions as determinants of SWB in biculturals. Accordingly, using the CPAI-2 to examine Chinese personality and the BII to measure bicultural identity in Chinese Americans will be advantageous in the investigation of SWB in this population.
CHAPTER TWO

LITERATURE REVIEW

This review of literature begins with a discussion of biculturalism that addresses the following aspects: acculturation models, bicultural competence and identity, and biculturalism and subjective well-being (SWB). The next area discussed is personality models and SWB. In this section, the etic versus emic assessment of personality was reviewed, and whether or not the Five Factor Model (FFM), regarded by many as a culturally-universal model of personality, is relevant for Chinese people. The Chinese Personality Assessment Inventory will also be introduced as an alternative to the FFM to assess Chinese personality. The relationship between personality and SWB is discussed and relevant issues related to biculturalism, personality, and SWB in Chinese Americans are examined. Specifically, I discuss why the CPAI-2 may be a better measure of Chinese personality and how both personality, assessed by the CPAI-2, and bicultural identity serve as predictors of SWB.

Biculturalism

Past research has demonstrated that there are significant psychological benefits derived from developing competence in one’s host culture while maintaining competence in one’s culture of origin (LaFromboise, Coleman, & Gerton, 1993; Ying, 1995). For example, bicultural competence is linked with greater interpersonal adjustment (Fernandez-Barillas & Morrison, 1984; Ying & Han, 2006), decreased anxiety (Rivera-Sinclair, 1997), diminished depression (Ying & Han, 2006), and greater sociocultural adaptation (Ward & Searle, 1991; Yip & Cross, Jr., 2004). In addition, immigrants’ competence in their heritage culture has predicted greater family life satisfaction, while host culture competence has increased general adjustment (Ryder et al., 2000). Therefore, it appears that competence in the host versus heritage cultures may
impact different aspects of well-being. Lee and Davis (2000) also suggested that cultural orientation, such as biculturalism, is important in adjustment or a sense of belongingness. In summary, in addition to personality factors, biculturalism also appears to contribute to SWB.

Acculturation Models

To better understand biculturalism, alternative models of acculturation will be briefly reviewed. The main models are either unilinear or bilinear. In the unilinear model, as an individual adapts to the mainstream or dominant culture, weakening of ties to the individual’s culture of origin is inevitable. In essence, this model describes only one outcome of acculturation, which is generally assimilation (Flannery, Reise, & Yu, 2001). This approach makes the assumption that individuals cannot retain the behaviors and values of their culture of origin as they incorporate the norms of the dominant culture (Miller, 2007). In addition, unilinear models are unable to differentiate between a person who identifies strongly with both the culture of origin and the dominant culture, or a person who identifies with neither group (Ryder et al., 2000). Therefore, according to Ryder and colleagues (2000), among others, the unilinear model may provide misleading or incomplete information about the acculturation process.

In contrast, bilinear models of acculturation assume that it is possible for an individual to have a sense of belonging in both cultures without compromising his or her sense of cultural identity (LaFromboise et al., 1993). Enculturation is the term used to describe an individual’s adherence to his or her culture of origin. Acculturation is the term used to describe an individual’s adherence to the dominant culture. Bilinear models assess the degree to which individuals enculturate and acculturate. The cultural orientations are viewed as independent of each other and it is possible to maintain a positive relationship with both cultures without the necessity of choosing between them (LaFromboise et al., 1993). For that reason, bilinear or
bidimensional models of acculturation are now viewed as more appropriate than unilinear or unidimensional models, which treat acculturation and enculturation as bipolar opposites (Berry, 1990; LaFromboise et al., 1993). The most frequently used bilinear acculturation model is the one proposed by Berry (1979), who was the first to suggest that the acculturation process is bilinear.

Berry (1990) proposed a widely accepted framework that depicts four distinct acculturation modes: assimilation (primary identification with the dominant culture), integration (high identification with both cultures), separation (primary identification with ethnic culture), and marginalization (low identification with both cultures). However, Berry’s concept of integration does not describe how people go about integrating and maintaining their identification with both cultures. He also does not discuss individual or sociocultural antecedents that would explain why individuals experience biculturalism (Benet-Martinez & Haritatos, 2005).

Applying these concepts to Chinese Americans, it is possible for Chinese Americans to be both highly enculturated in the Chinese culture and highly acculturated to the American culture. The acculturation literature identified two modes of biculturalism that can be described as compatible and oppositional. An individual with a compatible bicultural identity views their heritage and host cultures as complementary. In contrast, the person with an oppositional bicultural identity views the two cultures as highly discrepant or conflicting (Benet-Martinez & Haritatos, 2005; Downie et al., 2004). Although it has been suggested that multiple selves are adaptive in a postmodernist society (Amiot, de la Sablonniere, Terry, & Smith, 2007), it also has been argued that such compartmentalization can lead to fragmentation. Research on self-complexity has shown that even though compartmentalization provides a buffering effect against
a threat to any one self-aspect, the overall findings support a negative main effect on well-being
(Ryan, La Guardia, & Rawsthorne, 2001).

McCrae, Yik, Trapnell, Bond, and Paulhus (1998) studied undergraduates of European and Chinese ancestry. The researchers hypothesized that there could be biological or cultural explanations if different personality profiles were found between Hong Kong and North American students. If the differences were indeed genetically based, it would not matter if the Chinese undergraduates were brought up in Hong Kong or born and raised in Canada. The mean personality profiles would be the same for the two groups. However, profile differences were found and they were attributed to cultural factors (i.e., acculturation). The profiles of recent immigrants closely resembled those of the Hong Kong undergraduates. McCrae and colleagues (1998) found that the differences between undergraduates of European and Chinese ancestry were cultural in origin. This study provides some insight into the acculturation process but it does not directly address psychological adjustment or biculturalism (i.e., bilinear model of acculturation).

**Bicultural Competence and Identity**

Individuals achieve bicultural competence when they are able to successfully meet the demands of two distinct cultures. According to LaFromboise and colleagues (1993), bicultural competence includes the following: a) knowledge of cultural beliefs and values of both cultures, b) positive attitudes toward both groups, c) bicultural efficacy or belief that one can live in a satisfying manner within both cultures without sacrificing one’s cultural identity, d) communication ability in both cultures, e) role repertoire or the range of culturally appropriate behaviors, and f) a sense of being grounded in both cultures.
Kim and Omizo (2005) conducted a study that is consistent with a bicultural competence model. They investigated Asian and European American cultural values, collective self-esteem, acculturative stress, cognitive flexibility, and general self-efficacy among Asian American college students. One noteworthy finding was the positive relationship between adherence to Asian and European American values. These findings contrasted with past conceptualizations of acculturation and enculturation, which assumed that an increase in one’s adherence to the dominant cultural norms would result in a decrement in one’s adherence to indigenous norms. In other findings, the researchers reported that adherence to Asian values was a positive predictor of the importance-to-identity dimension of collective self-esteem, whereas adherence to European American values was a positive predictor of cognitive flexibility and general self-efficacy.

Consistent with LaFromboise’s bicultural competence model, Tsai and colleagues (2000) found that “being Chinese” and “being American” are independent constructs for American-born Chinese (ABC). They hypothesized that the American-born Chinese conception of being Chinese may be based on their engagement in Chinese culture and their notion of being American might be based on their engagement in American culture. In contrast, for immigrant Chinese, being Chinese and American are dependent and inversely related to each other. In other words, Tsai and colleagues (2000) predicted that for American-born Chinese, being Chinese and being American were independent concepts, which would support the bidimensional model of acculturation. On the other hand, for immigrant Chinese, being Chinese and being American were postulated to be dependent concepts, which would support the unidimensional model of acculturation. Their findings supported their hypotheses in that American-born and immigrant Chinese held different meanings of being Chinese and being American. Tsai and colleagues’ (2000) study found that immigrant Chinese who migrated before the age of 12 had not formed a
Chinese self-concept yet and were more ready to immerse in the American culture. In contrast, the immigrant Chinese who migrated after age 12, or who perceived their Chinese identity as a central part of their self-concept, viewed being American as a means of survival, while still identifying very much as Chinese. This study illustrates the complexity of the acculturation process, which may vary for American-born versus immigrant Chinese. However, the study did not address how acculturation and enculturation affect identity development, biculturalism, and SWB.

Because little is known about how biculturals, specifically Chinese Americans, negotiate and maintain their dual cultural identities, the construct of Bicultural Identity Integration (BII) has become a promising framework for exploring bicultural identities as a sociopsychological process (Benet-Martinez & Haritatos, 2005; Benet-Martinez, Leu, Lee, & Morris, 2002). Benet-Martinez and colleagues (2002) defined BII as the degree to which “biculturals perceive their mainstream and ethnic cultural identities as compatible and integrated vs. oppositional and difficult to integrate” (p. 9). In other words, the BII construct focuses on biculturals’ subjective perceptions of how much their dual cultural identities intersect or overlap. Benet-Martinez and Haritatos (2005) hypothesized that individuals who are high in BII view themselves as part of a “hyphenated culture” and find it easier to integrate both cultures in their daily lives. They are described as having compatible bicultural identities (Padilla, 1994; Phinney & Devich-Navarro, 1997; Rotheram-Borus, 1993), which would presumably facilitate positive adjustment. In contrast, biculturals who are low in BII report difficulty in combining both cultures into a cohesive sense of identity. They are sensitive to specific tensions between the two cultural orientations and view such incompatibility as a source of internal conflict (Benet-Martinez & Haritatos, 2005; Phinney & Devich-Navarro, 1997). In addition, individuals with low BII
struggle with choosing one culture (Benet-Martinez & Haritatos, 2005). I will discuss the findings of Benet-Martinez and Haritatos’ (2005) study shortly.

The BII model proposed by Benet-Martinez and colleagues examines how individuals develop a sense of community around national, cultural, ethnic, and racial group membership. Negotiating multiple cultural identities is complex and multifaceted. Individuals may act differently depending on the situation and role obligations. Even before the emergence of acculturation studies, Goode (1960) addressed the theory of role strain and its impact on individuals. He defined role strain as the difficulty of fulfilling role demands. People experience role conflict as they navigate through different role obligations in various social structures. A qualitative review of biculturalism in the acculturation literature by Benet-Martinez and Haritatos (2005) revealed that bicultural individuals often discuss their dual cultural heritage in complicated ways using both positive and negative terms. Bicultural individuals can enjoy being able to navigate in two worlds, but may also see their multiple identities as a source of conflict. Specifically, the construct of BII also embodies both cultural distance and conflict. Benet-Martinez and Haritatos (2005) defined cultural conflict as feeling torn between one’s two cultural identities versus feeling that they are compatible, whereas cultural distance is perceiving one’s two cultural identities as separate and dissociated versus hyphenated or fused.

Benet-Martinez and Haritatos (2005) attempted to address gaps in the literature on biculturalism (e.g., personality traits, acculturation stressors) and used 133 first-generation Chinese American individuals (58 males, 75 females, mean age = 24.5) in their study. The participants resided in a large college town in the Upper Midwest of the United States. This sample included undergraduate students and older members of the university community (e.g., graduate students, visiting scholars). They were given the following acculturation measures:
English and Chinese language proficiency and usage, Chinese and U.S. cultural identification, bicultural competence (LaFromboise et al., 1993), and acculturation attitudes (Berry, Kim, Power, & Bujaki, 1989). They were also given the following bicultural identity measures: Bicultural Identity Integration Scale-Version 1 (BIIS-1; Benet-Martinez, 2003a) and Bicultural Identity Integration Scale-Preliminary (BIIS-P; Benet-Martinez et al., 2002). The Riverside Acculturation Stress Inventory (RASI; Benet-Martinez, 2003b) and the Big Five Inventory (BFI; Benet-Martinez & John, 1998) were also administered. Correlational analyses showed that the BIIS-P cultural conflict and distance scales correlated with the cultural conflict and distance scales of the BIIS-1. The conflict and distance scales of the BIIS-1 showed no gender effects and hardly any age effects. The number of years lived in the United States and in a Chinese culture were both inversely related to cultural distance, while cultural conflict had fewer associations with the demographic and acculturation variables. This pattern suggested that the older an individual is when coming to the United States, or less exposed to American culture, the more cultural distance the individual perceives between his or her cultural identities. Cultural conflict also seemed largely independent of the acculturation factors that affected cultural distance (e.g., years lived in each culture, language proficiency). Cultural distance was negatively associated with both English proficiency/use and American identification, but was independent of the degree of Chinese identification. Therefore, these results suggested that cultural distance, but not cultural conflict, is related to objective learning and performance-based aspects of the acculturation experience. For instance, competence in mainstream American culture may contribute to the development of a “hyphenated” bicultural identity for first-generation biculturals. Structural equations modeling (SEM) was used to predict cultural conflict and distance from different proximal psychological factors (i.e., bicultural competence, acculturation
strategies) and personality dispositions. The final model resulted in the following fit indices:

χ²/df = 1.5, CFI = .99, GFI = .939, RMSEA = .065, and RMR = .045. This model revealed that cultural conflict was predicted mostly by acculturation stress in the linguistic and intercultural relations domains and moderately by discrimination. In contrast, cultural distance was predicted mainly by feelings of cultural isolation and linguistic challenges. The personality dispositions of neuroticism and openness emerged as significant predictors of BII and several other variables in the model. In addition, agreeable individuals were less likely to report conflict in their intercultural relationships and extraverted individuals were less likely to feel strained by a less multicultural living environment. However, the personality disposition of conscientiousness did not predict any variables in the model.

In summary, cultural distance and conflict are associated with different personality, performance, and contextual antecedents (Benet-Martínez & Haritatos, 2005; Nguyen & Benet-Martínez, 2007). As indicated by path analyses, cultural distance is predicted by having a close-minded disposition, lower levels of cultural competence in the mainstream culture, experiencing linguistic strains, and living in a community that is not culturally diverse. In contrast, cultural conflict is predicted by having a neurotic disposition, experiencing discrimination, and having strained intercultural relations (Nguyen & Benet-Martínez, 2007). Cultural distance is linked to performance-related personal and contextual challenges (e.g., cognitive rigidity, non-diverse environment), whereas cultural conflict stems from strains that are largely intra- and interpersonal in nature (e.g., social prejudice, rejection) (Nguyen & Benet-Martínez, 2007).

LaFromboise and colleagues (1993) also described the need to develop bicultural competence as a result of living in two cultures. Although some studies of biculturalism have assumed that an individual living within two cultures will suffer various forms of psychological
distress, this is not necessarily the case. According to LaFromboise and colleagues (1993), the key to psychological well-being may be the ability to develop and maintain competence in both cultures. They made the following suggestions for developing competence in two cultures: knowledge of cultural beliefs and values, positive attitudes toward both majority and minority groups, bicultural efficacy, communication ability, diverse role repertoire, and a sense of being grounded. Furthermore, if the values and beliefs of the two cultures are in conflict, the individual may internalize that conflict in an attempt to find an integrated resolution. The struggle to find this resolution motivates the individual to combine the two cultures as a stress-reducing solution. Therefore, investigating the concept of biculturalism can help researchers better understand this process and may facilitate the establishment of relevant services and resources for researchers and clinicians.

As suggested earlier, the phenomenon of biculturalism appears to relate to psychological well-being or psychological adjustment. How Chinese Americans navigate and express their dual identities or cultural orientations may provide insight into how they cope with distress and adjust within their own schemas. Li (1998) found that the culture of younger-generation Chinese Americans is more American than Chinese. Li also found that biculturalism affects various aspects of Chinese Americans’ lives such as adjustment at school and workplace, career outlook, dating, marriage, parent-child relationship, and other interpersonal relationships. Tsai, Ying, and Lee (2001) examined the cultural predictors of self-esteem in Chinese Americans and found that cultural orientation was significantly associated with self-esteem. They sampled 353 Chinese American college students from a large university in the San Francisco Bay Area (174 males, 179 females, mean age = 20.23 years). Participants completed the General Ethnicity Questionnaire (GEQ; Tsai, Ying, & Lee, 2000), the Personal Self-Esteem measure (Rosenberg,
1965), and a general demographic questionnaire. Tsai and colleagues (2001) found that proficiency in English and Chinese languages and pride in Chinese culture were positively correlated with self-esteem, whereas affiliation with Chinese people was negatively correlated with self-esteem. The cultural predictors of self-esteem differed for Chinese American men and women. For women, self-esteem was mainly related to pride in Chinese culture. For men, self-esteem was mainly related to English and Chinese language proficiency.

In addition, Benet-Martinez, Lee, and Leu (2006) found that Chinese Americans with lower bicultural identity experienced more cognitive dissonance because of conflicted cultural identities. In their second study, 261 Chinese American biculturals (126 males, 135 females, mean age = 21.6) from a large public university on the West Coast were recruited. Participants were randomly assigned to one of three experimental conditions (American, Chinese, or landscape) and given ten minutes to write ten statements about the different pictures presented. They also completed the BIIS-1. The results showed that cultural representations of biculturals with lower levels of BII revealed more cognitive complexity (influenced by cognitive dissonance and cultural conflict). Consequently, lower bicultural identity integration may also result in greater difficulty processing information in the host culture because lower BII is also related to lower openness to experience and higher acculturative stress (Benet-Martínez & Haritatos, 2005). In contrast, biculturals with higher BII engage in less effortful encoding of cultural information because they perceive their two cultures as compatible. When Mok, Morris, Benet-Martínez, and Karakitapoglu-Aygun (2007) examined the structures of social identity and social networks among first-generation biculturals, they found that biculturals with lower bicultural identity made fewer friends outside of their own heritage group and were less open to embracing
their host culture. It seems that biculturalism, in addition to personality factors, contributes to psychological adjustment or SWB.

Hong, Morris, Chiu, and Benet-Martinez (2000) introduced the concept of cultural frame switching to describe an important cognitive process of bicultural individuals. Hong and colleagues (2000) proposed that biculturals possess two or more cultural interpretative frames or schemas. These cultural schemas, defined as networks of discrete and specific constructs, guide behaviors only when they come to an individual’s mind, for example, when they are applicable to social events that need to be judged (Hong et al., 2003). This cultural frame switching involves biculturals shifting between their two cultural interpretive frames in response to social or cultural cues (Benet-Martinez et al., 2002).

Benet-Martinez and colleagues (2002) have applied a sociocognitive model and the concept of cultural frame switching to examine how biculturals navigate between their dual cultures. The authors suggested that each cultural meaning system can be independently activated by culturally-relevant icons or primes. The cultural icons therefore activate cultural frame switching. In theory, American icons will activate cognitions associated with the American culture and the Chinese icons will activate cognitions associated with Chinese culture. In addition, the BII framework incorporates the ideas of opposition versus compatibility. Benet-Martinez and colleagues (2002) stated that biculturals with high BII perceive their dual identities as compatible, whereas individuals with low BII experience perceive their dual identities as oppositional. Therefore, a high BII individual would respond to the cultural icons appropriate to the associated culture in the study. A low BII individual, on the other hand, would experience a culture clash and respond to the cultural icon associated with the opposing culture. For example, the low BII individual would respond in a more American manner to the Chinese prime (icon).
and in a more Chinese manner to the American prime. Indeed, in the study by Benet-Martinez and colleagues (2002), biculturals high on BII behaved in a prime-consistent manner: Chinese primes elicited external attributions, whereas American primes elicited internal attributions. Thus, it was demonstrated to a certain extent that Chinese American biculturals possess separate American and Chinese cultural schemas. These schemas guide their behaviors and are activated by situational cues. These findings support the dynamic constructivist perspective, which proposes that dual culture meaning systems can be mentally represented and integrated by an individual, and stimulated by situational cues. However, this study was limited by the small sample size, and only first generation Chinese Americans were sampled.

Amiot and colleagues (2007) also addressed social identity development and integration in the self, which is similar to Benet-Martinez and colleagues’ (2005) Bicultural Identity Integration (BII). Amiot and colleagues (2007) proposed a four-stage model (derived from intergroup models, developmental models, and cognitive frameworks) that explains the specific processes by which multiple social identities develop intra-individually and become integrated within the self. The first stage is anticipatory categorization, which represents an anticipatory phase that initiates the process of identity integration. The next stage is categorization, in which group members are confronted with an actual change in their lives and with the existence of a new social group. Distinct social identities are recognized and differences in values and norms among social identities become salient, which in turn heightens an individual’s sense of belongingness to his/her original social group. During this stage, analogous to a separation orientation, the new identity to be integrated is still external to the individual because there is no intra-individual conflict between identities (i.e., being Chinese vs. being American). The third stage is compartmentalization, where the multiplicity of one’s old and new social identities
becomes recognized more explicitly as the individual identifies with different social groups and realizes that he/she belongs to these various groups. The different social identities are kept separate and isolated and are context-dependent. The last stage is integration, in which individuals come to recognize that multiple and distinct social identities are simultaneously important to their self. These stages are comparable to how biculturals perceive their cultural identities as either compatible or oppositional in the BII framework. The first three stages also parallel the constructs of cultural conflict and distance. Amiot and colleagues (2007) also found that active forms of coping and social support facilitate identity integration. They suggested, in their review, that social identity and ethnic or cultural identity have been shown to predict enhanced well-being and to buffer against the negative effects of discrimination. In summary, Amiot et al., (2007) and Benet-Martínez and Haritatos (2005) reached a similar finding that having an integrated social or bicultural identity reduces inner conflict and facilitates cohesion in the self, which leads to psychological adjustment and well-being.

_Biculturalism and SWB_

As noted previously, researchers are invested in the study of biculturalism because it plays a significant role in subjective well-being. Downie, Koestner, ElGeledi, and Cree (2004) examined the relation of cultural internalization to well-being among tricultural individuals who have to navigate among diverse cultural settings in their everyday lives in Canada. These researchers measured global psychological well-being and positive and negative affect specific to the three cultural settings that all participants navigate among: their heritage culture, English Canadian culture, and French Canadian culture. Well-being was measured with Emmons’ (1992) Positive-Negative Affect Scale. Ryff and Singer’s (1996) measure was used to assess psychological well-being. In addition, multicultural identity integration was assessed with a scale
developed for this study, which was modeled after the BII instrument developed by Benet-Martinez and colleagues (2002). The final sample size included 113 participants and represented more than 35 distinct ethnicities. Chinese was the most frequent self-identified heritage (n = 24). The results indicated that psychological well-being was predicted by individuals’ cultural adaptation in both heritage and English Canadian cultures, combined with the extent of their integration of all three cultural identities. That is, well-being is greater when individuals internalize cultural beliefs and standards in an autonomous manner and when they are able to integrate their cultural identities within themselves. In summary, cultural integration, conceptualized as a lack of conflict between multiple cultural identities, predicted greater psychological well-being.

Benet-Martinez and Karakitapoglu-Aygun (2003) explored how personality and cultural variables, jointly and separately, influenced SWB in Asian Americans and European Americans. The sample consisted of 321 undergraduate students (122 European Americans and 199 Asian Americans). Individuals in the Asian American sample were mostly from a Chinese background (n = 102). The authors conducted structural equation modeling analyses, which supported a culture → personality model of SWB. The cultural syndromes of individualism and collectivism predicted variations in Big Five personality dispositions, which in turn influenced life satisfaction through self- and relational-esteem. Benet-Martinez and Karakitapoglu-Aygun noted that none of the pathways in the culture → personality model of SWB differed across the two ethnic groups, although some ethnic mean-level differences were present for many of the variables. The culture → personality model of SWB fit the data better than the competing personality → culture model of SWB. The latter model suggested that personality dispositions predicted cultural syndromes, which, in turn, predicted life satisfaction. Specifically, the results
from the culture → personality model of SWB revealed that individualism predicts satisfaction with friends, whereas collectivism predicts family satisfaction. Moreover, life satisfaction was influenced by extraversion through satisfaction with friends; conscientiousness influenced life satisfaction through self-esteem; and neuroticism influenced life satisfaction, in a negative manner, through self-esteem and satisfaction with friends. In addition, agreeableness and openness to experience predicted relational-esteem and self-esteem, respectively, which, in turn, predicted life satisfaction. These pathways from personality to self- and relational-esteem, and from the later variables to life satisfaction, were similar across the European and Asian American samples (Benet-Martinez & Karakitapoglu-Aygun, 2003). While this study provides valuable information about the role of culture and personality in SWB, Benet-Martinez and Karakitapoglu-Aygun only conceptualized cultural syndromes in terms of individualism and collectivism. This study had limited ethnic variability and did not account for within-group differences, especially for different groups of Asian ancestry. Furthermore, this study relied on cross-sectional data and it is highly possible that individuals’ identity and personality become more stable over time, which may provide more support for the personality → culture model of SWB, as previous research has indicated. Lastly, Benet-Martinez and Karakitapoglu-Aygun only examined the cognitive component of SWB, specifically life satisfaction, and did not include the affective component.

Chen, Benet-Martinez, and Bond (2008) examined the impact of bicultural identity, bilingualism, and social context on the psychological adjustment of multicultural individuals. They conducted three studies in three different samples, with Hong Kong immigrants from Mainland China (n = 67), female domestic workers in Hong Kong from the Philippines (n = 153), and Chinese college students from The Chinese University of Hong Kong (n = 213) and
Beijing Normal University (n = 239). All the instruments were administered in Chinese except in study two, where English was used. All participants completed the following instruments: language proficiency and usage, cultural identification, Bicultural Identity Integration Scale-Preliminary version (BIIS-P), Riverside Acculturation Stress Inventory, Symptom Checklist-90-Revised, UCLA Loneliness Scale, Satisfaction With Life Scale, subjective happiness scales, Rosenberg’s Self-Esteem Scale, The General Self-Efficacy Scale, and the Neuroticism Subscale of the Big Five Inventory. The results indicated that greater bicultural identity integration predicted better psychological adjustment for all the samples except for sojourners (i.e., the female domestic workers), even after controlling for the personality traits of neuroticism and self-efficacy. In addition, cultural identification and language abilities predicted adjustment. Chen and colleagues (2008) suggested that the process of managing multiple cultural environments and group loyalties, bilingual competence, and an integrated cultural identity are key antecedents of beneficial psychological outcomes and positive well-being.

In summary, the growing literature illustrates the importance of biculturalism in SWB, Chinese Americans in this case. Specifically, Chinese Americans who attain greater integration (e.g., minimal cultural conflict and distance), and view their cultural identities as compatible, tend to experience greater SWB. In the next section, I will explore another possible within-group predictor of SWB.

Personality Models and Subjective Well-being

Etic versus Emic Assessment

Whether to import assessment instruments or develop indigenous measures in new cultural contexts is a classic issue in cross-cultural psychology, and refers to the emic-etic issue (Yang & Bond, 1990). Psychologists interested in a particular construct have historically
translated the relevant test into the local language, administered it to comparable groups, and then made comparative statements about the psychological construct. This approach assumes the universal or etic status of the underlying construct and “imposes” it in other cultures; therefore, this approach has been labeled as imposed etic (Yang & Bond, 1990).

The Five Factor Model (FFM) is regarded as a culturally-universal model of personality. McCrae (2004) proposed that there are five major personality dimensions: Neuroticism (N), Extraversion (E), Openness to Experience (O), Agreeableness (A), and Conscientiousness (C). Many personality psychologists expect this model to be supported across different cultures because personality traits are considered to be biologically based (Tyler, Newcombe, & Barrett, 2005). Using factor analysis in cross-cultural studies, proponents of the FFM found that the five factors can indeed be recovered with varying degrees across cultures (McCrae & Allik, 2002). Most of this research used either the NEO-PI-R or NEO-FFI instruments (Costa & McCrae, 1992) to examine the FFM and most of the participants were university students (Yang & Bond, 1990). However, the personality dimensions may be interpreted differently in a different culture’s language system. For example, Chinese language users may blend Conscientiousness and Agreeableness to form a broader dimension of social morality (Yang & Bond, 1990).

Furthermore, indigenous personality researchers have claimed that the FFM does not fully capture all aspects of personality in non-Western cultures. China is culturally more distant from the United States than, for example, Israel or Spain (Cheung et al., 1996; Triandis & Suh, 2002). McCrae, Yik, Trapnell, Bond, and Paulhus (1998) suggested that the NEO-PI-R assesses pro-social behavior with a Western bias. For example, they found that Chinese undergraduates (regardless of country of birth) scored somewhat lower than North Americans of European ancestry on measures of Extraversion. Moreover, Cheung and colleagues (2001b) argued that the
Five Factor structure identified by Costa and McCrae (1992) could not be truly replicated in a Chinese sample. The personality structure of the Chinese population is considered significantly different from Western cultures and personality measures need to take into account these cultural differences.

A substantial body of empirical knowledge about the Chinese (Bond, 1986) provides growing evidence that the Chinese will modernize in ways that differ from Western cultures (Chinese Culture Connection, 1987; Yang, 1986). Yang and Bond (1990) examined the relation between indigenous and imported descriptors of personality. They argued that an objective investigation of both emics and imposed etics would help address the issue of cultural imperialism in psychology. The Chinese participants used a pool of Chinese personality descriptors to rate a variety of target persons and rated the same target persons using the translated Big Five personality descriptions first isolated by Tupes and Christal (1961) from Americans. Yang and Bond (1990) extracted five factors of personality perception from both the emic Chinese descriptors and the imported American descriptors. Four of the five Chinese factors could be adequately explained by varying combinations of the five imported factors. While there was similarity among the emic and imposed-etic measures, there is no consensus among researchers regarding on how much similarity or shared variance is adequate to conclude that factors are comparable across cultures.

The Openness to Experience, or Openness, dimension is the most controversial personality factor of the FFM. This is due, in part, to the conceptualization of Openness, which incorporates intelligence, creativity, imagination, and culture. The factor and associated scales have also exhibited relatively weak psychometric properties in non-Western cultures in comparison to the other four factors of the FFM (Cheung, Cheung, Zhang, Leung, Leong, &
There are six facets of Openness as measured in the NEO-PI-R (Costa & McCrae, 1992): “vivid fantasy, artistic sensitivity, depth of feeling, behavioral flexibility, intellectual curiosity, and unconventional attitudes” (Cheung et al., 2008). According to McCrae & Costa (1997), Openness portrays “the breadth, depth, and permeability of consciousness, and the recurrent need to enlarge and examine experience” (Cheung et al., 2008). For example, an open person has a higher degree of tolerance for ambiguity and can access more thoughts and feelings in consciousness simultaneously, which is related to the motivation to seek diverse experiences. In general, divergent thinking abilities correlated only with Openness but not with the other four factors of the FFM (McCrae, 1987). This factor might be dominated by intelligence according to lexical studies of personality. In contrast, other studies have suggested that imagination and creativity or unconventionality are the predominant contents (McCrae, 1994). Cheung and colleagues (2008) examined the relevance of the Openness factor in Chinese culture. Their results supported the relevance of some of the Openness facets in Chinese culture, despite both similarities and differences in their configuration in the nomological network of Chinese personality constructs. They indicated that in the Chinese context, the function of Openness might be conceptualized to include an interpersonal dimension that reaches out to others in social endeavors in conjunction with extraversion and leadership characteristics. The applicability of the Openness factor for Chinese populations will be revisited in the next section.

In any case, most of the personality tests used by psychologists are translated versions of imported, Western tests in non-Western societies, in this case Chinese societies (Cheung, 2007). While there are well-translated and standardized tests with adequate local norms, the cultural relevance and cross-cultural equivalence of these instruments may be in question (Cheung, 2004; Cheung et al., 2003). In response, cross-cultural psychologists have argued for the use of
indigenously derived measures (Cheung, 2007). In studies of Chinese personality, the Chinese Personality Assessment Inventory (CPAI; Cheung et al., 1996) was developed to address this need.

**Chinese Personality Assessment Inventory (CPAI)**

*Initial development.* The original Chinese Personality Assessment Inventory was created by Cheung, Leung, Fan, Song, Zhang, and Zhang (1996) in response to the following question: Would an empirically derived Western instrument be applicable to other countries? In this case, the researchers were referring to Chinese populations. Because of cross-cultural differences at the item and scale levels, cross-cultural psychologists began to question the sufficiency of the personality or clinical constructs included in borrowed inventories, such as the Minnesota Multiphasic Personality Inventory (MMPI-2) (Cheung, 2002).

In 1989, Cheung and Song, members of the Chinese MMPI research team in the People’s Republic of China and Hong Kong, decided to develop a comprehensive personality inventory for the Chinese culture. Their aim was to create an inventory that included personality characteristics for normal range and diagnostic assessment. The CPAI was developed as an omnibus indigenous personality inventory for the Chinese people using a combined emic-etic approach (Cheung et al., 2001b), which combines both universal (etic) and culture-specific (emic) constructs and items. The development of the CPAI (Cheung et al., 1996) involved methodological stages used in test construction in Western psychology (Cheung, 2002).

The first step was to identify culturally relevant personality constructs. The authors examined a broad range of sources in which personality descriptions are commonly found, including Chinese novels, books on Chinese proverbs, self-descriptions collected in an informal street survey, studies of Chinese personality in the psychological literature, and other
descriptions by professionals. These professionals represented teachers, nurses, social workers, psychiatrists, psychologists, business managers, and students or clients. A total of 150 distinct personality characteristics and 900 items were compiled to represent both common and broad personality constructs. Chinese language teachers in junior high schools were asked to judge whether the 900 items were appropriate for the general public. An expert committee approach was utilized, and the experts reached consensus on 26 normal personality constructs and 12 clinical constructs. The research team regarded these constructs as important aspects of personality and psychopathology among the Chinese people that are not all reflected in Western inventories (Cheung, 2002; Cheung et al., 1996). In addition, during a pilot study, 130 diverse respondents in China and Hong Kong were asked to rate the items in terms of comprehension, fluency, and cultural relevance. Items were subsequently deleted or modified based on the feedback obtained (Cheung, 2002; Cheung et al., 1996).

Approximately 1,700 adults from different backgrounds in China and Hong Kong took the 1991 trial version of the CPAI. Scales were modified or deleted based on the pattern of inter-scale correlations. The 1992 version of the CPAI was standardized with a representative sample of 1,998 respondents from China and 446 respondents from Hong Kong between the age of 18 and 65. This resulted in the final form of the CPAI, which consisted of 22 personality scales, 12 clinical scales, and three validity scales (Cheung, 2002; Cheung et al., 1996). While exhaustive efforts contributed to the development of the CPAI, this instrument relies heavily on the original conceptual structure of the different assessment scales. The authors used factor analyses to determine the relationships among the CPAI scales. However, they did not perform factor analyses at the item-level. Extensive feedback processes and a priori judgments determined the different personality characteristics and items used in the CPAI. Furthermore, the development
and research completed for the CPAI were based in China and Hong Kong so the generalizability of the CPAI to other Chinese countries (i.e., Taiwan) or populations (i.e., Chinese refugees in other nations) needs to be demonstrated.

**Structure of the CPAI.** In both the Chinese and Hong Kong samples, Cheung and colleagues (Cheung, 2002; Cheung et al., 1996) conducted factor analysis and extracted four factors with the personality scales and two factors from the clinical scales. The four personality factors were labeled Dependability, Chinese Tradition, Social Potency, and Individualism, which together accounted for 59.9% of the total variance. The two clinical factors (Emotional Problems and Behavioral Problems) accounted for 61.2% of the total variance.

Of the four personality factors, the Chinese Tradition factor is of high interest in the study of Chinese personality. This factor was defined by high positive loadings for scales that were deemed to be important in Chinese culture. This factor was not identified in the translated personality inventories (i.e., NEO-PI-R, MMPI-2). The scales included the following: Harmony (one’s inner peace of mind, contentment and interpersonal harmony); Ren Qing (social favors according to an implicit set of rules); Thrift versus Extravagance (virtue to save rather than to waste and prudence in spending); and Face (the concern for maintaining face and social behaviors that facilitate others’ respect toward self). This factor was also characterized by negative loadings for the Flexibility, Modernization, and Adventurousness scales. Because this factor assesses instrumental interpersonal relationships, it has subsequently been labeled Interpersonal Relatedness. This factor accounted for 16.5% of the total variance (Cheung, 2002; Cheung et al., 1996).

**Relationship between the CPAI and the Big Five Dimensions.** The CPAI can be examined to determine how its factor structure or dimensions compare with the dimensions of the universal
Five Factor Model (FFM) of personality (Cheung, 2002; Cheung et al., 2001b; McCrae & Costa, 1997). A series of studies yielded common or universal, as well as unique dimensions of the CPAI (Cheung et al., 2001b). Cheung and colleagues (2001b) sampled 279 Chinese students from Beijing and Guangzhou and administered both the personality scales of the CPAI and the Chinese version of the Revised NEO Personality Inventory (NEO-PI-R), a measure of the Big Five dimensions of Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness. Using principal components analysis with varimax rotation, a six-factor solution instead of a five-factor model was best, in the researchers’ view. The six-factor model encompassed the Big Five, plus the unique CPAI Chinese Tradition or Interpersonal Relatedness factor (Cheung, 2002; Cheung et al., 2001b). The CPAI scales loaded on four of the Big Five factors, Neuroticism, Conscientiousness, Agreeableness, and Extraversion. However, none of the CPAI scales had substantial loadings on the Openness to Experience factor of the Big Five model. In addition, none of the NEO-PI-R facet scales loaded on the Interpersonal Relatedness factor of the CPAI. Only CPAI scales had high loadings on the Interpersonal Relatedness factor. This included positive loadings for Ren Qing, Defensiveness, Harmony, Face, and Logical versus Affective Orientation, and negative loadings for Optimism versus Pessimism, and Flexibility (Cheung, 2002).

In order to replicate the six-factor model, Cheung and colleagues (2001b) conducted a second study with a non-student sample in China. Three hundred and seventy-two Chinese managers from Guangzhou took the short version of the Big Five measure (NEO-FFI) together with selected scales from the CPAI that represented the Interpersonal Relatedness factor (Harmony, Ren Qing, and Face and Flexibility). Confirmatory factor analysis (CFA) was used to test the goodness of fit of the six-factor model, and the statistics indicated a good fit to the data.
In addition, a principal components analysis was performed to fit the data into a five-factor model, but the original five-factor structure (Big Five) was not identified. Therefore, the uniqueness of the Interpersonal Relatedness factor was confirmed with the independent sample of Chinese managers.

Cheung and colleagues (2001b) revealed that four of the Big Five factors in the NEO-PI-R overlapped with the CPAI factors in the six-factor solution. These four factors (Neuroticism, Conscientiousness, Agreeableness, and Extraversion) are the commonalities shared by the NEO-PI-R and the CPAI. These results were also replicated using CFA in the second study. For instance, the Emotionality-related scales of the CPAI Dependability factor are comparable to the Neuroticism factor of the NEO-PI-R. The CPAI Dependability factor is broader in scope because it encompasses both the Conscientiousness and the Agreeableness factors in the NEO-PI-R. In addition, the CPAI Social Potency factor is positively related to the Extraversion factor, and negatively related to some of the facets in the NEO-PI-R Neuroticism factor (Cheung, 2002). In contrast, none of the CPAI scales loaded on the Openness factor.

**Redevelopment of CPAI-2.** The lack of Openness scales in the CPAI can be attributed to several possible reasons. One possibility is that Openness in the FFM is not a culturally-relevant personality dimension in Chinese person perception. Alternatively, Openness-related constructs may not have stood out in the person-description method used in the development of the CPAI. For example, these constructs may have been overlooked or deemed less important by the test developers during selection of constructs for the CPAI (Cheung, 2002).

To address these possibilities, Cheung and colleagues (2004) developed new indigenous scales related to Openness. In addition, the names of some of the other scales were revised. The resulting CPAI-2 has 28 personality scales, 12 clinical scales, and three validity scales (Cheung
et al., 2004). The CPAI-2 has been restandardized with a representative sample of 1,911 respondents (1,575 from China and 336 from Hong Kong SAR) between the ages of 18 and 70. Four factors have been extracted for the personality scales, which are the following: Social Potency, Dependability, Accommodation (originally called Individualism in the CPAI), and Interpersonal Relatedness (originally called Chinese Tradition in the CPAI). Emotional Problem and Behavioral Problem factors have again been identified with the clinical scales. The CPAI-2 still includes indigenously derived personality scales that are sensitive to the Chinese culture, such as Face, Family Orientation, Ah-Q Mentality, and Harmony (Cheung, 2007).

Cheung and colleagues (2008) conducted a joint factor analysis with varimax rotations of the 28 CPAI personality scales and 15 NEO-FFI subscales. The MAP method suggested the extraction of five factors and the five-factor solution explained 46.6% of the shared variance. To further investigate the replicability of the FFM, Cheung and colleagues (2008) used Procrustes rotation to maximize the similarity of the factor loadings of the NEO-FFI in the joint factor analysis with the corresponding loadings in a factor analysis with NEO-FFI item parcels only. After Procrustes rotation of the NEO-FFI parcels and the CPAI-2 scales, the FFM factors were recovered. The NEO Conscientiousness and Neuroticism factors were no longer blended together but six CPAI-2 scales did not load on any factor. As a result, the five-factor structure did not adequately describe all the CPAI-2 scales (Cheung et al., 2008). In response, Cheung and colleagues (2008) attempted a six-factor solution for the joint factor analysis. The six-factor solution explained 48.6% of the variance and presented a clearer structure of the FFM and the CPAI-2 Interpersonal Relatedness factor. Specifically, the first five factors of the six-factor solution resembled the dimensions of the FFM and the sixth factor was defined solely by the Interpersonal Relatedness scales (Cheung et al., 2008).
Cross-cultural research suggests that the CPAI-2 is also cross-culturally relevant, and the indigenously derived Chinese constructs may not be limited to the Chinese context. Lin and Church (2004) investigated the Interpersonal Relatedness dimension of the CPAI in samples of Chinese Americans (n = 201) and European Americans (n = 236). Results revealed that the Interpersonal Relatedness factor replicated very well in the Chinese American sample and fairly well in the European American sample, which indicate that the Interpersonal Relatedness factor is not culture unique. Similarly, Cheung, Cheung, Howard, and Lim (2006) found that non-Chinese ethnic groups in Singapore endorsed Chinese values (i.e., Interpersonal Relatedness) more than Chinese Singaporeans. Therefore, the CPAI-2 has been renamed the Cross-Cultural (Chinese) Personality Assessment Inventory-2 to reflect the broader cultural generalizability of the instrument (Cheung et al., 2004).

Like the original CPAI, the CPAI-2 covers normal and clinical aspects of personality assessment (Cheung, 2007). Cheung, Cheung, and Zhang (2004) showed that the CPAI-2 clinical scales demonstrated convergent validity with the clinical and content scales of the Chinese MMPI-2. For example, Cheung, Cheung, and Leung (2008) assessed substance use disorders among Chinese men with the CPAI-2. They contrasted the CPAI-2 profile of 121 Chinese men with substance use disorders with a matched psychiatric comparison group (n = 172) and a normal comparison group (n = 187). Results from multivariate analyses of variance and logistic regression supported the utility of the CPAI-2 clinical scales (e.g., Pathological Dependence, Antisocial Behavior, and Depression) for assessing substance use disorders. In addition, Cheung, Fan, and To (2008) used the CPAI-2 in applied settings (e.g., in business) and showed that the CPAI-2 is a culturally relevant measure for personality assessment in collectivistic cultures. In their examination of Chinese organizational settings, the CPAI Interpersonal Relatedness factor
scale assisted in profiling MBA students with previous or current senior-level positions, in assessing hotel workers’ customer orientation, and in predicting senior executives’ leadership behaviors. Therefore, the CPAI-2 is a culturally relevant personality measure in the field of psychology and clinical applications.

In summary, the CPAI and CPAI-2 are indigenously derived measures, based on a combined emic-etic approach, for Chinese populations (Cheung et al., 2001b). Because the original CPAI lacked Openness scales, Cheung and colleagues (2004) developed new indigenous scales related to Openness. The resulting CPAI-2 has 28 personality scales, 12 clinical scales, and three validity scales. Cheung and colleagues (2008) further investigated the replicability of the FFM and attempted a six-factor solution with a joint factor analysis when the five-factor structure unsuccessfully described all the CPAI-2 scales. The six-factor solution explained 48.6% of the variance and presented a clearer structure of the FFM and the CPAI-2 Interpersonal Relatedness factor emerged as the sixth factor. Like any instrument, the CPAI-2 also has limitations. Both the CPAI and CPAI-2 relied heavily on the original conceptual structure of the scales in their development. The authors did not perform factor analyses at the item-level for the CPAI/CPAI-2. Instead, extensive feedback processes and a priori judgments determined the different personality characteristics and items used in the CPAI. In addition, the alpha reliabilities of the individual scales of the CPAI-2 have ranged from 0.43 to 0.84 with a mean of only 0.68 (Cheung et al., 2008). The mean alpha reliability of the CPAI scales was only 0.67 (Cheung et al., 2003). Despite its less than optimal reliability estimates for individual scales, the CPAI-2 appears to be an appropriate, culture-relevant instrument when working with Chinese populations in the field of psychology, particularly if analyses are also conducted at the factor
level, in addition to the scale level. In addition, researchers (e.g., Cheung and colleagues) have demonstrated some clinical applications with the CPAI/CPAI-2.

**Personality and SWB**

The research on SWB focuses on how and why people experience their lives in positive ways (Diener, 1984). While the majority of studies have focused on biosocial indicators, such as sex and age, most of these variables have accounted for only a small proportion of SWB variance. For that reason, many researchers turned their interest to the examination of personality variables as predictors of well-being (DeNeve & Cooper, 1998). Among alternative SWB theories, top-down models of SWB emphasize the importance of personality. According to Diener (1984), top-down theories of SWB assume a global tendency, derived from stable personality traits, to experience life in a positive or negative manner. Large-scale studies have consistently shown little change in SWB as the result of specific life experiences. In addition, researchers have used structural equation modeling to examine the implications of top-down causal models by investigating whether SWB predicts experiences within particular life domains. They found that SWB leads to satisfaction with work, leisure, and standard of living, as well as greater physical health and constructive thinking (DeNeve & Cooper, 1998). Headey and Wearing (1989) also suggested that personality is critical for SWB and proposed the dynamic equilibrium model of SWB. They proposed that each individual has a normal equilibrium level of SWB, which is predicted by personality characteristics, especially extraversion, neuroticism, and openness to experience. Ormel and colleagues (Ormel & Schaufeli, 1991; Ormel & Wohlfarth, 1991) extended the dynamic equilibrium model by showing that personality predicts psychological distress better than external events do.
McCrae and Costa (1991) differentiated temperamental and instrumental views of the relationship between personality traits and SWB. In the temperamental view, certain personality traits, in particular extraversion and neuroticism, represent enduring dispositions that directly lead to SWB. Other personality traits, such as agreeableness and conscientiousness, have an instrumental or indirect role in SWB, for example, by leading to certain positive interactions or events. This temperamental-instrumental distinction has been supported by both correlational and experimental evidence (McCrae & Costa, 1991). For example, Wilson (1967) reviewed the results of 15 personality-SWB studies and found that emotional stability (the inverse of neuroticism) and extroversion were positively related to SWB whereas neuroticism was negatively related. Kozma and Stones (1978) also reviewed seven personality and SWB studies to extend Wilson’s review. They found that an internal locus of control was positively correlated with SWB. However, Kozma and Stones’ (1978) results were based on samples of elderly individuals, both non-institutionalized and institutionalized (DeNeve & Cooper, 1998).

Costa and McCrae (1980) proposed that extraversion leads to positive affect and neuroticism leads to negative affect due to underlying temperaments. Specifically, extroverts are dispositionally prone to be more cheerful and high-spirited than introverts, while emotionally unstable individuals are naturally more prone to negative affect. Costa and McCrae (1980) suggested that extraversion and neuroticism predict life satisfaction indirectly through their impact on positive and negative affect. McCrae and Costa (1991) expanded their theory to include the remaining three factors in the Big Five. They postulated that openness to experience predisposes individuals to feel both the good and the bad affects more deeply, while agreeableness and conscientiousness facilitate more positive experiences in social or achievement situations, respectively, which in turn increase SWB. Because agreeableness
enhances relationship quality and conscientiousness promotes task achievement, McCrae and Costa (1991) hinted that these variables would be most strongly correlated with life satisfaction and happiness (DeNeve and Cooper, 1998).

DeNeve and Cooper (1998) conducted a meta-analysis to examine 137 distinct personality constructs as correlates of SWB. They hypothesized that if positive and negative affect tap the same underlying stable dispositions as personality traits, then positive and negative affect should correlate more strongly with personality than with happiness and life satisfaction. In their meta-analysis, DeNeve and Cooper (1998) used the Big Five factors (also referred to as the Five Factor Model) as proposed by Costa and McCrae (1992) to organize the 137 specific personality traits that have been correlated with SWB in their meta-analysis. Because researchers do not agree on the precise definitions of the Big Five factors, DeNeve and Cooper (1998) resolved such discrepancies by applying their own a priori judgment to the theoretical descriptions of the factors. Extraversion was defined to include personality traits that focused on the quantity and intensity of relationships, energy level, positive emotionality, and excitement seeking. Personality traits for agreeableness focused on the quality of interpersonal relationships, such as empathy and warmth. Conscientiousness included goal-directed behavior and control-related traits. Neuroticism emphasized adjustment variables and negative emotional and behavioral traits. Lastly, the openness to experience encompassed measures of intelligence, openness, creativity, and any personality variable that is primarily cognitive in nature (i.e., belief in a just world, absorption, and rigidity). DeNeve and Cooper (1998) constructed their predictions regarding the pattern of association between the Big Five factors and the four measures of SWB (life satisfaction, happiness, positive, and negative affect) based on the theoretical work of Costa and McCrae (1980).
DeNeve and Cooper (1998) tested the utility of McCrae and Costa’s (1991) theory by calculating the average correlations between each of the Big Five factors and each of the four conceptualizations of SWB. They also tested whether the five factors significantly differed in their pattern of association with each SWB conceptualization. Consistent with Costa and McCrae (1980, 1991), DeNeve and Cooper (1998) hypothesized that positive affect would be most highly correlated with extraversion and negative affect would be most strongly correlated with neuroticism. In addition, they hypothesized that positive and negative affects would correlate with openness to experience, but these correlations would be weaker in comparison to the correlations with extraversion and neuroticism. Life satisfaction and happiness were expected to have their strongest associations with agreeableness and conscientiousness.

DeNeve and Cooper (1998) only included research reports that contained a valid measure of SWB and at least one personality measure. They used correlation coefficients to calculate effect sizes. The meta-analysis generated a total of 1,538 correlation coefficients relating personality to SWB from a total of 148 studies found in 142 research reports. A total of 42,171 respondents answered questionnaires covering personality and SWB. There were 12,072 male respondents and 12,931 female respondents from the 122 studies that reported on the sex of their samples. The average age was 53.2 years with a range of 17 to 99 years. Only 35 studies provided ethnic characteristics and the distribution was the following: 7,929 Whites, 785 African Americans, 121 Asians, and 115 Latinos. DeNeve and Cooper (1998) found that personality was equally predictive of life satisfaction, happiness, and positive affect, but significantly less predictive of negative affect. Repressive-defensiveness, trust, emotional stability, locus of control-chance, desire for control, hardiness, positive affectivity, private collective self-esteem, and tension were the specific traits most closely associated with SWB. This pattern of results
suggests that the tendency to make either positive or negative attributions of one’s emotions and life events, or even others’ behaviors is the most essential to SWB (DeNeve and Cooper, 1998).

Regarding the Big Five factors, neuroticism was the strongest predictor of life satisfaction ($r = -.24$), happiness ($r = -.25$), and negative affect ($r = -.23$), whereas positive affect was predicted equally well by extraversion and agreeableness. It appears that being neurotic predisposes a person to experience less SWB, regardless of reports of one’s quality of life experiences, negative short-term emotions, or lack of long-term positive emotions. Extraversion and agreeableness also foster or improve relationships, which in turn increases positive affect. This is also consistent with Myers and Diener’s (1995) description that happy individuals not only have specific personality traits, but also strong relationships. Extraversion also showed a positive association with happiness, whereas conscientiousness showed its strongest positive association with life satisfaction, as compared with other components of SWB (DeNeve and Cooper, 1998). Conscientious people tend to set higher goals for themselves and achieve more in work settings so they would more likely feel satisfied with their lives (Barrick & Mount, 1991; Barrick, Mount, & Strauss, 1993). In addition, openness to experience, compared to the other Big Five traits, had the lowest correlation with each SWB index (DeNeve and Cooper, 1998). McCrae and Costa (1991) proposed that openness to experience increases all emotions, both positive and negative. It is also plausible that this factor has the lowest correlation to SWB because it is the most ambiguous factor as noted by previous researchers.

DeNeve and Cooper’s (1998) meta-analysis had some limitations. The personality variables in their meta-analysis, on average, explained only 4% of the variance for all indices of SWB. There is still substantial, unexplained variation in the SWB variables in their study. There were also some methodological issues that may have limited the ability of personality to predict
SWB. Measurement error was not controlled for in the meta-analysis because the primary research reports did not do so. Furthermore, if the distribution of personality scores and SWB scores were not normal, then the correlations between personality and SWB would most likely be underestimated (Kirk, 1990). There is also the possibility that both personality and SWB are affected by a third variable that was not accounted for in the meta-analysis.

In addition to these methodological issues, personality is generally a weaker predictor of SWB than situational factors over a brief period of time. Personality is a stronger predictor of SWB when the focus is on long-term levels of affect (Diener, 1996). Another reason that personality does not completely explain SWB is because environmental circumstances sometimes produce lasting differences in SWB (Diener, 1996). For instance, Diener, Diener, and Diener (1995) found that the poorest countries differed markedly from the wealthiest countries on self-reported SWB. Some research suggests that daily events are also likely to affect SWB in the short-term. Suh, Diener, and Fujita (1996) found that SWB is only influenced by life events for a brief period of time, and the impact of life events is significantly diminished over a three-month time period. Magnus, Diener, Fujita, and Pavot (1993) found that extraversion predicted later positive events, whereas neuroticism predicted later negative events. While demographic variables and life events seem to have a small effect on long-term SWB, personality variables are a reliable predictor of long-term SWB (DeNeve and Cooper, 1998).

Additionally, cultural differences in conceptions and predictors of SWB have been found. Jahoda (1958) identified six standards of positive mental health within the Western Euro-American culture: balance of psychic forces, self-actualization, resistance to stress, autonomy, competence, and perception of reality. However, these standards may not be equally applicable to all cultures, especially collectivistic cultures. There is evidence of lower SWB in collectivistic
cultures than in individualistic cultures (Diener, Suh, Smith, & Shao, 1995). Furthermore, personality and SWB might be conceptualized differently across cultures. Kwan, Bond, and Singelis (1997) found that Asian American participants differ from their European American counterparts in the processes leading to life satisfaction. Specifically, Kwan and colleagues (1997) found that the relative importance of relationship harmony to self-esteem in predicting life satisfaction was greater in the collectivist culture of Hong Kong than in the individualistic culture of the United States. In addition, Benet-Martinez and Karakitapoglu-Aygun (2003) found that European Americans reported higher levels of extraversion, conscientiousness, and openness to experience than first-generation Asian Americans. Consequently, Diener (1996) suggested that personality would be a better predictor of within-group differences in SWB because of the shared environment within the group.

In summary, personality traits contribute to different components of SWB. Regarding the Big Five personality dimensions, neuroticism may be the strongest predictor of life satisfaction, happiness, and negative affect, whereas positive affect is predicted equally well by extraversion and agreeableness. Extraversion and agreeableness foster good relationships, which in turn increase positive affect. Conscientiousness is apparently more strongly related to life satisfaction than other components of SWB (DeNeve and Cooper, 1998). Compared to the other Big Five traits, openness to experience, which increases both positive and negative emotions (McCrae & Costa, 1991), is least predictive of SWB (DeNeve and Cooper, 1998). Some limitations in DeNeve and Cooper’s (1998) meta-analysis were the ambiguous construct definition of the openness to experience factor, personality as a less reliable predictor of SWB in the short-term, and possible cultural differences in the relationship between personality traits and SWB.
Integration and Future Research

Although the Five Factor Model (FFM) is regarded by many personality researchers as a universal model of personality, it may not provide the best representation of Chinese personality. For that reason, the CPAI-2 may be a better instrument when working with Chinese populations, despite less than optimal reliability estimates for the individual scales. Chen, Cheung, Bond, and Leung (2006) used the CPAI to predict life satisfaction and Lin and Church (2004) used the CPAI with Chinese Americans, so there is some precedent for applying the CPAI-2 in studies of SWB with the Chinese American population. For instance, past research of SWB has supported the relationship between personality, culture, and SWB (personality → cultural variables → SWB). Therefore, future research needs to evaluate whether or not this theoretical model applies to Chinese Americans. For example, it is reasonable to examine biculturalism as the cultural variable for Chinese Americans because of their dual cultural identities. As noted earlier in the review, Bicultural Identity Integration (BII) appears to be a promising cultural variable that addresses biculturalism and is related to SWB. Therefore, BII warrants further investigation in the context of personality predictors of SWB. For example, does BII add unique prediction of SWB beyond that provided by personality traits? What is the relationship, if any, between Chinese personality traits and the cultural distance and conflict dimensions of BII? Specifically, does BII mediate the relationship between personality and SWB (personality → bicultural identity → SWB)?

In response to the proposed research question, the personality → bicultural identity → SWB mediation model is preferred over the alternative model (bicultural identity → personality → SWB) because personality traits are known to be substantially inherited. Behavioral genetic studies have reported heritability estimates for the Big Five personality traits ranging from 20 to
45 percent (Loehlin, 1992). Jang, Livesley, and Vernon (1996) also assessed the genetic etiology of the FFM of personality as measured by the revised NEO Personality Inventory and their findings supported Loehlin’s (1992) results. Jang and colleagues (1996) found that the genetic influence on the five dimensions of neuroticism, extraversion, openness, agreeableness, and conscientiousness was estimated at 41%, 53%, 61%, 41%, and 44%, respectively. In addition, Diener, Oishi, and Lucas (2003) found that personality can explain a significant amount of the variability in SWB, which is fairly stable over time.

Given the relationships between the Five Factor Model and BII, it is reasonable to expect some of the CPAI-2 scales to predict BII. For example, the emotional scales (e.g., Emotionality, Inferiority versus Self-Acceptance, and Face) of the CPAI-2 Dependability factor may predict cultural conflict in the BII. These Dependability scales are analogous to the FFM Neuroticism factor. Similarly, the Diversity, Aesthetics, Divergent Thinking, Logical versus Affective Orientation, and Novelty scales of the CPAI-2 Social Potency factor may predict cultural distance in the BII because these scales coincide with the Openness to Experience factor.

Similarly, it is also appropriate to anticipate that some of the CPAI-2 scales will directly predict SWB. For example, the Leadership and Extraversion versus Introversion scales of the CPAI-2 Social Potency factor and the Social Sensitivity scale of the CPAI-2 Interpersonal Relatedness factor may predict positive affect, which in turn predicts life satisfaction, because they are related to the Extraversion factor. Similarly, the Meticulousness, Responsibility, and Practical Mindedness scales of the CPAI-2 Dependability factor resemble the Conscientiousness factor, so these scales may also predict life satisfaction. In addition, the Defensiveness, Graciousness versus Meanness, and Interpersonal Tolerance scales of the CPAI-2 Accommodation factor may relate to happiness and negative affect, which in turn will predict
life satisfaction, because these scales resemble the Agreeableness factor. Furthermore, it will be important to explore how the CPAI-2 Interpersonal Relatedness factor relates to BII. Might this factor provide unique prediction of bicultural identity integration because this personality factor encompasses traditional Chinese values that are relatively independent of the FFM?

In summary, in future research, it is worth investigating in Chinese Americans whether BII mediates the relationship between personality and SWB (personality → bicultural identity → SWB). Such a mediation effect is plausible given previous research on personality in relation to biculturalism and SWB. Such research can test this mediation model, while addressing the more specific relationships proposed above between the CPAI-2 scales, BII, and SWB.

Overview of the Present Study

Adding to the existing research on personality, cultural variables, and SWB, this study addressed some of the research needs proposed earlier. Specifically, the study examined whether or not BII mediates the relationship between personality and SWB (personality → bicultural identity → SWB) in Chinese Americans. This mediation model is favored because personality traits have been shown to be substantially inherited and they can explain a significant amount of variability in SWB. Furthermore, this study also evaluated the relationships between the CPAI-2 scales and the BII constructs of cultural conflict and distance.

The hypotheses for this study were the following:

*Hypothesis 1:* Both perceived cultural conflict and cultural distance of the BII scale will be negatively related to SWB, and the relationship will be stronger for cultural conflict.

*Hypothesis 2:* The BII scales will contribute unique prediction of SWB beyond that provided by the CPAI-2 personality traits.
Hypothesis 3: The CPAI-2 Dependability factor, in particular, the Emotionality, Inferiority versus Self-Acceptance, and Face scales, will have both direct and indirect effects on SWB, with BII cultural conflict as the mediating variable.

Hypothesis 4: The extraversion-related scales of the CPAI-2 Social Potency factor will have both direct and indirect effects on SWB, with BII cultural distance as the mediating variable.

Hypothesis 5: The agreeableness-related scales of the CPAI-2 Accommodation factor, in particular, the Defensiveness, Graciousness versus Meanness, and Interpersonal Tolerance scales, will have both direct and indirect effects on SWB, with BII cultural distance as the mediating variable.

Hypothesis 6: The openness-related scales of the CPAI-2 Social Potency factor will have only indirect effects on SWB, with BII cultural distance as the mediating variable.

Hypothesis 7: First-generation Chinese Americans will report greater cultural conflict and cultural distance than second-generation Chinese Americans.

Hypothesis 8: First-generation Chinese Americans will average higher on CPAI-2 scales associated with the Interpersonal Relatedness factor than second-generation Chinese Americans.
CHAPTER THREE

METHODOLOGY

Participants

The sample consisted of 325 Chinese American adults (at least 18 years old; 115 men, 207 women, and 3 unknown), who were recruited from a land grant university in the state of Washington and across the nation via the internet. Mean age was 28 (SD = 10.78). I excluded participants who rated their English language proficiency as “Much Below Average” on the demographic form, were unable to read the English surveys, had less than “some high school” education, or did not have valid CPAI-2 scores (described in a later section). After deleting these participants, the sample consisted of 310 Chinese Americans. I also decided to remove international students from the study because they are not as representative of the population of interest, which is bicultural Chinese Americans. The international students have not resided in the United States long enough to acclimate to the “American” culture. As a result, the final sample size is 272 Chinese Americans (100 men and 170 women, 2 unknown; mean age = 28.89, SD = 11.25). From this sample, 110 identified as Chinese Americans while other participants identified as Chinese predominantly from the following countries: Taiwan (n = 73), China (n = 38), and Hong Kong (n = 27). Other countries of origin before emigrating to the U.S. for Chinese participants included Vietnam, Malaysia, Indonesia, Singapore, Australia, and Canada.

Ninety-four participants were first generation, while more than 170 participants identified as second generation or greater. Participants were volunteers from diverse socioeconomic levels (“Much Below Average” to “Much Above Average”) and various educational backgrounds, ranging from high school degree to completed advanced degree, with most completing at least a college degree (n = 183). Most of the participants also resided in the United States for at least 20
years ($M = 23.07, SD = 10.19$), which likely increase the participants’ opportunities to acculturate to the U.S.

I recruited Chinese Americans by distributing the questionnaires to different Chinese American student organizations at universities, to professors of Asian/Chinese American courses, and to Chinese American organizations across the nation (e.g., Organization of Chinese Americans) via email invitations. Contact information was found via the Internet using Google searches. Participants were also asked to forward the research participation request to other contacts (e.g., family members and friends) in order to broaden the range of acculturation levels and generational statuses of Chinese Americans. As part of the recruitment process, four individual gift cards ($50 each) were awarded through a raffle.

**Instruments**

*Demographic Questionnaire.* Each participant was asked to complete a short demographic questionnaire, which asked about age, gender, self-identified ethnicity, socio-economic status (SES), generational status, language proficiency, level of education, and place of origin (see Appendix A).

*Cross-Cultural (Chinese) Personality Assessment Inventory-2 (CPAI-2; Cheung, Leung, Song, & Zhang, 2001a).* I administered the English version of the CPAI-2 (Form B), which was developed by standard translation and back-translation procedures. Form B of the CPAI-2 includes 341 items, which are scored for 28 personality scales and three validity scales. The items are answered in a dichotomous (true/false) response format. Cheung and colleagues (2001a) reported alpha reliabilities for the individual CPAI-2 scales that ranged from .47 to .85 with a mean of .63 for the 28 personality scales. The test-retest reliability of the scales over a one-week interval ranged from .68 to .94 with a mean of .84 (Cheung et al., 2004). Cheung and
colleagues (2001b) reported average alpha reliabilities for all scales of .69 and .70 for Chinese
and Hong Kong samples, respectively. In the present study, alpha reliabilities for the individual
CPAI-2 scales ranged from .42 to .81 with a mean of .60 for the personality scales (see Table 1),
which are quite comparable to those reported by Cheung and colleagues. Validity information for
the CPAI-2 was reviewed in Chapter Two.

Table 1

Alpha Reliabilities for CPAI-2 Personality Scales

<table>
<thead>
<tr>
<th>CPAI-2 Scale Name</th>
<th>Number of items</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social Potency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Novelty/NOV</td>
<td>10</td>
<td>.68</td>
</tr>
<tr>
<td>Diversity/DIV</td>
<td>10</td>
<td>.57</td>
</tr>
<tr>
<td>Divergent Thinking/DIT</td>
<td>10</td>
<td>.58</td>
</tr>
<tr>
<td>Leadership/LEA</td>
<td>10</td>
<td>.70</td>
</tr>
<tr>
<td>Logical vs. Affective Orientation/L_A</td>
<td>10</td>
<td>.45</td>
</tr>
<tr>
<td>Aesthetics/AES</td>
<td>10</td>
<td>.61</td>
</tr>
<tr>
<td>Extraversion vs. Introversion/E_I</td>
<td>10</td>
<td>.78</td>
</tr>
<tr>
<td>Enterprise/ENT</td>
<td>10</td>
<td>.60</td>
</tr>
<tr>
<td><strong>Dependability</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Responsibility/RES</td>
<td>10</td>
<td>.63</td>
</tr>
<tr>
<td>Emotionality/EMO</td>
<td>10</td>
<td>.57</td>
</tr>
<tr>
<td>Inferiority vs. Self-Acceptance/I_S</td>
<td>18</td>
<td>.81</td>
</tr>
<tr>
<td>Practical Mindedness/PRA</td>
<td>12</td>
<td>.42</td>
</tr>
<tr>
<td>Optimism vs Pessimism/O_P</td>
<td>10</td>
<td>.59</td>
</tr>
<tr>
<td>Meticulousness/MET</td>
<td>10</td>
<td>.58</td>
</tr>
<tr>
<td>Face/FAC</td>
<td>11</td>
<td>.54</td>
</tr>
<tr>
<td>Internal vs. External Locus of Control/I_E</td>
<td>10</td>
<td>.50</td>
</tr>
<tr>
<td>Family Orientation/FAM</td>
<td>10</td>
<td>.73</td>
</tr>
<tr>
<td><strong>Accommodation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defensiveness (Ah-Q Mentality)/DEF</td>
<td>10</td>
<td>.66</td>
</tr>
<tr>
<td>Graciousness vs. Meanness/G_M</td>
<td>10</td>
<td>.66</td>
</tr>
<tr>
<td>Interpersonal Tolerance/INT</td>
<td>10</td>
<td>.66</td>
</tr>
<tr>
<td>Self vs. Social Orientation/S_S</td>
<td>10</td>
<td>.56</td>
</tr>
<tr>
<td>Veraciousness vs. Slickness/V_S</td>
<td>10</td>
<td>.63</td>
</tr>
<tr>
<td><strong>Interpersonal Relatedness</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditionalism vs. Modernity/T_M</td>
<td>15</td>
<td>.66</td>
</tr>
<tr>
<td>Ren Qing (Relationship Orientation)/REN</td>
<td>12</td>
<td>.44</td>
</tr>
<tr>
<td>Social Sensitivity/SOC</td>
<td>11</td>
<td>.51</td>
</tr>
</tbody>
</table>
Discipline/DIS  
Harmony/HAR  
Thrift vs. Extravagance/T_E

To confirm the higher-order structure of the CPAI-2 scales, I also performed a four-factor principal-axis factor analysis with a varimax rotation of the CPAI-2 scales. As seen in Table 2, the four-factor structure proposed by Cheung et al. (2001a) was fairly well replicated in my sample, although some scales did not load as highly as desirable (e.g., .30 or higher) on the expected factor. Loadings for scales expected to define the respective factors are shown in boldface in Table 2.

Table 2

Varimax-Rotated Factor Matrix for the CPAI-2 Scales

<table>
<thead>
<tr>
<th></th>
<th>Social Potency</th>
<th>Accommodation</th>
<th>Dependability</th>
<th>Interpersonal Relatedness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novelty</td>
<td>.74</td>
<td>-.07</td>
<td>.16</td>
<td>-.03</td>
</tr>
<tr>
<td>Diversity</td>
<td>.67</td>
<td>.15</td>
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<td>Scale</td>
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<td>Veraciousness vs. Slickness</td>
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<td>Ren Qing (Relationship Orientation)</td>
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<td>Discipline</td>
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<td>Harmony</td>
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<tr>
<td>Thrift vs. Extravagance</td>
<td>-.05</td>
<td></td>
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</tr>
</tbody>
</table>

Note: Factor loadings expected to be high (i.e., define a factor) are shown in boldface.

Bicultural Identity Integration Scale-Version 1 (BIIS-1; Benet-Martinez, 2003a). This eight-item measure of bicultural identity integration (BII) includes two scales: cultural conflict (i.e., feeling torn between one’s two cultural identities vs. feeling that they are compatible) and cultural distance (i.e., perceiving one’s two cultural identities as separate and dissociated vs. hyphenated or fused). Each scale has four items. Respondents rated their agreement with each item on a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Benet-Martinez and Haritatos (2005) reported alpha reliabilities for the conflict and distance scales of .74 and .69, respectively, and the correlation between the two scales was .02. In my study, the conflict and distance scales had alpha reliabilities of .78 and .43, respectively, and the correlation between the two scales was .15 (p < .05). The validity information for the BII was reviewed in Chapter Two.

Subjective well-being. The Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) was used to assess the cognitive component of SWB. This scale has five items, which are rated on a 7-point scale ranging from 1 (strongly disagree) to 7 (strongly agree). To assess the affective component of SWB, the Positive Affect (10 items) and Negative Affect (10 items) scales of the Positive and Negative Affect Schedule-Expanded Form (PANAS-X; Watson
& Clark, 1994) were administered. Items are rated using a 5-point scale, ranging from 1 (very slightly or not at all) to 5 (extremely). Respondents were instructed to indicate how they “generally or usually feel.” Diener and colleagues (1985) reported alpha reliabilities from .60 to .85 for the Satisfaction With Life Scale and Watson and Clark (1994) reported alpha reliabilities from .73 to .83 for the Positive Affect scale and from .78 to .85 for the Negative Affect scale. In a Chinese sample, Wang et al. (2007) reported alpha reliabilities from .49 to .71 for the Positive Affect scale and from .56 to .75 for the Negative Affect scale. In the present study, alpha reliabilities were .88 for the Satisfaction With Life Scale, .89 for the Positive Affect scale, and .88 for the Negative Affect scale.

Procedure

Informed consent was obtained from all participants. All participants were provided either a packet of paper-and-pencil measures or a link to the questionnaires on the internet site, www.QuestionPro.com. The measures in each packet were placed in two orders. Both versions began with the demographic questionnaire followed by the remaining measures. Half of the participants filled out the measures in the following order: CPAI-2, BII, and the SWB measures. The other half completed the instruments in the reverse order. Counterbalancing was used to counteract possible fatigue effects. Participants who completed the paper-and-pencil questionnaires were asked to complete their packet individually at home and return it to the researcher. For the online version, I distributed two links corresponding to the two versions (orders) of the paper versions. Half of the online participants were sent one link and the other half received the alternate link. Only participants who self-identified as having Chinese ethnicity and having at least a basic degree of English proficiency were asked to proceed after the demographic questionnaire.
Data Analyses

Preliminary analyses. Before conducting the primary analyses, I applied criteria recommended by Cheung et al. (2001a) to eliminate participants with invalid CPAI-2 profiles. Only participants who met all of the following CPAI-2 criteria were retained:

1. Number of missing items is less than 34.
2. Response Consistency Index (RCI) is greater than 3.
3. Infrequency Scale (INF) is less than 12.
4. The longest True-False alternation is less than 30 (i.e., True-False-True-False … for 30 or more items).
5. The longest consecutive number of True’s or False’s is less than 100 (e.g., True-True … for 100 or more items).

Descriptive statistics (means, standard deviations) and alpha reliabilities were computed for all scales in the retained sample. Pearson correlation coefficients were computed between all variables to determine possible relationships between constructs.

Goodness-of-Fit indices. The following goodness-of-fit indices were used to evaluate all structural equations models (SEM): Overall $\chi^2$; GFI, good fit $\geq .90$; $\chi^2$/df, good fit = 2:1-3:1; CFI, good fit $\geq .90$; RMSEA, good fit $\leq .05$, fair fit $\leq .08$; and RMR, good fit $\leq .05$, fair fit $\leq .08$.

AMOS-18 computer software was used for all SEM analyses and SPSS-18 was used to test hypotheses 7 and 8.

Hypothesis 1: Pearson correlations were computed among the BII scales and the three SWB scales: life satisfaction (LS), positive affect (PA), and negative affect (NA). Confirmatory factor analysis was used to test the measurement models for each construct. For the BII measurement model, cultural conflict (BII-C) and cultural distance (BII-D) were the two latent
variables and the four items for each scale were the observed indicators. For SWB, the LS, PA, and NA scales were the observed indicators. I then tested the structural (path) model relating cultural conflict and cultural distance to SWB. Hypothesis 1 would be supported if the path coefficients relating cultural conflict and cultural distance to SWB are both statistically significant and negative.

**Hypothesis 2:** I computed three hierarchical multiple regressions in which scores on the SWLS, PA, and NA scales were the criterion or outcome variables. In step 1, age, gender, and generational status were entered as control variables. The four CPAI-2 personality factors were entered in step 2 and the BII scales were entered in step 3 of the model. I tested whether the change in $R^2$ was significant from step 1 to step 2 and from step 2 to step 3. A significant change in $R^2$ from step 2 to step 3 would support the hypothesis that the BII scales provide unique prediction of SWB (SWLS, PA, NA) beyond the personality traits.

**Hypotheses 3-6:** I used SEM to test hypotheses 3-6. I conducted these analyses for each hypothesis first at the factor level of the CPAI-2 personality dimensions and then at the scale level. In the factor-level analyses, the latent variables were the four CPAI-2 factors (Dependability, Social Potency, Accommodation, and Interpersonal Relatedness) and the observed indicators were the relevant scales loading on these factors. In the scale-level analyses, specific scales addressed in the respective hypotheses were the latent constructs, each defined by three item parcels. I used CFA to test the measurement models before proceeding to the SEM analyses.

Hypothesis 3 would be supported if (a) the path coefficient relating the CPAI-2 Dependability factor (or the hypothesized individual scales associated with this factor) to SWB was statistically significant (i.e., the direct effect), and (b) the indirect effect of CPAI-2...
Dependability (or the associated scales) on SWB via BII cultural conflict was statistically significant. Hypothesis 4 would be supported if (a) the path coefficient relating CPAI-2 Social Potency factor, as measured by the extraversion-related subscales, to SWB was statistically significant (i.e., the direct effect), and (b) the indirect effect of CPAI-2 Social Potency on SWB via BII cultural distance was statistically significant. I also repeated this analysis using the individual, extraversion-related scales associated with CPAI-2 Social Potency factor in place of the Social Potency factor.

Hypothesis 5 would be supported if (a) the path coefficient relating the CPAI-2 Accommodation factor to SWB was statistically significant (i.e., the direct effect), and (b) the indirect effect of CPAI-2 Accommodation on SWB via BII cultural distance was statistically significant. I also repeated this analysis using the individual, agreeableness-related scales associated with the CPAI-2 Accommodation factor in place of the Accommodation factor.

Hypothesis 6 would be supported if the indirect effect of the openness-related scales of the CPAI-2 Social Potency factor on SWB via BII cultural distance was statistically significant.

Hypothesis 7: I conducted a one-way MANOVA to test for generational differences between first-generation and second-generation Chinese Americans on the two BII scales (cultural conflict and distance). If the main effect for generational level was significant in the MANOVA, I also planned to conduct follow-up ANOVAs with cultural conflict and cultural distance as dependent variables.

Hypothesis 8: I conducted a one-way MANOVA to test for differences between first-generation and second-generation Chinese Americans on the CPAI-2 scales associated with the Interpersonal Relatedness factor. If the main effect for generational level was significant in the MANOVA, I planned to conduct follow-up ANOVAs with the Interpersonal Relatedness scales
(Traditionalism vs. Modernity, Ren Qing, Social Sensitivity, Discipline, Harmony, and Thrift vs. Extravagance) as dependent variables.
CHAPTER FOUR

RESULTS

Descriptive Statistics

Appendix B shows the means, standard deviations, and Pearson’s correlations for key demographic variables, BII variables, CPAI-2 personality factors, and SWB variables. Comparison of the scale means with the original rating anchors indicates that, on average, participants tended to somewhat disagree that they perceived a conflict (BII-C \( M = 2.55 \)) or considerable distance or incompatibility (BII-D \( M = 2.27 \)) between their American and Chinese cultures. Regarding subjective well-being, participants reported experiencing positive emotions “moderately” (\( M = 2.94 \)) and negative emotions between “very slightly or not at all” and “a little” (\( M = 1.59 \)). On average, they “slightly agreed” that they were satisfied with their lives (SWLS \( M = 4.90 \)).

Tests of Measurement Models

Before testing my hypotheses, I first used confirmatory factor analysis to test the measurement models for all instruments to be used in the SEM models (i.e., BII, SWB, and CPAI-2). Table 3 shows the selected fit indices for the measurement and structural models tested.

Table 3

Fit Indices for Measurement and Structural Models

<table>
<thead>
<tr>
<th>Construct</th>
<th>Overall ( X^2 )</th>
<th>( df )</th>
<th>( P )</th>
<th>( X^2/df )</th>
<th>GFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>RMR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement Models</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BII</td>
<td>54.85</td>
<td>19</td>
<td>&lt;.01</td>
<td>2.89</td>
<td>.95</td>
<td>.91</td>
<td>.08</td>
<td>.10</td>
</tr>
<tr>
<td>SWB (Revised model)</td>
<td>.08</td>
<td>1</td>
<td>.78</td>
<td>.08</td>
<td>1.00</td>
<td>1.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>Dependability (Initial model)</td>
<td>161.37</td>
<td>27</td>
<td>&lt;.01</td>
<td>5.98</td>
<td>.87</td>
<td>.75</td>
<td>.14</td>
<td>.44</td>
</tr>
</tbody>
</table>
Dependability (Final model) 58.63 23 <.01 2.55 .95 .94 .08 .27
Social Potency-Extraversion .00 0 0 0 1.00 1.00 - .00
Accommodation 6.23 5 .29 1.25 .99 1.00 .03 .09
Social Potency-Openness 5.11 5 .40 1.02 .99 1.00 .01 .08
Interpersonal Relatedness (Initial model) 74.29 9 <.01 8.25 .91 .67 .17 .39
Interpersonal Relatedness (Final model) 12.90 7 .07 1.84 .98 .97 .06 .17

Factor-Level Structural Models
BII → SWB 95.52 50 <.01 1.91 .95 .94 .06 .08
Dependability → BII → SWB 351.17 179 <.01 1.96 .89 .89 .06 .18
Social Potency-Extraversion → BII → SWB 209.49 84 <.01 2.49 .90 .89 .07 .15
Accommodation → BII → SWB 272.75 113 <.01 2.41 .90 .86 .07 .13
Social Potency-Openness → BII → SWB 258.12 113 <.01 2.28 .90 .87 .07 .15
Interpersonal Relatedness → BII → SWB 312.43 127 <.01 2.46 .89 .83 .07 .19

Scale-Level Structural Models
Emotionality → BII → SWB 181.87 84 <.01 2.17 .92 .89 .07 .07
Face → BII → SWB 187.46 84 <.01 2.23 .92 .88 .07 .07
Inferiority vs. Self-Acceptance → BII → SWB 165.34 84 <.01 1.97 .93 .94 .06 .07
Defensiveness → BII → SWB 154.26 84 <.01 1.84 .93 .92 .06 .07
Graciousness vs. Meanness → BII → SWB 178.31 84 <.01 2.12 .92 .90 .06 .07
Interpersonal Tolerance → BII → SWB 202.96 84 <.01 2.42 .91 .88 .07 .07

Bicultural identity integration (BII). In the BII measurement model, cultural conflict and cultural distance were the two latent variables and the four items for each scale were the observed indicators. Based on the overall $\chi^2$ test, the BII measurement model was rejected ($p < .01$). However, the overall $\chi^2$ test is very stringent and generally rejects models when sample
sizes are large. The fit indices suggested that the model provided a fairly good fit with the data. The standardized regression weights for the observed indicators for the BII measurement model were all statistically significant. For the cultural conflict construct, the standardized regression weights for the four indicators ranged from .63 to .78. For the cultural distance construct, they ranged from .20 to .64.

Subjective well-being (SWB). The latent variable SWB was measured with the following three observed indicators (scales): life satisfaction, positive affect, and negative affect. This model resulted in a negative variance estimate and thus an inadmissible solution. This problem was solved by dividing the life satisfaction scale into two observed indicators, dividing the items into two subscales based on alternating factor loadings in an exploratory factor analysis (i.e., largest loading item to the first parcel, second largest to the second parcel, etc.). In the revised model, SWB was thus measured with four observed indicators: positive affect, negative affect, and two life satisfaction subscales. A correlated residual was added between Positive Affect and Negative Affect in the measurement model after reviewing the AMOS modification indices. Based on the overall $\chi^2$ test, the revised SWB measurement model was accepted ($p > .05$). In addition, the fit indices revealed that the model fit the data very well. The standardized regression weights were the following: Positive Affect ($\beta = .37$), Negative Affect ($\beta = -.39$), SWLSa ($\beta = .86$), and SWLSb ($\beta = .88$). All regression weights were statistically significant.

CPAI-2 factors. For the CPAI-2 factor-level measurement models, each personality factor (i.e., Accommodation, Dependability, Social Potency, and Interpersonal Relatedness) was the latent variable and the observed indicators were the scales that were associated with each factor, based on Cheung and colleagues’ (2008) factor structure. The initial fit indices for the Dependability, Social Potency, and Interpersonal Relatedness models indicated that the models
fit the data poorly and they were rejected based on the overall $\chi^2$ tests ($p < .01$). I then reviewed the AMOS modification indices and added correlated residuals between item parcels that made substantive sense one at a time, and examined the fit of the respecified models. The Dependability model was respecified four times and the final measurement model for Dependability was also rejected ($p < .01$). However, the fit indices indicated a good model fit. The Social Potency dimension was split into two separate measurement models because this personality factor includes both extraversion-related and openness-related scales. The specific extraversion-related and openness-related scales were based on Cheung et al.’s (2008) six-factor solution in a joint principal-axis factor analysis of the CPAI-2 and NEO-FFI scale. The three extraversion-related scales included leadership, extraversion vs. introversion, and enterprise. The openness-related scales included aesthetics, logical vs. affective orientation, divergent thinking, diversity, and novelty. The Social Potency-Extraversion model was a saturated model with only one latent variable and three parameters (i.e., loadings), so this model can perfectly fit the data. The Accommodation model was accepted based on the overall $\chi^2$ test ($p > .05$). The fit indices also suggested that the model fit the data well. The Social Potency-Openness model was also accepted based on the overall $\chi^2$ test ($p > .05$). The associated fit indices suggested that the model fit the data well. Lastly, the Interpersonal Relatedness model was respecified twice by adding correlated residuals between item parcels one at time after reviewing the AMOS modification indices and it was accepted based on the overall $\chi^2$ test ($p > .05$). The associated fit indices suggested that the model fit the data well.

For the various CPAI-2 measurement models, the standardized regression weights for the observed indicators (scales) were all statistically significant, except for the meticulousness scale ($\beta =-.11, p = .12$), an indicator of the Dependability factor, and the harmony scale ($\beta = .14, p = .
.06), an indicator of the Accommodation factor. For the Dependability measurement model, the standardized regression weights for the nine scales ranged from -0.11 to 0.76 (scales with negative loadings identify the inverse pole of the CPAI-2 factor). The standardized regression weights for the three scales ranged from 0.69 to 0.77 for the Social Potency-Extraversion measurement model. For the Accommodation measurement model, the standardized regression weights for the five scales ranged from -0.39 to 0.80. The standardized regression weights for the five scales ranged from 0.43 to 0.75 for the Social Potency-Openness measurement model. Finally, for the Interpersonal Relatedness measurement model, standardized regression weights for the six scales ranged from -0.14 to 0.74.

In summary, after respecification of some of the models, the measurement models all exhibited sufficiently good fit to enable their use in SEM analysis to test relevant structural hypotheses.

Relationship between Bicultural Identity Integration and Subjective Well-being (Hypothesis 1)

In Hypothesis 1, I predicted that both perceived cultural conflict and cultural distance would be negatively related to SWB, and that the relationship would be stronger for cultural conflict. I first computed Pearson correlations (see Table 4) among the BII scales (conflict and distance) and the three SWB scales (life satisfaction, positive affect, and negative affect). Consistent with hypothesis 1, both cultural distance and conflict were negatively correlated with scales defining the positive pole of subjective well-being (i.e., life satisfaction and positive affect) and positively correlated with the scale defining the negative pole of SWB (i.e., negative affect). However, contrary to hypothesis 1, cultural conflict, as compared to cultural distance, only correlated more strongly with the negative affect component of SWB. Cultural distance correlated more strongly than cultural conflict with positive affect and life satisfaction. Cultural
conflict and cultural distance were also relatively independent \((r = .15, p < .05)\), which is consistent with the findings of Benet-Martinez and Haritatos’s (2005) study. Benet-Martinez and Haritatos found BII-C and BII-D to be correlated and they viewed the two aspects of BII as independent. Additionally, the Pearson correlations revealed that positive affect (PA) and negative affect (NA) were relatively independent, as expected. However, usually this correlation is slightly negative rather than positive. This positive correlation likely explained the need to add a correlated residual between PA and NA in my SWB measurement model.

Table 4

*Intercorrelations among BII and SWB Scales*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cultural Distance</th>
<th>Cultural Conflict</th>
<th>Positive Affect</th>
<th>Negative Affect</th>
<th>Life Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Distance</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cultural Conflict</td>
<td>.15*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive Affect</td>
<td>-.13*</td>
<td>-.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Affect</td>
<td>.13*</td>
<td>.25**</td>
<td>.14*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Life Satisfaction</td>
<td>-.32**</td>
<td>-.22**</td>
<td>.36**</td>
<td>-.34**</td>
<td></td>
</tr>
</tbody>
</table>

**Correlation significant at the 0.01 level (2-tailed).**
*Correlation significant at the 0.05 level (2-tailed).*

Next, I tested a structural equations model (SEM) in which the bicultural identity constructs predicted subjective well-being, using the revised SWB measurement model (see Figure 1). Given the large sample size and the stringent nature of SEM, the model was rejected by the overall \(\chi^2\) test. However, the fit indices suggest a good model fit. Hypothesis 1 was only partially supported. Consistent with the hypothesis, cultural distance \((\beta = -.45, p < .01)\) was a significant predictor of SWB. That is, participants who perceived their two cultures to be more distant and experienced feelings of cultural isolation reported lower SWB. However, cultural
conflict was not a significant predictor of SWB ($\beta = -0.13$, $p = .10$) and, contrary to the hypothesis, cultural conflict was not stronger than cultural distance as a predictor of SWB. Thus, although the Pearson correlations suggested some relationship between cultural conflict and components of SWB, in the context of the overall model, cultural conflict did not provide unique prediction of SWB beyond that provided by cultural distance.

Figure 1

*SEM with Bicultural Identity Integration as a Predictor of Subjective Well-being*

In Hypothesis 2, I predicted that bicultural identity integration (BII) would contribute unique prediction of SWB beyond that provided by the CPAI-2 personality traits. First, to get an initial indication that the CPAI-2 dimensions and traits predict SWB, I examined the Pearson
correlations relating the four CPAI-2 factors and the individual scales to the three components of SWB (i.e., life satisfaction [SWLS], PA, and NA). As seen in Table 5, most of the scales have sensible correlations with one or more components of SWB based on my hypotheses and previous literature. Only two scales, Aesthetics and Meticulousness, failed to show at least one statistically significant correlation with a component of SWB. The three specific CPAI-2 scales that related most consistently to components of SWB were Emotionality, Inferiority versus Self-acceptance, and Optimism versus Pessimism. Overall, the Pearson correlations indicate that the CPAI-2 personality traits predict SWB fairly well, so it is important to determine whether BII can provide any incremental prediction of SWB beyond these traits.

Table 5

*Correlations relating CPAI-2 Factors and Scales to SWB Scales*

<table>
<thead>
<tr>
<th>CPAI-2 Factor or Scale</th>
<th>Positive Affect</th>
<th>Negative Affect</th>
<th>SWLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Potency</td>
<td>.41**</td>
<td>-.16*</td>
<td>.29**</td>
</tr>
<tr>
<td>Novelty</td>
<td>.32**</td>
<td>-.09</td>
<td>.13*</td>
</tr>
<tr>
<td>Diversity</td>
<td>.15*</td>
<td>-.22**</td>
<td>.18**</td>
</tr>
<tr>
<td>Divergent Thinking</td>
<td>.29**</td>
<td>.04</td>
<td>.11</td>
</tr>
<tr>
<td>Leadership</td>
<td>.44**</td>
<td>-.02</td>
<td>.28**</td>
</tr>
<tr>
<td>Logical vs. Affective Orientation</td>
<td>.23**</td>
<td>-.17**</td>
<td>.12*</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>.06</td>
<td>.02</td>
<td>.05</td>
</tr>
<tr>
<td>Extraversion vs. Introversion</td>
<td>.27**</td>
<td>-.11</td>
<td>.27**</td>
</tr>
<tr>
<td>Enterprise</td>
<td>.31**</td>
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<td>.33**</td>
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Family Orientation  .17**  -.16**  .34**  
Accommodation  -.01  -.45**  .25**  
Defensiveness (Ah-Q Mentality)  .09  .33**  -.17**  
Graciousness vs. Meanness  .03  -.45**  .33**  
Interpersonal Tolerance  .15*  -.44**  .15*  
Self vs. Social Orientation  .08  .16**  -.12*  
Veraciousness vs. Slickness  -.01  -.19**  .07  
Interpersonal Relatedness  .31**  .10  .15*  
Traditionalism vs. Modernity  .17**  .22**  .07  
Ren Qing (Relationship Orientation)  .10  .13*  .00  
Social Sensitivity  .33**  -.11  .25**  
Discipline  .18**  .18**  .05  
Harmony  .23**  -.28**  .25**  
Thrift vs. Extravagance  .10  .13*  -.09  

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

To determine whether the BII can provide incremental or unique prediction of SWB beyond the CPAI-2 traits, I conducted three hierarchical multiple regressions, one each for the criterion variables of positive affect, negative affect, and life satisfaction. In each analysis, age, gender, and generational status were entered in Step 1 as control variables. The four CPAI-2 personality factors were entered in Step 2 and the BII scales were entered in Step 3. Table 6 provides the summary of hierarchical regression analyses. In Step 1, age was a statistically significant, though modest, predictor of two components of SWB. Specifically, older participants reported more positive affect and life satisfaction.

In the regression analysis for positive affect, three of four CPAI-2 factors were significant predictors in Step 2 and all four CPAI-2 factors were significant predictors in Step 3 (after the BII scales were included in the analysis). In other words, participants who endorsed more traits of Social Potency (e.g., extraverted, logically oriented, and enterprising), Dependability (e.g., responsible, less emotional, and optimistic), and Interpersonal Relatedness (e.g., relationship
oriented, socially sensitive, and harmonious), and fewer Accommodation traits (e.g., being gracious, self-oriented, and less defensive), reported experiencing greater positive affect. As seen in Step 3 ($\Delta R^2 = .01, p = .38$) of the regression analysis, and contrary to hypothesis 2, the BII scales did not provide unique prediction of positive affect beyond the CPAI-2 personality factors.

In the regression analysis for negative affect, Dependability, Accommodation, and Interpersonal Relatedness were significant predictors. Participants who reported more characteristics of Dependability (e.g., being responsible, emotionally stable, and optimistic) and Accommodation (e.g., less defensive, socially oriented, and interpersonally tolerant) reported less negative affect. In contrast, participants who endorsed traits associated with Interpersonal Relatedness (e.g., being socially sensitive, harmonious, and relationship oriented) reported greater negative affect. As in the regression analysis for positive affect, cultural conflict and cultural distance did not contribute unique prediction of negative affect beyond the personality traits (Step 3 $\Delta R^2 = .003, p = .60$).

For life satisfaction, gender was also a significant predictor in addition to age. Female participants reported higher life satisfaction than male participants. In Step 2, participants who endorsed more characteristics associated with Social Potency (e.g., being extraverted, logically oriented, and enterprising) and Dependability (e.g., being responsible, emotionally stable, and optimistic) reported greater life satisfaction, although the regression weight for Social Potency was no longer statistically significant in Step 3 (i.e., after the BII constructs were included). Cultural distance was also a significant predictor of life satisfaction in Step 3 ($\Delta R^2 = .03, p < .01$). This partially supports hypothesis 2 because cultural distance did add unique prediction of life satisfaction beyond the personality traits. Participants who described their two cultures as
incompatible reported experiencing less life satisfaction. Presumably, this lower life satisfaction is the result of greater cultural incongruence, at least in participants’ perceptions. The cultural distance effect can be viewed as moderate in strength, whereas the relationships between the CPAI-2 personality traits and SWB can be described as modest to moderate in strength.

Table 6

Summary of Hierarchical Regression Analyses for Variables Predicting Subjective Well-being

<table>
<thead>
<tr>
<th>Variable</th>
<th>Positive Affect</th>
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<th>Negative Affect</th>
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* p < .05. ** p < .01.

Positive affect model: Step 1 $\Delta R^2 = .05, p = .01$; Step 2 $\Delta R^2 = .26, p < .01$; Step 3 $\Delta R^2 = .01, p = .38$.

Negative affect model: Step 1 $\Delta R^2 = .02, p = .17$; Step 2 $\Delta R^2 = .26, p < .01$; Step 3 $\Delta R^2 = .003, p = .60$.

Life satisfaction model: Step 1 $\Delta R^2 = .05, p = .01$; Step 2 $\Delta R^2 = .20, p < .01$; Step 3 $\Delta R^2 = .03, p < .01$. 
CPAI-2 Dependability as a Direct and Indirect Predictor of SWB (Hypothesis 3)

In Hypothesis 3, I predicted that the CPAI-2 Dependability factor, in particular, the Emotionality, Inferiority versus Self-acceptance, and Face scales, would have both direct and indirect effects on SWB, with BII cultural conflict as the mediating variable. I first tested the structural path model at the factor level (Dependability) before I tested the scale-level models using each of the three scales mentioned in the hypothesis. In the factor-level model, the Dependability factor was the latent variable and the observed indicators were the nine scales that define this CPAI-2 personality factor in Cheung et al.’s (2008) results. As noted in Table 3, the structural path model for Dependability (Figure 2) was rejected ($p < .01$) based on the overall $\chi^2$ test. However, the fit indices indicated a fairly good model fit. As seen in Figure 2, Dependability significantly and directly predicted cultural conflict ($\beta = -.51, p < .01$), cultural distance ($\beta = -.43, p < .01$), and SWB ($\beta = .63, p < .01$). Participants who endorsed the personality characteristics associated with the CPAI-2 Dependability factor (e.g., responsible, less emotional, self-accepting, practical-minded, optimistic, meticulous, and family oriented) reported significantly less cultural conflict and cultural distance and greater subjective well-being.

I did not test the hypothesized indirect effect of CPAI-2 Dependability on SWB via BII-C because BII-C did not significantly predict SWB in the SEM model ($\beta = .11, p = .15$). Although not predicted, BII-D did serve as a mediator of the effect of CPAI-2 Dependability on SWB. The Sobel (1982) test, which tests the statistical significance of the product of the unstandardized path coefficients relating Dependability to BII-D and BII-D to SWB, was used to test the statistical significance of this indirect effect (Baron & Kenny, 1986) and this indirect effect was statistically significant ($T = -1.42, p < .05$). In other words, cultural distance mediated the
relationship between Dependability and subjective well-being. I also compared the size and
significance of the path coefficients relating the CPAI-2 Dependability factor to SWB in models
with (β = .63, p < .01) and without (β = .67, p < .01) the BII scales. This comparison revealed a
small reduction in the size of the standardized regression weight when the BII constructs were
included in the model. This result supports modest and partial mediation of the relationship
between CPAI-2 Dependability and SWB by BII cultural distance.

In the scale-level models, each of the personality scales listed in the hypothesis
(Emotionality, Face, and Inferiority vs. Self-Acceptance) was reverse coded to maintain the same
directional relationship with the Dependability factor (which has both positive and negative
scales). Each personality scale was the latent variable with three observed indicators (item
parcels). Item parcels were created by distributing the scale items to the parcels based on
alternating factor loadings in an exploratory factor analysis. See Table 3 for the fit indexes for
the scale-level structural models. I tested the structural path models of Emotionality, Face, and
Inferiority vs. Self-Acceptance separately and all of these models were rejected (p < .01) based
on the overall χ² test. However, as shown in Table 3, the fit indices indicated a fairly good model
fit for all three models. In the model for Emotionality, Emotionality (reversed) significantly
predicted cultural conflict (β = -.42, p < .001), cultural distance (β = -.29, p < .01), and SWB (β = .23, p < .05). That is, participants who endorsed being emotionally stable reported significantly
less cultural conflict, less cultural distance, and greater subjective well-being. Face (reversed)
also significantly predicted cultural conflict (β = -.51, p < .001), cultural distance (β = -.31, p < .01), and SWB (β = .26, p < .05). That is, participants who endorsed less face-saving practices
reported significantly less cultural conflict, less cultural distance, and greater subjective well-
being. Similarly, Inferiority vs. Self-Acceptance (reversed) significantly predicted cultural
conflict ($\beta = -0.44, p < .001$), cultural distance ($\beta = -0.46, p < .001$), and SWB ($\beta = 0.52, p < .001$). Participants who were more self-accepting reported significantly less cultural conflict, less cultural distance, and greater subjective well-being.

As with the Dependability factor-level model, I did not test the separate indirect effects of Emotionality, Face, and Inferiority vs. Self-Acceptance on SWB via BII-C because BII-C did not significantly predict SWB in any of the three separate individual-scale models (respectively, $\beta = -0.09, p = 0.26$; $\beta = -0.05, p = 0.61$; and $\beta = 0.02, p = 0.78$). However, BII-D did serve as a mediator of the effects of Emotionality, Face, and Inferiority vs. Self-Acceptance on SWB. Sobel tests were used to test the statistical significance of these indirect effects (Baron & Kenny, 1986) and they were all statistically significant ($T = 2.09, p < .05$; $T = 2.07, p < .05$; and $T = 2.26, p < .05$, respectively). That is, perceptions of cultural distance between one’s Chinese and American cultures mediated the relationship between each of the three personality scales and subjective well-being. Additionally, I compared the size and significance of the path coefficients relating Emotionality to SWB in models with ($\beta = 0.23, p < 0.05$) and without ($\beta = 0.38, p < 0.01$) the BII scales. I also compared the size and significance of the path coefficients relating Face to SWB in models with ($\beta = 0.26, p < 0.05$) and without ($\beta = 0.18, p < 0.05$) the BII scales. Lastly, I compared the size and significance of the path coefficients relating Inferiority vs. Self-Acceptance to SWB in models with ($\beta = 0.52, p < 0.001$) and without ($\beta = 0.63, p < 0.001$) the BII scales. In each case, the changes in the size of the standardized regression weights suggested modest, partial mediation of the relationships between the personality scale and SWB by BII cultural distance.

Overall, Hypothesis 3 was not supported. However, the results indicate that CPAI-2 Dependability (and the individual personality scales) had both direct and indirect effects, via cultural distance, on subjective well-being. Chinese Americans who describe themselves as high
in CPAI-2 Dependability (i.e., responsible, emotionally stable, self-accepting, practical-minded, optimistic, meticulous, face saving, internally controlled, and family-oriented) reported experiencing less conflict and distance between their two cultures, greater life satisfaction, more positive emotions, and fewer negative emotions.

Figure 2

SEM with CPAI-2 Dependability Predicting Subjective Well-being and BII Conflict and Distance as Mediators

CPAI-2 Social Potency-Extraversion as a Direct and Indirect Predictor of SWB (Hypothesis 4)

In Hypothesis 4, I predicted that the extraversion-related scales of the CPAI-2 Social Potency factor will have both direct and indirect effects on SWB, with BII cultural distance as the mediating variable. I tested the structural model at the factor level (i.e., Social Potency). Social Potency factor was the latent variable and the observed indicators were the three extraversion-related scales (e.g., leadership, extraversion, and enterprise) that define this CPAI-2
personality factor in Cheung et al.’s (2008) results (Figure 3). Because only the specific the extraversion-related scales were used from this CPAI-2 personality factor in this model, I decided not to test the structural path models for the individual scales associated with Social Potency (as the results would be very similar to the factor-level structural path model). As noted in Table 3, the structural path model for Social Potency (the extraversion-related scales) was rejected ($p < .01$) based on the overall $\chi^2$ test. However, the fit indices suggested a fairly good model fit. As seen in Figure 3, the extraversion-related scales of Social Potency significantly predicted cultural conflict ($\beta = -.36, p < .001$), cultural distance ($\beta = -.38, p < .001$), and SWB ($\beta = .31, p < .001$). Participants who endorsed the extraversion-related scales of Social Potency reported significantly less cultural conflict, less cultural distance, and greater subjective well-being.

I computed the hypothesized indirect effect by taking the product of the path coefficient relating Social Potency (as defined by the extraversion-related scales) to cultural distance and the path coefficient relating cultural distance to SWB. The Sobel test was used to test the statistical significance of this indirect effect (Baron & Kenny, 1986). The indirect effect was statistically significant ($T = 2.45, p < .01$). Specifically, cultural distance mediated the relationship between the Social Potency (extraversion-related scales) and subjective well-being. I also compared the size and significance of the path coefficients relating Social Potency, as defined by the extraversion-related scales, to SWB in models with ($\beta = .31, p < .001$) and without ($\beta = .47, p < .001$) the BII scales in the model. This substantial reduction in the size of the standardized regression weights suggested that cultural distance was a partial mediator of the relationship between Social Potency, as defined by the extraversion-related scales, and SWB.
Overall, Hypothesis 4 was supported because BII cultural distance was a partial mediator of the relationship between Social Potency, as defined by the extraversion-related scales, and SWB. That is, participants who endorsed the extraversion-related scales to a greater extent reported less perceived cultural distance between their Chinese and American cultures, which, in turn, predicted greater subjective well-being. Additionally, the direct effects indicated that participants who described themselves as more extraverted reported experiencing less cultural conflict, less cultural distance, and greater subjective well-being.

Figure 3

SEM with CPAI-2 Social Potency Extraversion-related Scales Predicting Subjective Well-being and BII Conflict and Distance as Mediators
CAPI-2 Accommodation as a Direct and Indirect Predictor of SWB (Hypothesis 5)

In hypothesis 5, I predicted that the agreeableness-related scales of the CAPI-2 Accommodation factor will have both direct and indirect effects on SWB, with BII cultural distance as the mediating variable. I first tested the structural path model at the factor level, in which the Accommodation factor was the latent variable and the observed indicators were the five scales that define this CAPI-2 personality factor in Cheung et al.’s (2008) results. For the scale-level models, the specific agreeableness-related scales were based on Cheung et al.’s (2008) six-factor solution in a joint principal-axis factor analysis of the CAPI-2 and NEO-FFI scales. I then tested these three scale-level models, in which the agreeableness-related scales (i.e., defensiveness, graciousness vs. meanness, and interpersonal tolerance) were the latent variables, each defined by three item parcels.

As noted in Table 3, the initial factor-level model was rejected ($p < .01$) based on the overall $\chi^2$ test but the fit indices suggested a fair model fit. As seen in Figure 4, Accommodation significantly predicted cultural conflict ($\beta = -.43, p < .001$), cultural distance ($\beta = -.41, p < .001$), and SWB ($\beta = .20, p < .05$). Participants who endorsed the personality characteristics associated with the CAPI-2 Accommodation factor (e.g., less defensive, gracious, interpersonally tolerant, socially oriented, and veracious) reported significantly less cultural conflict, less cultural distance, and greater subjective well-being.

I then tested the hypothesized indirect effect of CAPI-2 Accommodation on SWB through BII-D. The Sobel test was used to test the statistical significance of this indirect effect (Baron & Kenny, 1986) and the indirect effect was statistically significant ($T = 2.53, p < .01$). Cultural distance mediated the relationship between Accommodation and subjective well-being. That is, greater endorsement of Accommodation traits was associated with less perceived
cultural distance between participants’ Chinese and American cultures, which, in turn, predicted greater subjective well-being. I also compared the size and significance of the path coefficients relating the CPAI-2 Accommodation factor to SWB in models with ($\beta = .20, p < .01$) and without ($\beta = .39, p < .001$) the BII scales in the model. This reduction in the size of the standardized regression weight suggested moderate partial mediation of the relationship between CPAI-2 Accommodation and SWB by BII cultural distance.

In the scale-level models, the Defensiveness scale was reverse coded to maintain the same directional relationship with the Accommodation factor as the other two scales, Graciousness versus Meanness and Interpersonal Tolerance. Each personality scale was the latent variable with three observed indicators (item parcels). Items were distributed to the item parcels based on the alternating pattern of factor loadings in an exploratory factor analysis. Table 3 shows the fit indexes for the scale-level structural models. The three structural models for Defensiveness, Graciousness versus Meanness, and Interpersonal Tolerance were all rejected ($p < .01$) based on the overall $\chi^2$ test. However, as shown in Table 3, the fit indices suggested fairly good model fit for all three models.

In the first model, Defensiveness significantly predicted cultural conflict ($\beta = -.41, p < .001$) and cultural distance ($\beta = -.30, p < .01$) but did not predict SWB ($\beta = .06, p = .55$). Participants who reported being less defensive reported significantly less cultural conflict and cultural distance. In the second model, Graciousness versus Meanness significantly predicted cultural conflict ($\beta = -.48, p < .001$), cultural distance ($\beta = -.45, p < .001$), and SWB ($\beta = .41, p < .001$). Participants who endorsed being more gracious reported experiencing significantly less cultural conflict, less cultural distance, and greater subjective well-being. In the third model, Interpersonal Tolerance significantly predicted cultural conflict ($\beta = -.29, p < .001$) but did not
predict cultural distance ($\beta = .12, p = .16$) or SWB ($\beta = .06, p = .55$). That is, participants who endorsed being more interpersonally tolerant reported significantly less cultural conflict.

Sobel tests were used to test the statistical significance of the hypothesized indirect effects at the scale level (Baron & Kenny, 1986). In all three cases, they were statistically significant ($T = 2.22, p < .05$; $T = 2.17, p < .05$; and $T = 2.12, p < .05$, respectively).

Additionally, I compared the size and significance of the path coefficients relating Defensiveness to SWB in models with ($\beta = .06, p = .55$) and without ($\beta = .23, p < .01$) the BII scales in the model. The regression weight was no longer statistically significant when the BII scales were included in the model, indicating that BII fully mediated the relationship between Defensiveness and SWB. I also compared the size and significance of the path coefficients relating Graciousness versus Meanness to SWB in models with ($\beta = .41, p < .001$) and without ($\beta = .54, p < .001$) the BII scales in the model. Modest partial mediation was indicated. Lastly, I compared the size and significance of the path coefficients relating Interpersonal Tolerance to SWB in models with ($\beta = .12, p = .16$) and without ($\beta = .27, p < .001$) the BII scales in the model. Full mediation of the relationship between Interpersonal Tolerance and SWB by the BII scales was indicated.

Overall, the results indicate that CPAI-2 Accommodation (and the selected individual personality scales) had both direct and indirect effects, via cultural distance, on subjective well-being. For some of the individual agreeableness-related scales, the BII fully mediated the relationship between the personality trait and SWB. Chinese Americans who describe themselves as high in CPAI-2 Accommodation (i.e., gracious, tolerant, self-oriented, veracious) reported experiencing less conflict and distance between their two cultures and greater subjective well-being.
Figure 4

SEM with CPAI-2 Accommodation Predicting Subjective Well-being and BII Conflict and Distance as Mediators

In hypothesis 6, I predicted that the openness-related scales of the CPAI-2 Social Potency factor will have only indirect effects on SWB, with BII cultural distance as the mediating variable. I tested the structural model at the factor level (i.e., Social Potency). Social Potency factor was the latent variable and the observed indicators were the five openness-related scales that define this CPAI-2 personality factor in Cheung et al.’s (2008) results (Figure 5). Because only the specific openness-related scales were used from this CPAI-2 factor in this model, I did
not to test separate structural models for the individual scales associated with Social Potency (as the results would likely be very similar to the factor-level structural path model).

As noted in Table 3, the structural path model for Social Potency, as defined by the openness-related scales, was rejected ($p < .01$) based on the overall $\chi^2$ test. However, the fit indices suggested a fair model fit. As seen in Figure 5, the Social Potency factor, as defined by the openness-related scales, did not significantly predict cultural conflict ($\beta = -.02, p = .76$) or SWB ($\beta = .10, p = .24$). However, it did significantly predict cultural distance ($\beta = -.34, p < .01$). Participants who endorsed the openness-related traits of Social Potency (e.g., divergent thinking, being logical, novel thinking) reported significantly less distance between their Chinese and American cultures.

Both the path coefficients from cultural conflict ($\beta = -.20, p < .01$) and cultural distance ($\beta = -.42, p < .01$) to SWB were statistically significant. Participants who reported experiencing cultural conflict and cultural distance reported lesser subjective well-being. I then tested the hypothesized indirect effect by taking the product of the path coefficient relating Social Potency, as defined by the openness-related scales, to cultural distance and the path coefficient relating cultural distance to SWB. The Sobel test was statistically significant ($T = 2.42, p < .05$). As hypothesized, cultural distance mediated the relationship between the Social Potency, as defined by the openness-related scales, and subjective well-being.

I also compared the size and significance of the path coefficients relating the openness-related scales of Social Potency to SWB in models with ($\beta = .10, p = .24$) and without ($\beta = .24, p < .001$) the BII scales in the model. The results indicate that the BII scales fully mediated the relationship between the openness-related scales of Social Potency and SWB.
In Hypothesis 7, I predicted that first-generation Chinese Americans will report greater cultural conflict and cultural distance than second-generation Chinese Americans. A one-way MANOVA was conducted to examine generational differences between first-generation (N = 94) and second-generation (N = 165) Chinese Americans on the BII cultural conflict and cultural distance scales. The one-way MANOVA did not reveal a significant multivariate main effect for generational status, Wilks’ λ = .991, F (2, 256) = 1.10, p = 0.34. Because no generational effect
was found in the overall MANOVA test, I do not report the univariate effects. Therefore, Hypothesis 7 was not supported. Surprisingly, first-generation Chinese Americans, who are presumably less bicultural than second-generation Chinese Americans, did not average higher on cultural conflict and cultural distance. This seems to suggest that second-generation Chinese Americans do not experience their two cultures as more integrated and compatible than their first-generation Chinese American peers.

*Generational Differences in Interpersonal Relatedness Factor (Hypothesis 8)*

In Hypothesis 8, I predicted that first-generation Chinese Americans will average higher on CPAI-2 scales associated with the Interpersonal Relatedness factor than second-generation Chinese Americans. A one-way MANOVA was conducted to test for generational differences between first-generation ($N = 93$) and second-generation ($N = 160$) Chinese Americans on the CPAI-2 scales associated with the Interpersonal Relatedness factor. The one-way MANOVA did not reveal a significant multivariate main effect for generational status, Wilks’ $\lambda = .982$, $F(6, 246) = 0.754$, $p = 0.607$. Because no generational effect was found in the overall MANOVA test, I do not report univariate effects. Thus, Hypothesis 8 was not supported. Surprisingly, first-generation Chinese Americans, who are presumably less acculturated to American society than second-generation Chinese Americans, did not average higher on traits thought to characterize more traditional Chinese (Cheung et al., 1996).
CHAPTER FIVE

DISCUSSION

The results of the present study provided empirical evidence for the complex relationships of subjective well-being with personality and bicultural identity. The findings, with some exceptions, are consistent with past studies that demonstrate important links between personality, bicultural identity, and subjective well-being in Chinese Americans (Benet-Martinez & Haritatos, 2005; Benet-Martinez & Karakitapoglu-Aygun, 2003; DeNeve & Cooper, 1998; Miramontez, Benet-Martinez, & Nguyen, 2008). Specifically, this study examined whether or not bicultural identity integration (BII) mediated the relationship between personality and subjective well-being (SWB) in Chinese Americans.

Summary of Results

Hypothesis 1 was partially supported. Both cultural distance and conflict were negatively correlated with SWB as predicted. However, contrary to my prediction, cultural conflict, as compared to cultural distance, did not have a stronger relationship with SWB. Hypothesis 2 also received only limited support. Only cultural distance added unique prediction of life satisfaction beyond the personality traits after controlling for age, gender, and generational status, and neither cultural conflict nor distance contributed unique prediction of positive or negative affect beyond the personality traits. Hypothesis 3 was not supported because BII-Conflict did not mediate the relationship between CPAI-2 Dependability and SWB in the factor or scale-level analyses. However, CPAI-2 Dependability (and the individual personality scales) did have both direct and indirect effects on SWB via cultural distance (rather than cultural conflict). Hypothesis 4 was supported. As predicted, the extraversion-related scales of CPAI-2 Social Potency had both direct effects on SWB and indirect effects on SWB via BII-Distance. Hypothesis 5 was also
supported. CPAI-2 Accommodation and the agreeableness-related scales had both direct and indirect effects, via BII-D, on SWB. Indeed, BII fully mediated the relationship between Defensiveness and SWB and between Interpersonal Tolerance and SWB. Additionally, Hypothesis 6 was supported because the openness-related scales of Social Potency had only indirect effects on SWB via BII-Distance as a mediator. Indeed, the BII scales fully mediated the relationship between the openness-related scales of Social Potency and SWB. Lastly, neither Hypotheses 7 nor 8 was supported. That is, first-generation Chinese Americans did not average higher than second-generation Chinese Americans on the BII variables or the CPAI-2 scales associated with the Interpersonal Relatedness factor. In the following section, I interpret these results and relate them to the findings of previous studies.

Interpretation of Results and Relation to Previous Findings

Bicultural identity integration and SWB (Hypothesis 1). Consistent with past research on biculturalism and SWB, both cultural distance and cultural conflict were negatively correlated with scales defining the positive pole of SWB (i.e., life satisfaction and positive affect) and positively correlated with the scale defining the negative pole of SWB (i.e., negative affect). That is, participants who endorsed less cultural conflict and distance reported greater SWB. This result is consistent with the findings of Downie, Koestner, ElGeledi, and Cree (2004), who found that individuals reported greater SWB when they were culturally integrated (e.g., lack of cultural conflict and distance). These findings indicate that self-perceptions that one’s two cultures are not incompatible or “too far apart” from each other are important to one’s sense of well-being for bicultural individuals. However, contrary to my prediction, cultural distance correlated more strongly than cultural conflict with overall subjective well-being. Indeed, when both conflict and distance were simultaneous predictors of SWB in the SEM analysis, cultural conflict was no
longer a significant predictor of SWB. Inspection of the Pearson correlations relating cultural conflict and distance to the different components of SWB provides a more refined indication of the nature of these relationships (see Table 4). Cultural conflict, as compared to cultural distance, was a better predictor of negative affect, but a weaker predictor of positive affect and life satisfaction. That is, the key finding is not so much that cultural distance is a better predictor of SWB overall, but that cultural distance and conflict differentially predict the different components of SWB. Specifically, perceptions that one’s two cultures are different (distant) from each other has a stronger adverse impact on one’s cognitive appraisal of one’s life satisfaction, but it is the perception of conflict between one’s two cultures that has a greater impact on negative affect.

*Unique prediction of SWB by BII beyond personality traits (Hypothesis 2).* Another aim of this study was to determine whether cultural conflict and cultural distance provided unique or incremental prediction of SWB beyond the effects of CPAI-2 personality traits. This is important to determine because if BII does not add anything beyond personality traits in predicting SWB, the value of incorporating them in research on SWB is significantly reduced.

Before testing this hypothesis, I first examined whether the CPAI-2 traits, in fact, predicted the components of SWB (i.e., positive affect, negative affect, life satisfaction). This was indeed the case. Greater endorsement of most of the Social Potency traits was associated with an increase of positive affect, decrease of negative affect, and an increase in life satisfaction. CPAI-2 Social Potency resembles a blend of Big Five Openness to Experience and Extraversion. Thus, participants who endorsed more openness traits (e.g., novelty, creativity) and extraversion traits (e.g., enterprise, excitement seeking) reportedly experienced more positive emotions, less negative emotions, and more satisfaction with their lives. These Social Potency
correlations with components of subjective well-being are generally consistent with the correlations expected between the analogous Big Five dimensions and subjective well-being. Similarly, CPAI-2 Dependability resembles a blend of Big Five Conscientiousness and inverse Neuroticism. Participants who endorsed more Dependability traits (e.g., responsibility, optimism, emotional stability) reported experiencing more positive emotions, less negative emotions, and more satisfaction with their lives. Again, these relationships between CPAI-2 Dependability and subjective well-being are consistent with the relationships expected between the corresponding Big Five traits and subjective well-being. CPAI-2 Accommodation (e.g., empathy, warmth, interpersonal tolerance) is similar to the Big Five Agreeableness factor, and again showed similar correlations with subjective well-being. Specifically, Accommodation correlated inversely with negative affect and positively with life satisfaction. CPAI-2 Interpersonal Relatedness is the one CPAI-2 dimension that is relatively independent of the Big Five dimensions (Cheung et al., 2008). In general, participants who endorsed Interpersonal Relatedness traits more (e.g., social sensitivity, harmony) reported experiencing more positive emotions and life satisfaction.

In sum, the relationships found between the CPAI-2 personality traits and SWB were generally consistent with previous research using the Big Five measures (DeNeve & Cooper, 1998). This reinforces confidence in the findings of the present study, while also suggesting that researchers could consider using the CPAI-2 in lieu of Big Five measures with Chinese American populations. Use of the CPAI-2 would also have the advantage of including the Interpersonal Relatedness factor in the assessment, a dimension that is relatively independent of the Big Five and perhaps particularly relevant to Chinese populations.

Cultural distance predicted life satisfaction above and beyond the CPAI-2 personality traits, whereas cultural conflict failed to provide unique prediction of any SWB components.
beyond the personality traits. That is, individuals’ perceived dissociation (i.e., distance) between their Chinese and American cultures played a role in predicting lower life satisfaction, even after controlling for personality traits (Amiot et al., 2007; Downie, Koestner, ElGeledi, & Cree, 2004). This inverse relationship is consistent with the literature addressing biculturalism and SWB. While this finding makes sense, the failure of either cultural distance or cultural conflict to provide unique prediction of positive and negative affect beyond the prediction provided by the personality traits was not expected.

Recall, however, that Table 4 shows that both BII scales do modestly predict positive and negative affect by themselves. However, once the personality traits were controlled for in the hierarchical regression analyses, BII did not add anything new or incremental in predicting positive and negative affect. Personality traits have been shown to be strong predictors of positive and negative affect (DeNeve & Cooper, 1998; McCrae & Costa, 1991). Indeed, some personality traits (e.g., extraversion and neuroticism-related traits) are viewed by many personality psychologists as basic temperaments that underlie tendencies to experience positive and negative emotions or affects (Diener, Oishi, & Lucas, 2003; Jang, Livesley, & Vernon, 1996). This may explain why BII was unable to add anything in the prediction of positive and negative affect beyond personality traits. The BII constructs may be more socio-cultural or cognitive in nature and thus cannot add much, if anything, to the prediction of positive and negative affects because of the strong temperamental basis of the personality traits. However, life satisfaction is considered a more cognitive component of SWB (Benet-Martinez & Karakitapoglu-Aygun, 2003), which may explain why BII-D did add some unique prediction of life satisfaction beyond the personality traits.
In sum, while the results for this hypothesis were unexpected, it was still valuable to examine the role of BII in relation to SWB and personality and the test of this hypothesis added insight into the nature of the BII construct. Furthermore, although the BII scales did not have strong incremental validity beyond the personality traits in predicting the affective aspects of subjective well-being, the tests of subsequent hypotheses also argue for inclusion of the BII constructs, because BII mediated the relationships between personality and SWB.

*Integrated mediation models of personality, BII, and SWB (Hypothesis 3-6).* The present study provided support for a personality → culture model of SWB, with the BII representing the cultural component. I proposed that the CPAI-2 personality dimensions would predict BII, which in turn, would predict SWB. Overall, the BII scales mediated the relationship between various CPAI-2 factors and scales and SWB in Chinese Americans. All hypotheses were supported except for Hypothesis 3. In Hypothesis 3, BII-C did not mediate the relationship between CPAI-2 Dependability and SWB in the factor or scale-level analyses. Instead, Dependability (and its individual personality scales) had both direct and indirect effects, via cultural distance, on SWB.

Overall, BII constructs (e.g., feeling torn between two cultures, feeling that the two cultures are distant) mediated the relationship between various personality factors and traits and the psychological well-being in Chinese Americans. Chinese Americans who endorsed Dependability traits (e.g., greater responsibility, less neuroticism, less face-saving practices, self-acceptance) reported experiencing less distance (e.g., disparateness) between their two cultures, which, in turn, led to greater SWB. This might be because individuals who are more responsible and emotionally stable are better able to negotiate the distance between their two cultures. I also speculate that these individuals are less anxious about embracing two seemingly different cultures because they are more emotionally stable and self-accepting.
Additionally, Chinese Americans who endorsed to a greater extent Social Potency traits related to extraversion reported less perceived cultural distance between their Chinese and American cultures, which in turn, predicted greater psychological well-being. This might be because more outgoing Chinese Americans are better able to close the gap between their cultures by more extensive interactions with others. Similarly, Chinese Americans who described themselves as high in Accommodation traits (e.g., graciousness, tolerance, and agreeableness) reported experiencing less conflict and distance between their two cultures and greater psychology well-being. This might be because Chinese Americans who are more agreeable and gracious with others feel less torn about integrating their two cultures and are also better able to negotiate the distance between their cultures. Finally, Chinese Americans who endorsed the openness-related traits of Social Potency (e.g., divergent thinking, being logical, novel thinking) reported experiencing less distance between their two cultures. This might be because individuals who are more open to experience are more willing to engage and interact with the majority culture, which would likely reduce their perception of dissociation between their culture and the majority culture.

In sum, Chinese Americans who endorsed these CPAI-2 personality traits perceived their two cultures as less disparate from each other, which, in turn, led to greater psychological well-being. It makes sense that Chinese Americans would experience greater psychological well-being (e.g., more positive emotions, fewer negative emotions) when they feel more integrated in their bicultural identities (e.g., cohesion), and the mediation analyses show how some personality traits lead to greater integration of bicultural identities. Overall, the mediation findings in the present study were consistent with, but also extended, previous research. Previous research has supported the relationship between personality and SWB (DeNeve and Cooper, 1998) and the
relationship between bicultural identity/integration and SWB (Amiot et al., 2007). However, the literature thus far has not integrated both personality and bicultural identity in examining the relationships with SWB. Benet-Martinez and Karakitapoglu-Aygun (2003) examined cultural variables (i.e., individualism and collectivism) in the complex relationships involving personality and SWB, but did not specifically explore bicultural identity. Tests of all four of these hypotheses demonstrated at least partial mediation of the relationships between personality traits and SWB by cultural distance, and illustrated the important relationships between the CPAI-2 scales, BII, and SWB.

**Generational differences in BII (Hypothesis 7).** In an unexpected finding, first-generation Chinese Americans, who are presumably less bicultural and less acculturated than second-generation Chinese Americans, did not average higher on cultural conflict and cultural distance. I expected second-generation Chinese Americans, as compared to their first-generation peers, to experience their two cultures as more integrated and compatible. However, Benet-Martinez and Haritatos (2005) postulated that competence in mainstream American culture may contribute to the development of a “hyphenated” or integrated bicultural identity for first-generation biculturals as well. In their study, they also found that the older an individual is when coming to the U.S., the more cultural distance the individual perceives between his or her cultural identities. Cultural conflict also seemed largely independent of the acculturation factors that affect cultural distance (Benet-Martinez & Haritatos, 2005).

In a follow-up analysis, I examined the age of immigration of the first-generation Chinese Americans in my study by subtracting reported years in the U.S. from the reported age in the Demographic Questionnaire. Results revealed that, on average, the first-generation immigrants moved to the U.S. around age 14 ($M = 14.24$, $SD = 11.30$). On average, the first-generation
immigrants have resided in the U.S. for 18 years ($M = 18.31$, $SD = 9.21$). In addition, most of the participants in this study had at least a college education, suggesting that they are relatively acculturated to U.S. society. These factors most likely increased the participants’ opportunities to acculturate to the U.S., so that even first-generation Chinese Americans in the sample experienced limited cultural conflict and distance between their two cultures. Indeed, recall that, on average, the sample tended to somewhat disagree that they perceived a conflict or considerable distance or incompatibility between their two cultures.

**Generational differences in Interpersonal Relatedness traits (Hypothesis 8).** I also expected first-generation Chinese Americans, who are presumably less acculturated than second-generation Chinese Americans, to average higher on the CPAI-2 scales associated with the Interpersonal Relatedness factor. The Interpersonal Relatedness factor was originally called Chinese Tradition, which theoretically measures characteristics that are particularly salient for Chinese people (Cheung, 2007). The first-generation Chinese Americans in my sample lived in a Chinese country (e.g., Taiwan, China) before they arrived to the U.S., so they have presumably had more exposure to traditional Chinese culture. However, this hypothesis was not supported because the first-generation Chinese Americans did not differ, on average, from the second-generation Chinese Americans in endorsement of these traits.

How might we explain this unexpected result? Recent cross-cultural research has indicated that the CPAI-2 is also cross-culturally relevant and the indigenously derived Chinese constructs may not be limited to the Chinese context. For example, Lin and Church (2004) examined the Interpersonal Relatedness dimension in samples of Chinese Americans and European Americans. Their results revealed that the Interpersonal Relatedness factor is not culture-unique because it replicated fairly well in the European American sample, although
Chinese American did average higher on the factor than European Americans. Indeed, in a factor analysis in the present study, I also showed that the Interpersonal Relatedness factor could be replicated in my Chinese American sample. It is plausible that Hypothesis 8 was not supported because the first- and second-generation Chinese American participants in my study share relatively similar acculturation and bicultural experiences and have both been in the U.S. for a considerable amount of time, on average (as discussed above in relation to Hypothesis 7). Another possibility is that those Chinese who chose to immigrate to the U.S., as well as their descendants, were less traditional to begin with, which played a role in their decision to immigrate. Thus, self-selection may provide a partial explanation of the failure of the first- and second-generation participants to exhibit average differences on the Interpersonal Relatedness traits.

Theoretical and Applied Implications

Thus far, most studies have not addressed both personality and bicultural identity in relation to SWB. Past literature has illustrated the important relationships between personality and SWB and between cultural variables and SWB (e.g., Benet-Martinez & Karakitapoglu-Aygun, 2003; DeNeve & Cooper, 1998; McCrae & Costa, 1997), but have not tested integrated models. Consequently, it made sense to explore both personality and bicultural identity integration as determinants of SWB in this study. My study can contribute to integrative theory by demonstrating how BII mediates the relationship between personality traits and SWB. In addition, my results indicated that cultural distance added some incremental prediction of SWB beyond the effects of CPAI-2 personality traits. Therefore, it makes sense to incorporate BII in integrated theoretical models of SWB because BII did serve as a mediator of the personality-SWB relationship.
The study also has implications for the etic-emic issue in cross-cultural assessment. The indigenous structure of the CPAI-2 traits has replicated fairly well in Chinese Americans, suggesting that the CPAI-2 dimensions are not culture-unique. This was demonstrated in the present study and in the study by Lin and Church (2004). Also, the CPAI-2 traits predicted, for the most part, BII and SWB in an analogous manner as expected from their resemblance to the Big Five traits. This indicates that hypotheses based on the Big Five dimensions were indeed successful using an indigenous Chinese personality inventory. However, the structure of the CPAI-2 scales does not replicate all dimensions of the Five Factor Model, indicating that the organization of personality traits assessed by the indigenous measure, even in a Chinese-American sample, differs somewhat from the hypothesized universal Big Five traits. In addition, use of an indigenous Chinese personality inventory is justified because the Big Five dimensions do not encompass the Interpersonal Relatedness traits or accurately represent the openness domain in Chinese people (Cheung et al., 2008). As in Cheung et al.’s (2008) study with Asian Chinese, openness-related traits did not identify a distinct dimension in my Chinese American sample, but rather blended with extraversion-related traits on the Social Potency dimension. It has been suggested that such traits are not unique to Chinese people, for example, Lin and Church (2004) replicated the Interpersonal Relatedness dimension with European Americans. Nonetheless, the CPAI-2 is a valuable and possibly more informative tool for the assessment of Chinese people, and in this study, Chinese Americans specifically.

The results of the study have applied clinical implications. For example, the results could be utilized to guide counseling interventions with bicultural individuals. Reinforcing or developing a healthy bicultural identity may be helpful in adding positive emotions and life satisfaction to an individual’s everyday life. Although only cultural distance, not cultural
conflict, mediated the relationship between personality (as measured by CPAI-2 scales) and SWB, both cultural conflict and cultural distance individually predicted the cognitive and affective components of SWB. Therefore, psychologists, in their therapeutic work, can intervene to improve life satisfaction from a broader perspective that includes clients’ bicultural identity development in addition to their personality traits. These interventions can potentially impact clients who are struggling with cultural issues (e.g., acculturative stress) in a positive way with larger implications in the mental health field.

Strengths and Limitations of Study

As discussed previously, one of the strengths of this study was examining both personality and bicultural identity in relation to SWB. Additionally, this study focused on an ethnic group, Chinese Americans, which is under-represented in the psychological literature. Application of a cultural-specific measure of personality (CPAI-2) was another strength of the study. This study also included both cognitive and affective components of SWB.

As with all studies, this study had some limitations. First, the study used only self-report measures, so participants’ perceptions and reports of their bicultural identity and SWB were subjective and could be influenced by various response biases (e.g., acquiescence, socially desirable responding) or reference group effects that impact self-report ratings. Second, although efforts were made to recruit a wide variety of Chinese Americans, most of the participants were at least college educated and heard about this study through their university affiliation (e.g., professor, social/cultural campus organization). On average, first-generation Chinese Americans immigrated to the U.S. around age 14. As a result, variability on the key BII construct was probably more limited that it would have been had a more representative sample been obtained. Third, most of the participants identified as either first or second-generation Chinese American
so perhaps future studies can recruit across additional generational statuses. Also, some second-generation Chinese Americans (less than 10% of sample) noted in unsolicited responses to the Demographic Questionnaire that they have lived in another country before returning to the U.S. This could add to the complexity of measuring biculturalism. Fourth, the present study focused on one common conceptualization of subjective well-being, comprised of life satisfaction and positive and negative affect components. Although these components of well-being seem relevant to all human beings, other more collectivistic forms of well-being (e.g., relationship harmony, family well-being) might produce somewhat different results. Finally, as in all correlational research, the direction of causality was not definitive in the study. For example, although it is theoretically plausible to treat personality traits as basic tendencies that impact BII in the integrated SEM models (e.g., McCrae & Costa, 1997), a more cultural interpretation could propose that BII impacts personality traits (Benet-Martinez & Karakitapoglu-Aygun, 2003).

**Future Directions**

Future studies can explore other explanations or mediators of the relationship between personality and SWB. Other than the BII variables, perhaps other acculturation or cultural variables can explain or mediate the important links between personality and SWB. It may be helpful to include a measure of acculturation in addition to the BIIS-1. For this study, other demographic variables were collected but not specifically studied. Future studies should incorporate such variables like country of origin, geographical location (e.g., multicultural vs. monocultural) to examine within-group differences. Most participants also identified their country of origin as either Taiwan or China so perhaps within-group comparisons could be made. For instance, some participants requested the option of selecting “Taiwanese American” in the survey. Thus, there may be acculturation and cultural differences associated with identifying
with or growing up in Taiwan versus China or another country. Additionally, future studies should examine these processes in other U.S. ethnic groups including biracial/multicultural individuals. Employing alternative research designs such as qualitative methods would also enrich this growing body of literature. Qualitative investigations would allow participants to provide their perspectives on how bicultural identity affects their psychological well-being.

**Conclusion**

This study has important implications for research and theory in cultural (e.g., biculturalism) and personality psychology. The study showed that when exploring determinants of SWB, researchers can benefit from studying the effects of bicultural identity and culture-specific personality variables simultaneously. Thus, integrating personality and bicultural identity in mental health is an intricate but necessary and worthwhile endeavor. I strongly encourage continued attention to the variables such as BII that can predict positive psychological outcomes and be incorporated into clinical practice. This study suggests a more comprehensive and sophisticated framework to investigate life satisfaction and psychological well-being. In conclusion, this study attests that individuals reflect the larger social-cultural milieu in which each individual lives.
References


the Chinese Personality Assessment Inventory. *Journal of Cross-Cultural Psychology, 34*, 433-452.


Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO PI-R) and NEO Five-Factor Inventory professional manual*. Odessa, FL: Psychological Assessment Resources.


University Press.


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Appendix A

DEMOGRAPHIC QUESTIONNAIRE

1. Age: __________
2. Gender: _____Female _____Male
3. Are you an international student or a temporary United States resident? _____Yes _____No
4. How many years have you lived in the United States? _____years
5. How would you describe your ability to read the English language?
   _____Much Below Average
   _____Below Average
   _____Average
   _____Somewhat Above Average
   _____Much Above Average
6. How would you describe your ability to communicate with others in English?
   _____Much Below Average
   _____Below Average
   _____Average
   _____Somewhat Above Average
   _____Much Above Average
7. How would you describe your ability to communicate with others in Chinese?
   _____Much Below Average
   _____Below Average
   _____Average
   _____Somewhat Above Average
   _____Much Above Average
8. What is your highest level of education? (check one)
   _____Elementary school
   _____Middle school
   _____Some high school
   _____High school degree
   _____Some college
   _____College graduate
   _____Some graduate school
   _____Completed advanced degree (e.g., M.A., Ph.D., M.D., J.D.)
9. How would you describe your family’s socioeconomic status growing up?

_____ Much below Average
_____ Below Average
_____ Average
_____ Somewhat above average
_____ Much above average

10. What is your ethnic identification (check one):

_____ Chinese (from Hong Kong)
_____ Chinese (from People’s Republic of China)
_____ Chinese (from Taiwan)
_____ Chinese (from another country, please list ____________)
_____ Chinese American
_____ Other (please specify ____________)

11. Choose the generational status that best describes you: (check one)

_____ 1st generation = I was born in another country (e.g., China, Taiwan)
_____ 2nd generation = I was born in the U.S., and at least one of my parents was born in a country other than the U.S.
_____ 3rd generation = I was born in the U.S., both of my parents were born in the U.S., and all of my grandparents were born in a country other than the U.S.
_____ 4th generation = I was born in the U.S., both of my parents were born in the U.S., and at least one of my grandparents was born in a country other than the U.S., and one of my grandparents was born in U.S.
_____ 5th generation = I was born in the U.S., both of my parents were born in the U.S., and all of my grandparents were also born in the U.S.

12. What city/town and state are you currently living at?

____________ (name of city/town)   ____________(name of state)
### Appendix B

#### Descriptive Statistics and Intercorrelations

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<th>Variable</th>
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<th>Y</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>CD</th>
<th>CC</th>
<th>SP</th>
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A = Age, Y = Years in the U.S., E = Education, F = Family SES, G = Generational Status, CD = Cultural Distance, CC = Cultural Conflict, SP = Social Potency, DE = Dependability, AC = Accommodation, IR = Interpersonal Relatedness, PA = Positive Affect, NA = Negative Affect, SWLS = Satisfaction With Life Scale

**Correlation significant at the .01 level (2-tailed).

*Correlation significant at the .05 level (2-tailed).