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Pepperdine University
Graduate School of Education and Psychology

HOW CULTURE SHAPES PERSONALITY:
A PRELIMINARY STUDY

A clinical dissertation submitted in partial satisfaction
of the requirements for the degree of
Doctor of Psychology

by

Hing Man Amy Wong

June, 2013

Joy Asamen, Ph.D. – Dissertation Chairperson

This clinical dissertation, written by

Hing Man Amy Wong

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF PSYCHOLOGY

Doctoral Committee:

Joy Asamen, Ph.D., Chairperson

Carolyn Keatinge, Ph.D.

Reyna García Ramos, Ph.D.

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DEDICATION

It is GOD, my best friend and provider, who gives me continual strength to get through every challenge that I face in life, making the experience of living both meaningful and beautiful.

To Dr. Joy Asamen, my mentor and teacher, whose support, direction, and dedication to her profession have served as a role model for the importance of living a purposeful life guided by faith.

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To my family – thank you for trying not to make me worry about you, despite being so far away, so that I could focus on my studies.

VITA

EDUCATION

Doctor of Psychology in Clinical Psychology
Pepperdine University, Graduate School of Education and Psychology
Los Angeles, CA, USA 2013

Master of Education in Counselling Psychology
McGill University
Montreal, Quebec, Canada 2000

Bachelor of Arts in Psychology
McGill University
Montreal, Quebec, Canada 1998

CLINICAL EXPERIENCE

Pre-Doctoral Psychology Intern
Hamilton-Madison House
New York, NY, USA 2012-2013

Psychology Extern
Neuropsychological Department
Cedar Sinai Medical Center
Los Angeles, CA, USA 2011-2012

Psychology Extern
Forensic Psychiatric Admission Unit
Metropolitan State Hospital
Norwalk, CA, USA 2010-2011

Psychology Extern
Community Clinic,
Pepperdine University
Los Angeles, CA, USA 2009-2012

Mental Health Therapist
Vancouver Coastal Health Authority
Vancouver, BC, Canada 2004-2009

Multicultural Family Counsellor
Vancouver Integrated Family Program
Vancouver, BC, Canada 2000-2004

ABSTRACT

The purpose of this study was to explore the relevance of a collectivistic personality attribute indigenous to the Chinese culture to non-Asian collectivistic cultures. To measure this attribute, the CPAI-2 Interpersonal Relatedness factor scales were administered to current college students who self-identified as Mexican American, Chinese American, or Caucasian. Only less acculturated Mexican American and Chinese American participants, as measured by the ARMSA-II or SL-ASIA, respectively, were included in the analysis. Although the Mexican American and Chinese American participants did not significantly differ from one another, these two groups did significantly differ from the Caucasian participants on two scales, Traditionalism-Modernity and *Ren Qing*. The clinical implications of these findings are discussed.

Chapter I: Introduction

Psychologists often view personality characteristics as universal. For instance, Digman (1990), following up on the work of Tupes and Cristal (1961), identified five personality factors, referred to as The Big Five or Five-Factor Model, which are assumed to represent the basic structures of personality. These five personality factors include: (a) Neuroticism, (b) Extraversion, (c) Openness, (d) Agreeableness, and (e) Conscientiousness. The five factors have been analyzed by several groups of researchers and the items within each factor were found highly inter-correlated, justifying their inclusion within each factor (e.g., Costa & McCrae, 1992; Goldberg, 1993; Tupes & Cristal, 1961). Although the Big Five Model received widespread acceptance and was used by psychologists to develop theories of personality, some argued that the model did not adequately take into account the relevance of culture in the expression of personality traits (Bock, 2000; McCrae, 2001). For example, McCrae (2001) suggested that personality might be shaped by culture or vice versa, resulting in cultural variance.

Indeed, the area in which questions had been most frequently raised about the limitations and appropriateness of utilizing Western based assumptions about personality across cultures is in the assessment of personality (e.g., Butcher, Cheung, & Lim, 2003; Cheung, 2004; Geisinger, 1994; Tsai & Pike, 2000). Issues that emerge include the construct validity of using translations of personality measures (Geisinger, 1994) as well as the scale equivalence and normative equivalence of these measures (Leong, Qin, & Huang, 2008; Marsella, Dubanoski, Hamada, & Morse, 2000). But the critics also acknowledge the challenge of maintaining the conceptual

integrity of these measures as concepts may not have the same meaning across different cultural contexts (Marsella et al., 2000).

In response to these criticisms, Cheung and her colleagues (1996) developed an indigenous personality instrument, the Chinese Personality Assessment Inventory (CPAI), for use with both normal and clinical populations of Chinese people. The authors took into account both etic (i.e., universal) and emic (i.e., indigenous) considerations in its development in an attempt to minimize the validity threats that were raised by critics of the MMPI. In the development of the CPAI, one factor, Interpersonal Relatedness, has emerged as an element of personality structure that appears indigenous to the Chinese people and is omitted from personality measures based in Western personality theories (Cheung, 2004; Cheung, Cheung, Wada, & Zhang, 2003; Cheung, Fan, & To, 2008; Cheung et al., 2001). The personality traits associated with this factor are indigenous to a collectivistic cultural context (Cheung et al., 2008). Hence, it is no surprise that cross-cultural research with other Asian nations that subscribe to collectivistic views, such as Japan and Korea, support the distinctiveness of the Interpersonal Relatedness factor of the CPAI (Cheung, 2009, as cited in Cheung, van de Vijver, & Leong, 2011). Moreover, there is some evidence that these collectivistic traits may also be relevant in a Western cultural context, for example among Asian Americans and European Americans (Cheung, 2009, as cited in Cheung et al., 2011; Cheung, Cheung, Wada, et al., 2003; Cheung et al., 2001; Lin & Church, 2004). Therefore, this dissertation is proposing to further examine the applicability of Cheung et al.'s (1996) Interpersonal Relatedness factor for understanding non-Asian collectivistic

cultures. This appears an important issue to study as Latin American, Asian, and African cultures, cultures typically associated with collectivism, make up a substantial portion of the world in comparison to North America and Northern and Western European cultures that are more frequently identified as individualistic in orientation (Triandis, 1989).

To provide an understanding for the basis of this proposed investigation, the following bodies of literature are reviewed: (a) the relationship of culture to personality theories, (b) the challenges of assessing personality across diverse cultures, (c) NEO Personality Inventory, (d) collectivism as a cultural value that influences personality traits, and (e) research with the CPAI and the CPAI-2.

Culture and Personality Theories

Personality is a topic studied by different disciplines, including psychology, sociology, and anthropology. In psychology, traits associated with personality structure have been examined by Allport, Cattell, and Eysenck (Boyle, Matthews, & Saklofske, 2008a), and personality traits are viewed as universal and descriptive of all cultures (Costa & McCrae, 1992). However, this point of view has been challenged by other disciplines. Anthropologists and sociologists, for example, believe that culture shapes personality; hence, culture cannot be overlooked in the study of personality (Bock, 2000). Cross-cultural psychologists have studied the relationship between culture and personality since the 1960s (Chiu, Kim, & Wan, 2008). Although they agree that trait theories provide a basic understanding of personality structure, ignored are the cultural variants among the traits (McCrae &

Costa, 1997). The following discussion considers both the universal and cross-cultural perspectives.

Universal perspectives. The Five-Factor Model (FFM) is widely accepted for understanding the structure of personality (McCrae & Costa, 1997). The FFM does not purport to be a theory of personality but rather is a model for the structure of personality traits. However, the FFM has been the basis for several personality theories such as The Five Factor Theory, Cattell's factor-analytic theory, and HEXACO model (Ashton & Lee, 2008; Cattell & Mead, 2008), as well as the development of personality measures such as Myers-Briggs Type Indicator (MBTI) and NEO-PI-R (Costa & McCrae, 2003). The popularity of the FFM in the past 25 years has much to do with research that indicates these traits are universal (Costa & McCrae, 2009). For example, Bouchard and Loehlin (2001) discuss studies of the heritability of personality traits. In other words, if these traits are genetically transmitted and all human being share the same genome, it can be argued the five factors of personality are stable and universal among all people. Hence, the FFM may serve as a good predictor of behavioral patterns, but it may be less effective in predicting specific behaviors (Costa & McCrae, 2009). This latter observation may limit the usefulness of the FFM in understanding the individual needs of clients necessary to plan appropriate interventions (Boyle et al., 2008a).

In order to understand how a person thinks, acts, feels, and behaves, Stankov and Lee (2008) argue that one must consider the individual's values, and values are the product of one's culture; therefore, some personality psychologists have begun to examine the relationship of culture to personality.

Cross-cultural perspectives. According to Chiu et al. (2008), “culture and personality research reached its peak in the social sciences when Kluckhohn and Murray published *Personality in Nature, Society, and Culture* in 1948” (p. 124). However, research on the intersection of culture and personality by personality psychologists declined after the controversial national character studies were criticized for perpetuating national stereotypes; despite the criticism, culture researchers continued examining the relationship of culture to personality.

From the 1960s, cross-cultural psychology was influenced by anthropology, and cross-cultural comparisons became a major research emphasis in personality studies (Chiu et al., 2008). According to Church (2001), there are four approaches for understanding the role of culture to personality: pan-cultural, indigenous, evolutionary psychology, and cultural psychology. The pan-cultural and evolutionary psychology approaches focus on universalism. From a pan-cultural perspective, personality shapes the character of a culture. Evolutionary psychologists view personality traits as evolved mental structures that are selectively activated by different cultures. In contrast, indigenous psychologists and cultural psychologists subscribe to a perspective grounded in cultural relativism so they believe personality is a cultural construction. The ontological assumption that underlies how personality is understood results in the development of personality measurements that reflect this difference.

Assessing Personality across Diverse Cultures

Early in its history, the study of personality was of interest to psychologists in North America and Europe; yet, there did not exist a standardized way to assess

personality, although informal assessment methods existed. For instance, Woodworth, in 1919, used the Personal Data Sheet to examine personality characteristics and Jung used word association techniques to assess personality functioning (Boyle et al., 2008b).

In the assessment of personality, Saucier (2008) believes there is no consensus on how personality is operationally defined; there is no agreement on whether traits (attributes) can be distinguished from temperament and whether personality is “a set of attributes characterizing an individual” or “the underlying system that generates the set of attributes” (p. 29). For example, Funder (1997) defined personality as the array of attributes that are psychological in nature, which are ascribed to individuals and stable over time. Whereas, Saucier (2008) defined personality in sociological terms as “attributes associated with the role one assumes or the status one has achieved in society [attitudes]...Such social effects represent a person’s social stimulus value” (p. 30). Similarly, temperament was defined by Strelau and Zanadzki (2008) as, “a set of relatively stable personality traits present since early infancy in people and animals” (p. 352). Moreover, Eysenck and Eysenck (1985) added that temperament traits are universal, and although variation occurs by culture and demographic characteristics, these traits exist among all human beings. Hence, the issue of whether clients are better served and understood if testing is approached from an etic versus an emic perspective is discussed.

Etic approach. According to van de Vijver and Hemert (2008), “an etic approach of personality has the aim of developing a single model that captures all features of personality across the cultures of a study” (p. 65). Given the biological

basis of personality structure assumed among etic thinkers, nation, culture, time, and sociodemographic difference do not influence the measurement of temperamental traits (Furnham, Eysenck, & Saklofske, 2008). Therefore, temperament inventories were designed with the assumption of their universal applicability (Eysenck & Eysenck, 1985). The most popular of the standardized temperament assessments include the Revised NEO Personality Inventory (NEO-PI-R) and the Eysenck Personality Questionnaire (EPQ). To establish the universal utility of these measures, these instruments have been translated into different languages for studies conducted in other countries. The results of the cross-cultural studies indicate that temperamental traits are universal (Barrett, Petrides, Eysenck, & Eysenck, 1998). Despite these findings, van de Vijver and Leung (1997) critiqued the etic assessment approach as neglecting the culture-specific manifestations of traits that may exist in some nations, which may result in inaccurate personality findings.

Etic approach. As Strelau and Zawadzki (2008) stated, “the choice of the etic approach seems to be reasonable taking into account the universal nature of temperament; however, the idea of a simple translation of the instrument developed in one culture seems to be inappropriate” (pp. 366-367). In other words, by simply translating an instrument from one language into another, the validity of the instrument may have been compromised.

van de Vijver and Leung (1997) cite three types of biases that can be potentially introduced if simple translations of instruments are assumed culturally sensitive. The first one is construct bias, which occurs when the construct measured

is not manifested identically across groups. The second challenge is a method bias, which refers to all sources of methodological biases. Finally, an item functioning bias occurs when the average score on the test favor one cultural group over another due to background or geographic differences. Because of these concerns, Strelau and Zawadzki (2008) suggested that temperament inventories be comprised of culture-common elements and/or culture-specific manifestations. Hence, an indigenous or emic approach that takes into account cultural context is recommended by cross-cultural psychologists. This observation has resulted in the development of personality measures, such as the Cross Cultural Personality Assessment Inventory (CPAI-2), that are designed for non-Western cultural groups (Cheung, Cheung, Wada, et al., 2003).

NEO Inventories

The NEO Inventories have been translated into more than 40 languages, and have been used for both clinical and research purposes around the world (Costa & McCrae, 2009). These Inventories were the first set of instruments designed to measure the personality trait structure delineated in the FFM. The development of the NEO was influenced by data collected with the Sixteen Personality Factors Questionnaire (16PF) developed by Cattell and his colleagues. The NEO has undergone several revisions since the original NEO Inventory, which includes the NEO Personality Inventory (NEO-PI), NEO Five-Factor Inventory (NEO-FFI) that is a brief 60-item version of the NEO, 240-item Revised NEO Personality Inventory (NEO-PI-R), and NEO-PI-3 that is anticipated for release in the near future (Costa & McCrae, 2009; McCrae & Costa, 2008). It is an instrument often used in validation

studies for personality measures developed for non-Western cultural groups, such as the CPAI-2 (Cheung et al., 2008; Cheung et al., 2001; Cheung et al., 2011) and the Japanese Five-Factor Personality Questionnaire (Tsuji et al., 1997, as cited in Cheung, Cheung, Wada, et al., 2003).

NEO-PI-R and cross cultures. Investigations have offered evidence to support the cross-cultural applicability of the FFM personality trait structure in a number of diverse cultures, including Belgium, England, Germany, the Netherlands, USA, Italy, Spain, Croatia, Czech Republic, Slovakia, Israel, Hungary, and Japan (Hendriks et al., 2003; Konstabel, Realo, & Kallasmaa, 2002; Poortinga, Van de Vijver, & Van Hemert, 2002; Rolland, 2002). However, other researchers have indicated that the Openness to Experience (O) trait may vary among cultures, which is more sensitive to cultural context and related to the interpersonal sphere (Church & Katigbak, 2002; Hrebickova et al., 2002; McCrae, Costa, Pilar, Rolland, & Parker, 1998; Rolland, 2002). The NEO-PI overlooked how language may influence how the traits are operationally defined, i.e., some cultures may not have the vocabulary to describe some traits, as well as how traits are expressed may vary among cultures (Costa & McCrae, 2009; Gulgoz, 2002; Hrebickova et al., 2002; McCrae, 2002; Piedmont, Bain, McCrae, & Costa, 2002).

Collectivism and Personality

According to Hofstede (1991), collectivism is a construct that depicts “societies in which people from birth onwards are integrated into strong, cohesive ingroups, which throughout people’s lifetime continue to protect them in exchange for unquestioning loyalty” (p. 51). Moreover, cultures “are wholes, and their

internal logic cannot be understood in the terms used for the personality dynamics of individuals” (Hofstede, 1980, p. 31). Other scholars have concurred that collectivism is a construct that is most relevant at a culture-level rather than at an individual-psychological level (Katigcibasi, 2004; Kim, Triandis, Kagitcibasi, Choi, & Yoon, 2004). Hence, Hofstede (1980) argues that cross-cultural comparisons are only valid when data are collected with instruments developed to assess the culture as a whole; whereas data on individuals, such as attitude, values, and behaviors, should be limited to within-culture analysis to avoid an ecological fallacy introduced by interpreting individual behavior based on a particular cultural system. In other words, Hofstede and others believe in collectivistic cultures, the construct of culture describes the collective while personality depicts the individual. Hence, a question pertinent to this dissertation arises: Can an attribute integral to a number of cultures, such as collectivism, which influences the psychological make-up of individuals within these cultures, undergo a valid cross-cultural examination?

To answer this question, it is important to consider three points. First, there is no denying the way we are socialized within a particular cultural system, whether individualistic or collectivistic, influences the manifestation of personality attributes and behavioral patterns (Hofstede, 2001). Moreover, Triandis (2001) refers to the environmental factors that shape culture, which, in turn, influence personality. These factors include child rearing practices, geographical location, historical influences, and resources (Triandis, 2001).

The second point is although we may be raised in either a culture that tends toward individualism or collectivism, at the individual level, we may possess

attributes and exhibit behaviors associated with both constructs to varying degrees (Mishra, 2004; Sinha & Tripathi, 2004). The degree to which an individual leans toward individualism or collectivism, despite how he or she is raised, may be mediated by factors such as education level, the environment in which one is raised, and age (Mishra, 2004).

And finally, the third point is the importance in distinguishing the constructs, i.e., individualism versus collectivism, from the behavioral manifestation of these constructs. In other words, how does one operationally define or make observable whether an individual's typical behavior leans toward individualism, collectivism, or both directions? Triandis (2001) refers to behaviors that are allocentric, i.e., the individual favors the goals of the collective over personal goals, and idiocentric, i.e., the individual focuses his or her attention on personal goals. Therefore, in the measurement of personality characteristics, the ability to assess for allocentric and idiocentric behaviors provides a means by which to examine the validity of cultural constructs such as collectivism.

CPAI and CPAI-2

The Chinese Personality Assessment Inventory (CPAI) was developed by Cheung et al. (1996) in response to the import of Western-based personality assessments that lacked indigenous personality traits critical to characterizing the disposition of the Chinese people (Cheung, Cheung, Wada, et al., 2003). Cheung and her team believed in the importance of taking both the etic and the emic into consideration in the development of the CPAI. The identification of the universal personality traits for the CPAI were influenced by Western personality tests such as

the Chinese translation of the MMPI and the NEO-PI that is based on the FFM (Cheung, Cheung, Wada, et al., 2003; Cheung et al., 2001). The Chinese-specific personality traits were derived by triangulating data from how the Chinese people described themselves through their novels and proverbs; an informal survey conducted by students of people in Hong Kong in which self-descriptions were collected; a pilot study with professionals in Hong Kong and the People of Republic China (PRC) in which the participants were asked to describe others using personality adjectives; and the psychological literature on Chinese personality constructs (Cheung et al., 1996). The initial set of Chinese specific personality traits included: (a) Harmony (equilibrium, contentment, and avoidance of conflict in interpersonal relationships), (b) *Ren Qin* (relationship expectations), (c) Modernization (attitudes toward traditional Chinese values), (d) Thrift-Extravagance (use of material resources), (e) Defensiveness/ Ah-Q Mentality (rationalizes to conceal one's sense of inferiority), (f) Graciousness-Meanness (tolerance of others), (g) Veraciousness-Slickness (trustworthiness), (h) Face (maintaining social standing or reputation), and (i) Family Orientation (family unity) (Cheung et al., 1996). In addition, among the clinical scales, Somatization was identified as including Chinese-specific elements.

The CPAI was standardized in the early 1990s with a randomly selected sample of 2,444 participants, whose ages ranged from 18 to 65 years. Of the total number of participants, 1,998 participants were from the seven major regions of the PRC and 446 participants were from Hong Kong (Cheung, Cheung, Wada, et al., 2003). The original version of the CPAI was composed of 22 non-clinical personality

scales and 12 clinical scales (Cheung et al., 1996). The reliability and validity of the CPAI were examined. The test-retest correlations were ranged and ranged from 0.56 to 0.94, with most the personality scales .70 or greater and the clinical scales .60 or greater.

To examine the underlying personality structure of the CPAI, factor analyses were conducted and yielded four normal personality scales (Dependability, Chinese Tradition, Social Potency, and Individualism) and two clinical scales (Emotional Problems and Behavioral Problems) (Cheung et al., 1996). In the next wave of investigations, the personality structure of the CPAI was examined for its alignment with the FFM and its Western assumptions about personality structure by engaging in a joint factor analysis with the CPAI and NEO-PI-R (Cheung, Cheung, Wada, et al., 2003; Cheung et al., 2001; Cheung et al., 2011). The results of the confirmatory factor analysis indicate that the factors associated with the CPAI and NEO-PI-R were confirmed for four of the five factors, one factor was unique to the NEO, and a sixth factor unique to the CPAI was identified, i.e., Interpersonal Relatedness (Cheung et al., 2001). Based on these results, Cheung et al. (2001) suggest a six-factor model might better describe the indigenous personality structure of the Chinese people.

The CPAI was first translated to English for a dissertation (Gan, 1998, as cited in Cheung, Cheung, Leung, Ward, & Leong, 2003) and an examination of this version was undertaken in conjunction with Gan's dissertation research (Cheung et al., 2001). The validation procedure followed with the Chinese version of the CPAI was used in examining the English version to determine if the six-factor personality structure uncovered with the Chinese people would hold true for a non-Chinese population.

In this study, a cross-section of college students in the state Hawai'i who were Caucasian or a member of an Asian ethnic group were administered the English version of the CPAI and NEO-FFI, which is an abridged version of the NEO-PI-R (Cheung et al., 2001). The findings of the study indicate that for this population, the FFM appears a better fit when compared to the findings with the Chinese sample. But it is also important to note that the Interpersonal Relatedness factor still emerged as distinctive. Although some might argue that the inclusion of both Caucasian and Asian ethnic groups might raise questions about the distinctiveness of the factor, given the strong influence of Asian cultures in the state of Hawai'i, the sense of personhood of residents may be atypical in regards to Western culture.

Additional research with the English version of the CPAI was conducted with a sample of Singaporean Chinese, for whom English is an official language (Cheung, Cheung, Leung, et al., 2003). The same validation process used with the Chinese language CPAI and previous research with the English version of the inventory was followed. In this study, the factor loading was similar to those found with the Chinese population, including the uniqueness of the Interpersonal Relatedness factor, supporting the equivalence of the translation from Chinese to English. After establishing the equivalence of the two language versions of the CPAI, attention turned to further examining the fit of the Interpersonal Relatedness factor in a Western culture (Cheung, Cheung, Leung, et al., 2003). For this study, a sample of Caucasian Americans from a Midwestern university served as participants. The findings indicate that loading on the more universal personality factors were similar between the Chinese sample and the Caucasian American sample, but the latter

group was found to score lower on the traits associated with the Interpersonal Relatedness factor.

In a study of the English version of the CPAI with samples of Chinese American and European American university students, it was found that the Interpersonal Relatedness factor generalizes to both Chinese and European Americans (Lin & Church, 2004). But this factor is moderated by acculturation level; hence, this factor is more descriptive of less acculturated Chinese Americans when compared to more highly acculturated Chinese Americans and European Americans.

According to Cheung, Cheung, Wada, and Zhang (2003), the emergence of Interpersonal Relatedness as a unique factor could be related to the interdependent nature of social relationships within the context of collectivist cultures that subscribe to Confucian thought. Given these initial findings, the CPAI was renamed the Cross-Cultural Personality Assessment Inventory (CPAI-2). One study has examined the English translation of the CPAI-2 with three ethnic samples in Singapore – Chinese, Malays, and Indians – comparing these groups to the Chinese normative data (Cheung, Cheung, Howard, & Lim, 2006). Overall, it was found that the Malay and Indian samples were more similar to the Chinese normative sample than the Chinese Singaporeans. The researchers acknowledge the limitations of their investigation and recommend further research.

It is the intent of this study to further examine the cross-cultural relevance of the CPAI-2 by administering the Interpersonal Relatedness scale to a non-Asian culture assumed to share in a collectivistic worldview.

Why Compare Mexican Americans to Chinese Americans?

Emigrants of Mexico and China have a long history of migration from their countries of origin to the United States (Wong, 2006). Descendants of Mexico and China constitute the largest number of Latino and Chinese immigrants, respectively, in the U.S. (Knight et al., 2010; Wong, 2006). Buriel and De Ment (1997) report natives of Mexico and China often emigrate to the U.S. to improve their economic condition, and typically arrive with limited to no mastery of the English language (Wong, 2006); although the spending practices of the two groups tend to be distinct (Medina, Saegert, & Gresham, 1996; Wang & Lin, 2009).

Upon arriving in the U.S., immigrants of Mexico and China do share the experience of acculturation (Buriel & De Ment, 1997; Wong, 2006). Acculturation refers to the process of change in the values, practices, and cultural identity made by individuals who migrate from one culture to another (Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Unlike some immigrant groups, immigrants of Mexico and China typically have the option to settle in relatively identifiable, densely populated ethnic communities with whom they share cultural values, beliefs, and practices, allowing for maintaining their native culture orientation (Buriel & De Ment, 1997).

In addition to sharing a similar immigration history to the U.S., Mexican Americans and Chinese Americans share a worldview based on collectivist values. According to Triandis (1995), cultures based on collectivism emphasize the importance of relationships, feel a sense of obligation to the in-group, and consider the good of the group over personal interest. Those values are usually found among people in China and other Asian countries because “many Asian cultures have

distinct conceptions of individuality that insist on the fundamental relatedness of individuals to each other” (Markus & Kitayama, 1991, p. 224). Although these collectivistic values are viewed as Asians characteristics, Carter, Yeh, and Mazzula (2008) describe that “Latino cultural values are also primarily influenced by collectivist values which emphasize interpersonal harmony and the good qualities in human nature” (p. 15). Their findings are consistent with the observations of Rinderle and Montoya (2008) and Sue and Sue (2002). For example, Rinderle and Montoya indicate Latinos demonstrate familistic tendencies that are akin to collectivism or a group orientation; while Sue and Sue refer to the importance placed on family unity and loyalty, cooperation over competition, and interpersonal relationships. Similar familistic observations have been reported for Chinese Americans (Chia et al., 1994) and Asian Americans (Sue & Sue, 2002).

In an international study of family values by Chia et al. (1994), cultural differences were found when comparing college students from Mexico and China to Caucasian American college students. Specifically, Caucasian American college students scored lower in family solidarity than their Mexican and Chinese counterparts. The researchers explain the findings as the difference between coming from an individualist orientation (Caucasian American students) versus a collectivist orientation (students from Mexico and China). A similar finding was found in a study by Cooper, Baker, Polichar, and Welsh (1993). In this study, American college students of Mexican, Chinese, Vietnamese, and Filipino descent endorsed familistic values more often when compared to American students of European descent. Finally, Hardway and Fuligli (2006) and Fuligni, Tseng, and

Lam(1999) found that Mexican American and Chinese American adolescents whose parents were immigrants presented a greater sense of family obligation than those adolescents from European American families. Moreover, some researchers hypothesize that these observed differences may be related to acculturation, with the less acculturated adhering more strongly to these cultural values than the more acculturated members of these ethnic groups (Buriel & De Ment, 1997; Knight et al., 2010; Schwartz et al., 2010).

The decision to compare the traits associated with Interpersonal Relatedness with data from Mexican Americans and Chinese Americans is based on three major considerations. First, on theoretical grounds, to study the potential cross-cultural applicability of an instrument designed to measure collectivism requires that this construct is valued by the groups under examination. As the literature indicates, collectivism has been evidenced in and consistently associated with both Asian and Latino cultures (Chia et al., 1994; Cooper et al., 1993; Rinderle & Montoya, 2008; Sue & Sue, 2002).

Second, a common criticism of multicultural research is the ambiguous way in which ethnic communities are described and studied (Saw & Okazaki, 2009). Studies often refer to “Asian Americans” or “Latinos,” which does not take into account the diverse cultural and immigration experiences of these heterogeneous populations (Phinney, 1996). In this study, only Chinese Americans and Mexican Americans will be considered for study inclusion, fully acknowledging that this decision is not ideal as both these ethnic groups are diverse in themselves. But since the instrument used to measure Interpersonal Relatedness was initially developed

for use with the Chinese culture, Chinese Americans were selected for the Asian group; and due to similar values and immigration experiences of Mexican Americans with the Chinese Americans, this particular Latino group was selected.

Finally, the decision to confine the study to Chinese Americans and Mexican Americans is based on practical considerations related to access. According to the U.S. Census Bureau (2010), approximately 16.3% of the general population identifies as Hispanic or Latino, and among the Hispanic/Latino cohort, 63.0% of this population is of Mexican descent; in the state of California, 37.6% of the population identify as Hispanic or Latino, with 81.5% of the Hispanics/Latinos identifying specifically as of Mexican descent, while in Los Angeles County, 47.7% of the population identifies as Hispanic or Latino, and among the Hispanic/Latino population, 74.9% identify as of Mexican descent. The Asian subgroups in the U.S. composes 4.8% of the general population, with 22.8% of the Asian population who identify of Chinese descent; in the state of California, Asians make up 13.0% of the population, with 25.8% of the Asian population of Chinese descent, and in Los Angeles County, Asians compose 13.7% of the population with 29.2% of the Asian population of Chinese descent (U.S. Census Bureau, 2010). Therefore, the ability to recruit an adequate sample of participants from these particular ethnic groups is more plausible.

Research Questions and Hypotheses

In order to explore the relevance of collectivistic personality attributes in non-Asian cultures as defined in the CPAI-2 (Interpersonal Relatedness factor), the following research questions were examined and hypotheses were tested:

1. Do less acculturated Mexican Americans, less acculturated Chinese Americans, and Caucasian Americans significantly differ on the following CPAI-2 personality scales of the Interpersonal Relatedness factor: (a) Traditionalism vs. Modernity, (b) *Ren Qing*, (c) Social Sensitivity, (d) Discipline, (e) Harmony, and (f) Thrift-Extravagance?

Hypothesis 1.1: Less acculturated Mexican Americans and Chinese Americans will score significantly higher on Interpersonal Relatedness factor scales when compared to Caucasian Americans.

Hypothesis 1.2: Less acculturated Mexican Americans will not score significantly higher on Interpersonal Relatedness factor scales when compared to less acculturated Chinese Americans.

2. Among the three groups of participants, what is the rank order of the groups, from highest to lowest, relative to the Interpersonal Relatedness factor scales?

Hypothesis 2.1: The less acculturated Chinese Americans will score highest on each factor followed by the less acculturated Mexican Americans, while Caucasian Americans will score the lowest on each factor.

It is important to note the original set of research questions proposed comparing five groups, which, in addition to the groups referred to above, included highly acculturated Chinese Americans and highly acculturated Mexican Americans. The reduction from five groups to three groups does not alter the conceptual basis for the study, but the inability to recruit highly acculturated Chinese American

participants necessitated this decision. The details regarding the reduction from five groups to three groups are offered in the Method chapter, Methodological Limitations section.

Chapter II: Method

This study used a causal-comparative research approach (Mertens, 2005). The independent variable is the ethnicity of the participants with three levels – less acculturated Chinese Americans (LAC), less acculturated Mexican Americans (LAM), and Caucasian Americans (CA). The dependent variables are the scales for the traits associated with the Interpersonal Relatedness factor.

Participants

For this study, participants were recruited through one of two methods. One recruitment approach was through the dissemination of a brochure and making oral presentations to classes and student groups at Pepperdine University and at community organizations and churches (see Appendices A and B). The second approach was through posting a request for research volunteers on listservs of Pepperdine student groups and other organizations up to three times, with the permission of each group or organization (see Appendix C).

The following criteria for inclusion had to be met: (a) at least 18 years of age, (b) a student in a community college or a college/university, (c) the ability to read English, and (d) access to email. College student status was a criterion for inclusion as the likelihood of English proficiency and access to email are increased with this population. LAC and LAM groups were identified after-the-fact by scores from the acculturation measures that were administered. Moreover, Caucasian Americans who report speaking a language other than English in their home, emigrated to the U.S. from another country, and did not attend elementary through high school in the U.S., were excluded from the analysis.

Among the 24 Chinese American participants, 16 were less acculturated, four moderately acculturated, and four highly acculturated; for the 15 Mexican American participants, six were less acculturated, two moderately acculturated, and seven highly acculturated. Participants who were highly acculturated and moderately acculturated were not included in the analysis. The recruitment also yielded a total of 40 Caucasian Americans. The number of participants who were entered into the analysis was: 9 LAM, 16 LAC, and 40 CA. The mean age of each group is: (a) 30.8 years ($SD = 8.80$) for LAM, (b) 24.0 years ($SD = 4.83$) for LAC, and (c) 32.2 years ($SD = 10.65$) for CA. Tables 1 and 2 provide a summary of the remaining sociodemographic and immigration characteristics of the participants.

Table 1

Sociodemographic Characteristics

	LAM ($n = 6$)	LAC ($n = 16$)	CA ($n = 40$)
Gender			
Female	5	8	36
Male	1	8	4
Education level			
Undergraduate	0	3	0
Graduate	6	10	40
Community college	0	3	0
Language spoken in home			
Chinese	n/a	16	n/a
English	3	n/a	40
Spanish	3	n/a	n/a

(continued)

Table 1

Sociodemographic Characteristics

	LAM (n = 6)		LAC (n = 16)		CA (n = 40)	
	Mother	Father	Mother	Father	Mother	Father
Parent education						
Less than 7 th grade	1	1	0	0	0	0
Junior to middle	0	1	1	2	1	0
High school	1	1	3	5	1	2
GED	1	2	4	2	7	8
Some college	0	0	1	0	6	4
Community/ technical college	2	0	2	2	8	4
Bachelor's degree	0	1	5	2	7	7
Master's/doctoral degree	1	0	0	3	10	14
No response	0	0	0	0	0	1
Parent occupation						
Executives/major professionals	0	0	0	5	5	11
Business professionals	0	0	3	4	11	8
Managers	0	0	1	3	7	5
Technicians	1	0	2	0	4	5
General clerical/ sales work	0	0	1	0	2	1
Crafts/trades	0	1	0	0	0	5
Machine operators/ specialized skilled workers	2	2	0	2	2	3
Non-specialized skilled workers	1	2	1	1	1	0
Limited/no training	0	0	0	0	0	0
No occupation/ unemployment	1	0	7	0	7	0
No response	1	1	1	1	1	2

Table 2

Immigration Related Characteristics

	LAM ^a (<i>n</i> = 6)	LAC (<i>n</i> = 16)
Born in U.S.		
Yes	5	0
No	1	16
Age of immigration		
<i>M</i> (in years)	24.00	19.42
<i>SD</i>	n/a	3.96
Residence in U.S.		
<i>M</i> (in years)	4.00	4.85
<i>SD</i>	n/a	3.80
School attendance in U.S.		
Elementary	5	0
Middle school	5	0
High school	5	2

Note. Only the data for the low acculturated Mexican American and low acculturated Chinese American participants were provided since Caucasian participants who were born outside the U.S. were excluded from the study.

^aOnly one low acculturated Mexican American participant was born outside the U.S.; hence, there were no *SDs* to report for the age of immigration and residence in U.S. variables; this participant also did not attend elementary through high school in the United States.

Instruments

Although some of the instruments described below are available in languages other than English, for the purpose of this study, the English version was used.

Demographic questionnaire (see Appendix D). Each respondent was asked to complete a demographic questionnaire, which includes age; gender; self-identified ethnicity; educational level; place of birth; if born in another country, the number of years in the U.S.; language preference; and socioeconomic status. The questions for the educational and occupational levels of the parents or caretakers

were based on the categories suggested by Hollingshead (1975). These data were used to make the determination for study inclusion and to provide a demographic profile of the participants.

Brief Relational, Individual, and Collective Self-Aspects (Brief RIC)

Scale. The Brief RIC Scale (Hardie, 2009), based on the RIC developed by Kashima and Hardie (2000), measures three aspects about the self: individual self, relational self, and collective self. Studies regarding self-aspects have been conducted with the 30-item RIC in which college students in Australia, Mainland U.S. (non-Asian American students only), Hawaii, Japan, and Korea were compared (Kashima et al., 1995). The Brief RIC Scale consists of nine items (rather than the original 30 items), with three items for each self-aspect subscale. Participants are asked to respond using a 10-point scale (ranging from 0 = Strongly Disagree to 10 = Strongly Agree) regarding the degree to which the respondent agrees with each item.

In a validation study, Hardie (2009) found Cronbach's alphas greater than .65 for the subscales; statistically significant partial correlations supported convergent validity for the subscales of the Brief RIC with those of the original version of the RIC. Moreover, the three factors—individual, relational, and collective—were corroborated.

The RIC score was initially going to be entered as a covariate, but with the inclusion of only the less acculturated groups and the exclusion of the highly acculturated groups, the need to account for the varying influence of collectivistic values was minimized. Moreover, the need to use a nonparametric test to analyze

the data did not allow for the entry of a covariate into the analysis. Table 3 presents the average RIC score for the LAM, LAC, and CA groups for each factor.

Table 3

RIC Mean Scores by Ethnic Group

	LAM	LAC	CA
Individual	28.00	24.30	27.30
Family	29.67	28.50	28.50
Ethnic group	27.83	20.83	14.50

Acculturation Rating Scale for Mexican Americans II (ARSMA-II). ARSMA-II was developed by Cuellar, Arnold and Maldonado in 1995. The ARSMA-II was derived from the original Acculturation Rating Scale for Mexican Americans (ARSMA; Cuellar, Harris, & Jasso, 1980). The questions asked are about language use and preferences; ties to one's ethnic heritage as exhibited by behaviors and patterns of consumption as well as social associations and interactions; and ethnic identity. This instrument is available in Spanish and English, but only the English version was administered. The ARSMA-II contains two scales; the first scale measures integration and assimilation (focuses on orientation based on behavioral indices) whereas the second scale measures separation and marginalization (focuses on the feelings associated with one's orientation). For the purposes of this study, only the first scale was administered. The first scale consists of 30 items, which provides a Mexican Orientation Score (MOS) and an Anglo Orientation Score (AOS). By subtracting the mean MOS score from the mean AOS score, five different

acculturation levels of Mexican Americans are distinguished. The five levels are: (a) very Mexican oriented, (b) Mexican oriented to approximately balanced bicultural, (c) slightly Anglo oriented bicultural, (d) strongly Anglo oriented, and (e) very assimilated or Anglicized. For this study, only participants who met either Very Mexican oriented/Mexican oriented to approximately balanced (less acculturated group) were included in the analysis. Respondents are asked to indicate the degree to which each item is descriptive of their orientation on a five-point Likert scale ranging from 1=Not at all to 5=Almost Always/Extremely Often.

Cuellar et al.'s (1995) study showed that ARSMA-II has good internal consistency and concurrent validity, with coefficients of 0.87 and 0.89, respectively. Furthermore, correlation between acculturation and generational status was 0.61. Therefore, ARSMA-II has reasonable levels of reliability and validity.

Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA). The SL-ASIA consists of 21 multiple-choice questions and was developed by Suinn, Rickard-Figueroa, Lew, and Vigil in 1987. Behaviors, language acculturation, identity, friendship choice, generational level or geographical history, and attitude were asked within those 21 items. A mean score is determined by totaling across the items and dividing by 21. Low scores reflect high Asian identification and high scores suggest Western identification. The middle score reflects biculturalism. For this study, Chinese American participants who exhibited low scores were included in the analysis. The Cronbach's alpha among items is .91 for the 21-item instrument, which implies that the instrument has a high level of internal consistency (Suinn, Ahuna, & Khoo, 1992). According to Ponterotto, Baluch, and Carielli (1998), a

review of studies using the SL-ASIA exhibited coefficient alphas ranging from .68 to .91, with a mode of .80. It is important to note that the samples used in these studies were predominately college students. Construct validity was examined by factor analysis, convergent methods, and criterion-related validity. Ponterotto et al.'s review indicates that further examination of the theoretical basis of the SL-ASIA is needed before a more robust set of factors can be identified, significant correlations exist for the SL-ASIA and other classic indicators of acculturation (e.g., generation level, years residing in non-Asian neighborhoods), and the ability to find relationships between scores on the SL-ASIA and outcomes (e.g., use of mental health services, psychiatric symptoms, use of resources) is mixed.

Cross-Cultural Personality Assessment Inventory (CPAI-2),

Interpersonal Relatedness factor scales. The CPAI-2 consists of 28 personality scales, 12 clinical scales, and three validity scales (Cheung & Cheung, 2003). Three forms of the inventory exist: (a) Form A consists of all the scales, which has 541 items in total; (b) Form B consists of only the personality scales and the validity scales, which has 341 items; and (c) Form C consists of only the clinical and the validity scales, which has 268 items. Moreover, scales associated with a specific factor can also be administered. The median Cronbach's alpha for the personality scales is .63 (.76 for the clinical scales), and the factor structure of both the Chinese and English language versions of the CPAI-2 are similar (Cheung et al., 2001). For this study, only the scales associated with the Interpersonal Relatedness factor of the CPAI-2 were administered: (a) Traditionalism vs Modernity, (b) *Ren Qing*, (c) Social Sensitivity, (d) Discipline, (e) Harmony, and (f) Thrift vs. Extravagance. The

Interpersonal Relatedness factor, and the scales contained within, tap into the traits most relevant to the measurement of a collectivistic orientation. The scales include 74 items for which the participant indicates either a “true” or a “false” response. For the English version of these six scales, factor loading of .40 or higher were considered congruent, and the average loading was about .60 (Cheung et al., 2006).

A condition for the use of the CPAI-2 is “the findings of the study and the data set of the CPAI-2 will be provided to the CPAI archive” (as per the *Request for Research Use of the Cross-cultural Personality Assessment Inventory -2*). Hence, the participants were informed of this arrangement and the de-identified data set will be submitted to Dr. Cheung.

Procedures

After approval was obtained from each potential recruitment site and the Pepperdine University Graduate and Professional Schools Institutional Review Board (GPS-IRB), undergraduate and graduate students were invited to participate in the study. Data collection with students interested in participating occurred in group administrations of the instruments scheduled on the particular campus or at the community organization or church from which students were recruited. For individuals who contacted the investigator by email, the individuals were asked to indicate two things: (a) whether they prefer to receive the study materials by U.S. mail or electronically; and (b) whether they self-identify as Chinese American, Mexican American, or Caucasian so the appropriate instrument packet was sent.

The instrument packet contained the following: (a) a cover letter that highlights the key elements of the consent form (see Appendices E and F), (b) the

consent form that explains the study and the participant's rights (see Appendices G and H), (c) the instruments, and (d) a postcard requesting the name and email address of the participant for entry into the drawing (see Appendix I).

For participants who complete the instrument packet in the investigator's presence, they were asked to place their materials back into the envelope and return everything to the investigator upon completion. For participants who received the instrument packet by mail, the packet included an addressed, postage-paid envelope. For participants who receive the electronic version, they were asked to return three files: (a) the consent form; (b) the questionnaires; and (c) the postcard for the drawing, if they are interested in entering the drawing.

The instruments were organized as follows: (a) demographic questionnaire, (b) acculturation measure, and (c) the order of the RIC and the CPAI-2 were counterbalanced between packets. The packets for recruiting the Chinese Americans contained the SL-ASIA and the packets for recruiting the Mexican Americans included the ARSMA-II. The instruments should not take more than 20-25 minutes to complete. Each package was pre-assigned a randomly generated identification number. To avoid confusion when distributing the packets, also noted on the instrument packet was whether the acculturation measure is the SL-ASIA (noted with an *A*) or ARSMA-II (noted with an *M*). No notation appeared on the packets for the Caucasian participants. See Appendix J for the instrument packet distribution table.

Participants who returned the instrument packet and expressed interest were entered into a drawing for a \$50 e-gift card to Best Buys. Participants

interested in entering their name into the drawing were asked to provide the investigator with his or her name and email address on a postcard, which was returned with the rest of the instrument packet materials.

In opening the hard copies of instrument packets, the following steps were taken: (a) the consent form was first checked to ensure it had been signed; (b) if the consent form was properly signed, the consent form, instrument packet, and postcard for the drawing were separated into three different piles; (c) if the consent form was not properly signed, the instrument packet was shredded but the postcard for the drawing was placed into the appropriate pile. For the electronic version of the materials, the investigator first opened the consent form file to ensure it had been properly executed. If the file for the consent form was not attached to the email or if it was not properly executed, the file of questionnaires was deleted. If the consent form was properly executed, the consent form and questionnaires were printed. All participants who returned the instrument packet and provide their contact information on the postcard were entered into the drawing, regardless of whether the consent form was properly executed or if the individual met the criteria for entry into data analysis.

After all data collection was completed, the drawing for the Best Buy e-gift card occurred. The investigator's chairperson served as witness that the drawing occurred in a fair manner. The winner was notified by email and forwarded the e-gift card. The other participants who ask to be entered into the drawing were notified by email that the drawing had occurred and were thanked for their participation.

The consent forms and postcards will be kept separately from the data in a locked cabinet for a minimum of three years and destroyed after no longer needed for research purposes. In preparation for data analysis, the data were entered onto a password protected computer to which only the investigator has access. A back-up copy of the data was kept on a flash drive and kept in a locked cabinet.

Methodological Limitations

This investigation had initially proposed to compare five groups of participants. In addition to the LAM, LAC, and CA groups, the initial recruitment included highly acculturated Mexican American and highly acculturated Chinese American groups. After more than a year of attempting to recruit and fill these cells, the group for which few participants qualified was the highly acculturated Chinese American group. Although this issue is an interesting observation in itself and is further discussed in the Discussion chapter, Clinical Implications section, it was decided, in collaboration with the members of the clinical dissertation committee, to eliminate the highly acculturated groups from the analysis. To include only the highly acculturated Mexican American group without a comparable highly acculturated Chinese American group would not yield suitable comparative findings.

Since the major purpose of the study was to examine if the collectivistic personality attributes as measured by the CPAI-2, Interpersonal Relatedness factor, can be generalized to non-Asian cultures that share similar cultural values, focusing on Mexican Americans who are less acculturated offers the opportunity to test this hypothesis. As the group that is most likely to embrace an orientation toward the native cultural worldview, this group offers the strongest test of the hypothesis.

Prior research conducted by Lin and Church (2004) with Chinese Americans offered support for the legitimacy of this observation. In their research, they found the Interpersonal Relatedness factor appeared to generalize to both Chinese Americans and European Americans, but the factor was found to be more descriptive of the less acculturated Chinese Americans than either the highly acculturated Chinese Americans or European Americans. It is important to note that the reduction from five groups to three groups does not change the major objective of the study, i.e., this study was still able to examine the potential for generalizing the use of the CPAI-2 Interpersonal Relatedness factor to non-Asian cultures.

Chapter III: Results

In addition to descriptive statistics for describing the samples, the Kruskal-Wallis one-way analysis of variance by ranks (KWANOVA) was used to examine both research questions. There are four design requirements that must be met to conduct the KWANOVA:

1. There is one independent variable with two or more levels.
2. The levels of the independent variable may differ either qualitatively or quantitatively.
3. A subject may appear in one and only one cell of the design.
4. The minimum number of subjects in a group must be greater than or equal to 6 for the chi-square sampling distribution to hold. (Shavelson, 1996, p. 593)

This study met all four of these design requirements. If significant differences were found, the Tukey's HSD post hoc comparison test was conducted (Shavelson, 1996).

Significant Differences on Interpersonal Relatedness Personality Scales

The first research question addressed whether less acculturated Chinese Americans (LAC), less acculturated Mexican Americans (LAM), and Caucasian Americans (CA) significantly differ on the six CPAI-2 personality scales of the Interpersonal Relatedness factor: (a) Traditionalism vs. Modernity, (b) *Ren Qing*, (c) Social Sensitivity, (d) Discipline, (e) Harmony, and (f) Thrift-Extravagance. It was hypothesized that the LAM and LAC groups would significantly differ from the CA group but not one another. Table 4 provides the results of the KWANOVA. The results of the analysis indicate significant ethnic group differences for two of the

scales at $p < .001$, Traditionalism-Modernity and *Ren Qing*; no significant differences were found for the scales of Social Sensitivity, Discipline, Harmony, and Thrift-Extravagance.

Table 4

KWANOVA Results for Personality Scales of Interpersonal Relatedness Factor by Ethnic Group

	<i>n</i>	Mean Rank	χ^2	<i>p</i>
Traditionalism-Modernity				
LAM	6	41.67	24.43	.001
LAC	16	48.25		
CA	40	23.28		
<i>Ren Qing</i>				
LAM	6	48.67	15.92	.001
LAC	16	41.34		
CA	40	24.99		
Social Sensitivity				
LAM	6	35.83	1.36	.51
LAC	16	27.38		
CA	40	32.50		
Discipline				
LAM	6	35.92	4.58	.10
LAC	16	38.75		
CA	40	27.94		
Harmony				
LAM	6	35.92	.87	.65
LAC	16	28.47		
CA	40	32.05		
Thrift-Extravagance				
LAM	6	25.17	.99	.61
LAC	16	30.69		
CA	40	32.78		

To determine the direction of the significance, Tukey's HSD post hoc comparison test was conducted with the Traditionalism-Modernity and *Ren Qing* scales. The results of the post hoc analysis corroborated the hypotheses that the LAM and LAC groups would score significantly different from the CA group but not one another. Table 5 presents the results of the Tukey's HSD test.

Table 5

Tukey's HSD Post Hoc Comparison Test Results

Ethnic group comparisons			<i>p</i>
Traditionalism-Modernity	LAM	LAC	.516
	LAM	CA	.005
	LAC	CA	.001
<i>Ren Qing</i>	LAM	LAC	.543
	LAM	CA	.002
	LAC	CA	.002

Rank Order on Interpersonal Relatedness Personality Scales

The second research question focused strictly on the rank order of the three groups relative to the Interpersonal Relatedness factor scales. Since the instrument was developed with a Chinese population, it was hypothesized that LAC group would score the highest on each of the six scales, the CA group the lowest since it was assumed the most culturally distinct of the groups, and the LAM group falling between these two groups, given the similar values exhibited between the Chinese and Mexican cultures.

In examining the rank orders, only the Traditionalism-Modernity and Discipline scales reacted as hypothesized (see Table 4). The remaining scales

exhibited varying ranks that were not consistent with the hypothesis. The LAM group scored the highest on *Ren Qing*, the CA group with the lowest score, and the LAC group fell between the two groups. For the Social Sensitivity and Harmony scales, the LAM group exhibited the highest score, the LAC group with the lowest score, and the CA group falling between the two groups. In contrast, the CA group had the highest score on Thrift-Extravagance with the LAM group the lowest score and the LAC group falling between the two groups.

Chapter IV: Discussion

The critics of psychology's current Western based universal view of personality characteristics and assessment of personality structure have raised a range of concerns, including more attention to the relevance of culture in how personality is shaped (Bock, 2000; McCrae, 2001); questioning the construct validity of translations of personality measures as well as scale equivalence and normative equivalence of measures (Geisinger, 1994; Leong et al., 2008; Marsella et al., 2000); and the conceptual integrity of these measures as concepts may not have the same meaning across cultures (Marsella et al., 2000).

To address the needs of the Chinese people, Cheung et al. (1996) developed an indigenous personality measure, the Chinese Personality Assessment Inventory (CPAI). This measure took an emic-etic approach, drawing from the universal personality constructs from NEO-PI-R and the indigenous personality constructs of the Chinese culture. In the development of the CPAI, one factor, Interpersonal Relatedness, emerged as an element of personality structure unique to the Chinese people. In later research (Cheung & Cheung, 2003), it was found that Interpersonal Relatedness was shared among other collectivistic Asian cultures (e.g., Japan, Korea); hence, the inventory was renamed as the Cross-Cultural Personality Assessment Inventory (CPAI-2).

To explore the relevance of the CPAI-2, Interpersonal Relatedness factor, to non-Asian collectivistic cultures, this dissertation examined less acculturated Mexican American (LAM), less acculturated Chinese American (LAC), and Caucasian (CA) students on the six scales that make-up the factor. Mexican Americans and

Chinese Americans were chosen for the purpose of this study because both cultures share a similar immigration history, typically arrive in the U.S. speaking a language other than English, often settle in ethnic communities that allow them to maintain their native cultural orientation, and most important, both cultures are collectivistic in nature (Buriel & De Ment, 1997; Carter et al., 2008; Markus & Kitayama, 1991; Triandis, 1995; Wong, 2006). The least acculturated members of Mexican American and Chinese American groups were examined since it was assumed these individuals would be more similar to the Chinese population on which the CPAI-2 was developed; hence, offer the best test of the hypotheses. The following discussion offers an explanation of the study findings.

Interpretation of Findings

First, it was hypothesized that the LAM and LAC groups would significantly differ from the CA group on each of the scales of the Interpersonal Relatedness factor, while the LAM and LAC groups would not significantly differ from one another. Since the CPAI-2 was initially developed specifically for the Chinese population, a collectivistic culture, and the Mexican culture shares this collectivistic value, it seemed reasonable to hypothesize that the LAM and LAC groups would perform similarly on the scales but would significantly differ from the CA group. This hypothesis was supported with two of the scales, Traditionalism-Modernity and *Ren Qing*, but not for the scales of Social Sensitivity, Discipline, Harmony, and Thrift-Extravagance.

Moreover, it was further hypothesized that for each scale, the LAC group would score the highest, given that the CPAI-2 was developed specifically with a

Chinese population, the CA group would score the lowest, and the LAM group would score between the LAC and CA groups, although more like closer to the LAC group than the CA group. Traditionalism-Modernity and Discipline demonstrated the hypothesized trend but there was considerable variability among the scales of *Ren Qing*, Social Sensitivity, Harmony, and Thrift-Extravagance.

Traditionalism-Modernity measures whether an individual responds to family relational situations from a traditional (collectivism) or a more modern (individualism) approach (Cheung et al., 1996). Consistent with the research (Carter et al., 2008; Fuligni et al., 1999; Rinderle & Montoya, 2008), both the LAM and LAC groups leaned toward the more traditional beliefs and values, scoring almost twice the score of the CA group for this scale. Moreover, as hypothesized, the LAC group scored the highest, the CA group scored the lowest, and LAM group fell between the two groups but clearly performed more like the LAC group than the members of the CA group. Although both LAC and LAM group members reside in the U.S., a nation typically associated with individualism, the members of these groups seem to maintain traditional, collectivistic values. This finding makes sense for the LAC group whose average residence in the U.S. is just under five years; the more interesting finding is that all but one of the members of the LAM group was born in the U.S. but retain a strong collectivistic orientation. Based on the literature, one might hypothesize that LAM group members maintain a more traditional orientation because they settle or remain in close contact with their ethnic community (Buriel & De Ment, 1997). Although the place of birth of the participants' parents was not collected, Fuligni et al. (1999) discuss how foreign-

born parents are more likely to raise their children from a traditional orientation than their American-born counterparts, which may also be relevant to why the LAM group members maintain their traditional views.

The second scale that corroborated the hypothesis is *Ren Qing*, which refers to the rules of reciprocity in social relationships, i.e., how one appropriately acknowledges and returns favors to others (Cheung et al., 1996, 2008). In collectivistic cultures that value interdependence among its members, *Ren Qing* provides the structure for maintaining the smooth exchange of support to one another. Hence, it is not surprising that cultures known for valuing collectivism, such as the LAC and LAM groups, would demonstrate higher adherence to this value. What is unique is that the LAM group scored the highest on this scale, not the LAC group, as hypothesized. This finding might be related to the difference in the length of residence in the U.S. and the proximity to Mexico that allows for a larger network on which to rely. For the LAM group members, all but one individual was born in the U.S. and attended elementary through high school in the U.S., whereas among the LAC group members, none were born in the U.S. and only two members attended high school in the U.S. while none attended elementary and middle school in this country. Hence, although valued by both groups, access to diverse social relationships among members of the LAM group, when compared to the LAC group, may have influenced how these respective groups viewed the reciprocal nature of their relationships.

Discipline was one of the scales that did not significantly differ between ethnic groups. Discipline refers to the degree to which individuals are rigid versus

flexible in living their lives (Cheung et al., 1996, 2008). This finding may be, in part, due to the declining emphasis on rules and conventions by which an individual is expected to live his or her life, particularly as families become accustomed to the freedom of residing in the United States. Given the cultural basis of the CPAI-2, the rank order of groups on the Discipline scale was as hypothesized, i.e., the LAC group scored the highest, the CA group scored the lowest, and the LAM group fell between the two previous groups; although performing more like the LAC group than the CA group.

Both Social Sensitivity (i.e., understanding the feelings of others) and Harmony (i.e., avoiding interpersonal conflict) did not yield significant differences between ethnic groups (Cheung et al., 1996, 2008). Moreover, the LAC group scored the lowest on both scales, which is counter to what was hypothesized. The LAM group scored the highest, with the CA group falling between the LAC and LAM groups; although the CA group performed more like the LAM group than the LAC group. One way to understand these findings might be related to how long each group has resided in the U.S. and the effect this factor has on one's integration into the social context. As previously mentioned, although scoring in the less acculturated range, five of the six the LAM group members were born and raised in the U.S. and were split between Spanish and English as the language spoken in the home, while none of the Chinese American participants were born in this country, with only two members completing the latter part of their pre-college education here and all speaking Chinese in the home. Not only are the members of the LAC group less acculturated, but they have the least amount of experience functioning in

this social context, which may require that these participants shift attention away from focusing on others to focusing on their own survival. The LAM group performed in the direction hypothesized, although the CA group findings were initially viewed as unexpected. After further consideration, the performance of the CA group makes sense, given the substantial cultural diversity found in the U.S. and the national emphasis on understanding the worldview of others that compels ethnic groups to consider tolerance of differences, share resources, and find peaceful ways to work and live together. The lack of significance found between ethnic groups might be explained, in part, by the fact that whether peacefully coexisting is an indigenous cultural value or a value that has evolved, all groups are compelled to value Social Sensitivity and Harmony for the nation to sustain.

Finally, Thrift-Extravagance measures one's tendency to spend carefully and avoid materialism. Although no significant differences were found between ethnic groups, it is interesting to note that the CA group scored the highest on this scale, the LAM group the lowest, with the LAC group falling between these two group; although the LAC group performed more like the CA group than the LAM group. The lack of significant differences between ethnic groups might be due to the current economic challenges faced in the U.S., which has compelled all individuals to more thoughtfully consider their spending practices. Although the findings for the LAC group were in the direction documented in the literature (Wang & Lin, 2009), what is unclear is why the members of the LAM group did not score as hypothesized on this scale, that is to say, why this group scored the lowest in relation to the other groups. One possible hypothesis might be related to the research conducted by

Medina et al. (1996) in which it was observed that Mexican American consumers tend to be present oriented in regards to their spending practices, even when education level and socioeconomic status are taken into consideration.

Clinical Implications

As clinicians, one of the key points to take away from this study is the diversity of individuals who fall under the descriptor of *less acculturated*. Moreover, how this descriptor might apply to one ethnic group might look different in other ethnic groups. Although commonly administered acculturation measures were used to assess the acculturation level of the Chinese and Mexican American participants in this study, the personal characteristics of each group were quite distinct. For example, among the sample of Mexican American participants, five of six individuals were born in the U.S., attended elementary through high school in the U.S., and the group was split between Spanish and English on the language spoken in the home. In contrast, all the Chinese American participants were born outside of the U.S., only 2 of the 16 participants attended any school in the U.S. prior to entering college, and Chinese was the language spoken in the home for all 16 participants. Despite these differences, both groups fell in the less acculturated range of their respective acculturation measures. Hence, it is important not to make assumptions about an individual's acculturation level based on features such as the number of generations one's family has resided in the U.S. or one's preferred language.

As previously discussed, the study was initially designed to include highly acculturated Mexican American and Chinese American groups. Due to recruitment problems with identifying highly acculturated Chinese American participants, the

decision was made to stop attempting to recruit for this group and proceed with only the less acculturated groups. This experience was unexpected, given that a number of the participants were graduate students with an undergraduate education obtained in a U.S. college. Although one cannot ignore the possibility that the recruitment sites for Chinese American students might serve a less acculturated population so the sample was simply a reflection of this limitation, it is nonetheless important to consider that the generally less acculturated status of the group has implications for how clinicians successfully serve this population.

Lastly, the findings of this study offer preliminary support for the importance of taking into account indigenous personality constructs in developing personality measures. Although more fine-tuning is required as to which of the Interpersonal Relatedness factor scales apply across diverse collectivistic cultures versus particular ones, trends for Traditionalism-Modernity, *Ren Qing*, and Discipline appear to support how one non-Asian collectivistic culture, Mexican Americans, are more similar to Asian collectivistic cultures yet unique from cultures characterized as individualistic. As is important when interpreting findings from any psychological test, when interpreting a client's performance on the CPAI-2, it is important to consider the unique cultural context of the individual, including how acculturation intersects with the test results in explaining what is found. Moreover, just as it raises concern to not consider indigenous personality traits such as the scales associated with the CPAI-2 Interpersonal Relatedness factor, it is equally concerning to administer the CPAI-2 to groups for whom a collectivistic worldview does not apply. Finally, it is important to not dismiss the results of psychological

testing but, instead, caution must be exercised in how testing results are interpreted. Although the client's testing results might fall outside the normative range for the test, the clinician should not assume pathology without consideration of the client's unique cultural context. It is also important to focus on the testing results that emphasize the client's strengths and the features shared in common with the normative data.

Future Research Directions

The most obvious recommendation for future research is the need to increase the sample size so that more complex parametric analyses can be conducted. Particularly useful would have been the ability to engage in factorial analyses that could take into account the interaction of ethnic group membership and the sociodemographic and immigration characteristics relative to the Interpersonal Relatedness factor scales. Of particular interest is the influence of socioeconomic status on these scales. For example, the findings found for the scales of *Ren Qing* and Thrift-Extravagance might have been influenced by socioeconomic differences between the ethnic groups. Moreover, the RIC could be entered as a covariate as initially planned. The findings from such analyses would strengthen the quality and depth of the results.

This study was originally designed to compare highly acculturated Mexican American and Chinese American participants in addition to their less acculturated counterparts and the Caucasian group. After over a year of attempting to recruit highly acculturated participants, particularly for the Chinese American group, the decision was made to exclude the highly acculturated groups from the analysis. The

value of comparing the five groups would have been to offer preliminary findings on whether acculturation might serve as a moderator of indigenous personality traits, such as those of the Interpersonal Relatedness factor scales. This experience raises issues that are worthy of future consideration. The most obvious of the issues is the selection of recruitment sites and the need to identify sites that offer a more heterogeneous subset of the population of interest. It is possible that members of each level of acculturation might require unique recruitment strategies rather than approaching recruitment from a more nomothetic approach. For example, highly acculturated individuals might self-identify as *American* rather than *Chinese American* so to specifically recruit for Chinese Americans might not yield an adequate subset of this sample. A better approach might be to recruit for individuals of *Chinese ancestry*. A second consideration might be the way the acculturation measures used to determine the acculturation level of participants operationally defined acculturation, particularly the SL-ASIA. Although the SL-ASIA is a common measure of acculturation with Asian participants, as discussed by Ponterotto et al. (1998), further examination of the conceptual basis of the measure is needed. Finally, if it is possible that the challenges faced in recruiting highly acculturated Chinese Americans was not an issue of ascertainment but rather a group actually that loads on less acculturated members, this is an observation worthy of further investigation due to its implications for offering clinical services.

Although the findings of this study must be considered with caution and are preliminary in nature at best, it does appear some scales of the Interpersonal Relatedness factor might be shared by non-Asian and Asian collectivistic cultures

and that their performance on these scales is distinct from a culture that is considered more individualistic in its orientation. This observation merits further examination. It is possible that, at least for the Interpersonal Relatedness factor, the CPAI-2 might need to consider different forms of the measure, i.e., the original version might work well for Asian collectivistic cultures but a version with fewer scales might be warranted with members of the Mexican culture. Moreover, it is important to examine the use of this measure with other Latino/a cultures, similar to Cheung and her colleagues work with diverse Asian cultures. Finally, work with other collectivistic cultures is an important direction for future research, as the number of cultures characterized as collectivistic outnumber those cultures often described as individualistic (Triandis, 1989), yet much of the current assessment practices remain heavily based in a Western worldview.

Conclusion

There is a Chinese proverb, “Different villages have different customs” (各處鄉村各處例), which I believe is an important piece of wisdom that psychologists should not overlook in their assessment practices with clients. These customs and the related value system can influence how one’s personality develops and how personality traits are expressed. Hence, to truly understand a client’s inner workings, it is imperative to take the emic into account in the assessment of personality, rather than taking strictly an etic approach. Moreover, if we agree that personality and culture have a reciprocal relationship with one another, it is critical that we move away from assuming all cultures operate from Western assumptions

as a substantial portion of cultures do not. As great a challenge as it would be, completing this dissertation has left me believing that the field would benefit more people if it placed a stronger emphasis on developing indigenous personality measures.

References

- Ashton, M. C., & Lee, K. (2008). The HEXACO model of personality structure. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *Handbook of personality theory and testing: Personality measurement and assessment* (Vol. 2, pp. 239-60). London, England: Sage.
- Barrett, P. T., Petrides, K. V., Eysenck, S. B. G., & Eysenck, H. J. (1998). The Eysenck Personality Questionnaire: An examination of the factorial similarity of P, E, N, and L across 34 countries. *Personality and Individual Differences, 25*(5), 805-819. doi:10.1016/S0191-8869(98)00026-9
- Bock, P. K. (2000). Culture and personality revisited. *American Behavioral Scientist, 44*(1), 32-40. doi:10.1177/00027640021956071
- Bouchard, T. J., & Loehlin, J. C. (2001). Genes, evolution, and personality. *Behavior Genetics, 31*(3), 243-74. doi:10.1023/A:1012294324713
- Boyle, G. J., Matthews, G., & Saklofske, D. H. (2008a). Personality theories and models: An overview. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *Handbook of personality theory and testing: Personality theories and models* (Vol. 1, pp. 1-29). London, England: Sage.
- Boyle, G. J., Matthews, G., & Saklofske, D. H. (2008b). Personality measurement and testing: An overview. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *Handbook of personality theory and testing: Personality measurement and testing* (Vol. 2, pp. 1-26). London, England: Sage.
- Buriel, R. & De Ment, T. (1997). Immigration and sociocultural change in Mexican, Chinese, and Vietnamese American families. In A. Booth, A. C. Crouter & N. S. Landale (Eds.), *Immigration and the family: Research and policy on U.S. immigrants* (pp. 165-200). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Butcher, J. N., Cheung, F. M., & Lim, J. (2003). Use of the MMPI-2 with Asian populations. *Psychological Assessment, 15*(3), 248-256. doi:10.1037/1040-3590.15.3.248
- Carter, R. T., Yeh, C. J., & Mazzula, S. L. (2008). Cultural values and racial identity statuses among Latino students: An exploratory investigation. *Hispanic Journal of Behavioral Sciences, 30*(1), 5-23. doi:10.1177/0739986307310505.
- Cattell, H. E. P., & Mead, A. D. (2008). The sixteen personality factor questionnaire (16PF). In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *Handbook of personality theory and testing: Personality measurement and assessment* (Vol. 2, pp. 135-59). London, England: Sage.

- Cheung, F. M. (2004). Use of Western and indigenously developed personality tests in Asia. *Applied Psychology: An International Review*, 53(2), 173-191. doi:10.1111/j.1464-0597.2004.00167.x
- Cheung, F. M., & Cheung, S. (2003). Measuring personality and values across cultures: Imported versus indigenous measures. *Online Readings in Psychology and Culture*, Unit 4. Retrieved from <http://scholarworks.gvsu.edu/orpc/vol4/iss4/5>
- Cheung, F. M., Cheung, S. F., Howard, R., & Lim, Y. (2006). Personality across the ethnic divide in Singapore: Are "Chinese Traits" uniquely Chinese. *Personality and Individual Differences*, 41(3), 467-77. doi: 10.1016/j.paid.2005.12.023
- Cheung, F. M., Cheung, S. F., Leung, K., Ward, C. & Leong, F. (2003). The English version of the Chinese Personality Assessment Inventory. *Journal of Cross-cultural Psychology*, 34(4), 433-52. doi: 10.1177/0022022103254170
- Cheung, F. M., Cheung, S. F., Wada, S., & Zhang, J. (2003). Indigenous measures of personality assessment in Asian countries: A review. *Psychological Assessment*, 15(3), 280-289. doi: 10.1037/1040-3590.15.3.280
- Cheung, F., Fan, W., & To, C. (2008). The Chinese Personality Assessment Inventory as a culturally relevant personality measure in applied settings. *Social and Personality Psychology Compass*, 2(1), 74-89. doi: 10.1111/j.1751-9004.2007.00045.x
- Cheung, F. M., Leung, K., Fan, R. M., Song, W., Zhang, J., & Zhang, J. (1996). Development of the Chinese personality assessment inventory. *Journal of Cross-Cultural Psychology*, 27(2), 181-99. doi:10.1177/0022022196272003
- Cheung, F. M., Leung, K., Zhang, J. X., Sun, H. F., Gan, Y. Q., Song, W. Z., & Xie, D. (2001). Indigenous Chinese personality construct: Is the Five Factor Model complete? *Journal of Cross-Cultural Psychology*, 32(4), 407-33. doi:10.1177/0022022101032004003
- Cheung, F. M., van de Vijver, F. J. R., & Leong, F. T. L. (2011). Toward a new approach to the study of personality in culture. *American Psychologist*, 66(7), 593-603. doi: 10.1037/a0022389
- Chia, R. C., Wuensch, K. L., Childers, J., Chuang, C., Cheng, B., Cesar-Romero, J., & Nava, S. (1994). A comparison of family values among Chinese, Mexican, and American college students. *Journal of Social Behavior and Personality*, 9(2), 249-258. Retrieved from <http://www.sbp-journal.com/index.php/sbp>

- Chiu, C. Y., Kim, Y. H., & Wan, W. N. (2008). Personality: Cross-cultural perspectives. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *Handbook of personality theory and testing: Personality theories and models* (Vol. 1, pp. 124-44). London, England: Sage.
- Church, A. T. (2001). Personality measurement in cross-cultural perspective. *Journal of Personality, 69*(6), 979-1006. doi:10.1111/1467-6494.696172
- Church, A. T. & Katigbak, M. S. (2002). The five-factor model in the Philippines. In R. R. McCare & J. Allik (Eds.), *The five-factor model of personality across cultures*. (pp. 129-154). New York, NY: Plenum.
- Cooper, C. R., Baker, H., Polichar, D., & Welsh, M. (1993). Values and communication of Chinese, Filipino, European, Mexican, and Vietnamese American adolescents with their families and friends. *New Directions for Child Development, 62*(1), 73-89. doi 10.1002/cd.23219936207
- Costa, P. T., Jr., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) manual*. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., Jr., & McCrae, R. R. (2003). *Personality in adulthood: A five-factor theory perspective*. New York, NY: The Guildford Press.
- Costa, P. T., Jr., & McCrae, R. R. (2009). The Five-Factor Model and the NEO Inventories. In J. N. Butcher (Ed.), *Oxford handbook of personality assessment*. (pp. 299-322). New York, NY: Oxford University Press, Inc.
- Cuellar, I., Harris, L. C., & Jasso, R. (1980). An acculturation scale for Mexican American normal and clinical populations. *Hispanic Journal of Behavioral Sciences, 2*(3), 199-217. Retrieved from <http://hjb.sagepub.com/>
- Cuellar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic Journal of Behavioral Sciences, 17*(3), 275-304. doi:10.1177/07399863950173001
- Digman, J. M. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology, 41*(1), 417-440. doi:10.1146/annurev.ps.41.020190.002221
- Eysenck, H. J., & Eysenck, M. W. (1985). *Personality and individual differences: A nature science approach*. New York, NY: Plenum Press.

- Fuligni, A. J., Tseng, V., & Lam, M. (1999). Attitudes toward family obligations among American adolescents with Asia, Latin American, and European backgrounds. *Child Development, 70*(4), 1030-1044. doi:10.1111/1467-8624.00075
- Funder, D. C. (1997). *The personality puzzle*. New York, NY: Norton.
- Furnham, A., Eysenck, S. B. G., & Saklofske, D. H. (2008). The Eysenck personality measures: Fifty years of scale development. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *Handbook of personality theory and testing: Personality measurement and assessment* (Vol. 2, pp. 199-218). London, England: Sage.
- Geisinger, K. F. (1994). Cross-cultural normative assessment: Translation and adaptation issues influencing the normative interpretation of assessment instruments. *Psychological Assessment, 6*(4), 304-312. doi:10.1037/1040-3590.6.4.304
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist, 48*(1), 26-34. doi:10.1037/0003-066X.48.1.26
- Gulgoz, S. (2002). Five-factor model and NEO-PI-R in Turkey. In R. R. McCare & J. Allik (Eds.), *The five-factor model of personality across cultures*. (pp. 175-96). New York, NY: Plenum.
- Hardie, E. A. (2009). Development and validation of the brief Relational, Individual and Collective (brief RIC) Self-Aspects scale. *Asian Journal of Social Psychology, 12*, 63-69. doi: 10.1111/j.1467-839X.2008.01271.x
- Hardway, C. & Fuligni, A. J. (2006). Dimensions of family connectedness among adolescents with Mexican, Chinese, and European backgrounds. *Developmental Psychology, 42* (6), 1246-58. doi: 10.1037/0012-1649.42.6.1246
- Hendriks, A. A. J., Perugini, M., Angleitner, A., Ostendorf, F., Johnson, J. A., De, F. F., Hrebickova, M., ... Bratko, D. (2003). The Five-Factor Personality Inventory: Cross-cultural generalizability across 13 countries. *European Journal of Personality, 17*(5), 347-74. doi: 10.1002/per.491
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind*. London, England: McGraw-Hill.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions, and organizations across nations*. Beverly Hills, CA: Sage.

- Hollingshead, A. B. (1975). *Four factor index of social status*. Unpublished working paper, Department of Sociology, Yale University, New Haven, CT.
- Hrebickova, M., Urbanek, T., Cermak, I., Szarota, P., Fickova, E., & Orlicka, L. (2002). The NEO five-factor inventory in Czech, Polish, and Slovak contexts. In R. R. McCare & J. Allik (Eds.), *The five-factor model of personality across cultures*. (pp. 53-78). New York, NY: Plenum.
- Kagitcibasi, C. (2004). A critical appraisal of individualism and collectivism: Toward a new formulation. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications*. (pp. 52-65). Thousand Oaks, CA: Sage.
- Kashima, E. S., & Hardie, E. A. (2000). The development and validation of the relational, individual, and collective self-aspects (RIC) scale. *Asian Journal of Social Psychology*, 3(1), 19-48. doi: 10.1111/1467-839X.00053.
- Kashima, Y., Yamguchi, S., Kim, U., Choi, S., Gelfand, M. J., & Yuki, M. (1995). Culture, gender, and self: A perspective from individualism-collectivism research. *Journal of Personality and Social Psychology*, 69(5), 925-937. doi: 10.1037/0022-3514.69.5.925
- Kim, U., Triandis, H. C., Kagitcibasi, C., Choi, S. C., & Yoon, G. (2004). Introduction. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications*. (pp. 1-16). Thousand Oaks, CA: Sage.
- Knight, G. P., Gonzales, N. A., Saenz, D. S., German, M., Deardorff, J., Roosav, M. W., Bonds, D. D., ... Updegraff, K. A. (2010). The Mexican American cultural values scale for adolescents and adults. *Journal of Early Adolescence*, 30(3), 444-481. doi: 10.1177/0272431609338178
- Konstabel, K., Realo, A., & Kallasmaa, T. (2002). Exploring the sources of variations in the structure of personality traits across cultures. In R. R. McCare & J. Allik (Eds.), *The five-factor model of personality across cultures*. (pp. 29-52). New York, NY: Plenum.
- Leong, F. T. L., Qin, D. B., & Huang, J. L. (2008). Research methods related to understanding multicultural concepts. In J. K. Asamen, M. L. Ellis, & G. L. Berry (Eds.), *Child development, multiculturalism, and media* (pp. 63-80). Los Angeles, CA: SAGE.
- Lin, E. & Church, T. (2004). Are indigenous Chinese personality dimensions culture-specific. *Journal of Cross-Cultural Psychology*, 35(5), 586-605. doi:10.1177/0022022104268390.

- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98(2), 224-53. doi:10.1037/0033-295X.98.2.224
- Marsella, A. J., Dubanoski, J., Hamada, W. C., & Morse, H. (2000). The measurement of personality across cultures historical, conceptual, and methodological issues and considerations. *American Behavioral Scientist*, 44(1), 41-62. doi:10.1177/00027640021956080
- McCrae, R. R. (2001). Trait psychology and culture: Exploring intercultural comparisons. *Journal of Personality*, 69(6), 819-846. doi:10.1111/1467-6494.696166
- McCrae, R. R. (2002). NEO-PI-R data from 36 cultures: Further intercultural comparisons. In R. R. McCrae & J. Allik (Eds.), *The five-factor model of personality across cultures* (pp. 105-25). New York, NY: Plenum.
- McCrae, R. R., & Costa, P. T., Jr. (1997). Personality trait structure as a human universal. *American Psychologist*, 52(5), 509-16. doi:10.1037/0003-066X.52.5.509
- McCrae, R. R., & Costa, P. T., Jr. (2008). Empirical and theoretical status of the five-factor model of personality traits. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *Handbook of personality theory and testing: Personality theories and models* (Vol. 1, pp. 273-94). London, England: Sage.
- McCrae, R. R., Costa, J. P. T., Pitar, G. H. D., Rolland, J. P., & Parker, W. D. (1998). Cross-Cultural Assessment of the Five-Factor Model: The Revised NEO Personality Inventory. *Journal of Cross-Cultural Psychology*, 29(1), 171-88. doi:10.1177/0022022198291009
- Medina, J. F., Saegert, J., & Gresham, A. (1996). Comparison of Mexican-American and Anglo-American attitudes toward money. *The Journal of Consumer Affairs*, 30(1), 124-145. doi:10.1111/j.1745-6606.1996.tb00728.x
- Mertens, D. M. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (2nd ed.). Los Angeles, CA: SAGE.
- Mishra, R. C. (2004). Individualist and collectivist orientations across generations. In U. Kim, H. C. Triandis, C. Kagitcibasi, S.C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications*. (pp. 225-38). Thousand Oaks, CA: Sage.

- Phinney, J. S. (1996). When we talk about American ethnic groups, what do we mean? *American Psychologist*, 51(9), 918-27. doi: 10.1037/0003-066X.51.9.918
- Piedmont, R. L., Bain, E., McCrae, R. R., & Costa, P. T. (2002). The applicability of the five-factor model in a sub-saharan culture: The NEO-PI-R in Shona. In R. R. McCare & J. Allik (Eds.), *The five-factor model of personality across cultures*. (pp. 155-73). New York, NY: Plenum.
- Ponterotto, J. G., Baluch, S., & Carielli, D. (1998). The Suinn-Lew Asian Self-Identity Acculturation Scale (SL-ASIA): Critique and research recommendations. *Measurement & Evaluation in Counseling & Development*, 32(2), 109-124.
- Poortinga, Y. H., Van De Vijver, F. J. R., & Van Hemert, D. A. (2002). Cross-cultural equivalence of the big five: A tentative interpretation of the evidence. In R. R. McCare & J. Allik (Eds.), *The five-factor model of personality across cultures*. (pp. 281-302). New York, NY: Plenum.
- Rinderle, S., & Montoya, D. (2008). Hispanic/Latino identity labels: An examination of cultural values and personal experiences. *The Howard Journal of Communications*, 19(1), 144-64 doi:10.1080/10646170801990953
- Rolland, J. P. (2002). The cross-cultural generalizability of the five-factor model of personality. In R. R. McCare & J. Allik (Eds.), *The five-factor model of personality across cultures*. (pp. 7-28). New York, NY: Plenum.
- Saw, A. & Okazaki, S. (2009). Research Methods. In N. Tewari & A. N. Alvarez (Eds.), *Asian American psychology: Current perspectives*. (pp. 49-67). New York, NY: Taylor & Francis Group, LLC.
- Saucier, G. (2008). Measures of personality factors found recurrently in human lexicons. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *Handbook of personality theory and testing: Personality measurement and assessment* (Vol. 2, pp. 29-54). London, England: Sage.
- Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocanik, J. (2010). Rethinking the concept of acculturation: Implications for theory and research. *American Psychologist*, 65(4), 237-51. doi:10.1037/a0019330
- Shavelson, R. J. (1996). *Statistical reasoning for the behavioral sciences* (3rd ed.). Boston, MA: Allyn and Bacon.
- Sinha, D. & Tripathi, R. C. (2004). Individualism in collectivist culture: A case of coexistence of opposites. In U. Kim, H. C. Triandis, C. Kagitcibasi, S. C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications*. (pp. 123-36). Thousand Oaks, CA: Sage.

- Stankov, L. & Lee, J. (2008). Culture: Ways of thinking and believing. In G.J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *Handbook of personality theory and testing: Personality theories and models* (Vol. 1, pp. 560-75). London, England: Sage.
- Strelau, J., & Zawadzki, B. (2008). Temperament from a psychometric perspective: Theory and measurement. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *Handbook of personality theory and testing: Personality measurement and assessment* (Vol. 2, pp. 352-374). London, England: Sage.
- Sue, D. W., & Sue, D. (2002). *Counseling the culturally diverse: Theory and practice* (4th ed.). New York, NY: John Wiley.
- Suinn, R. M., Rickard-Figueroa, K., Lew, S., & Vigil, P. (1987). The Suinn-Lew Asian Self-Identity Acculturation Scale: An initial report. *Educational and Psychological Measurement, 47*(2), 401-407. doi:10.1177/0013164487472012
- Suinn, R. M., Ahuna, C., & Khoo, G. (1992). The Suinn-Lew Asian Self-Identity Acculturation Scale: Concurrent and factorial validation. *Educational and Psychological Measurement, 52*(4), 1041-1046. doi:10.1177/0013164492052004028
- Triandis, H. C. (1989). The self and social behavior in differing cultural contexts. *Psychological Review, 96*(3), 506-520. doi: 10.1037/0033-295X.96.3.506
- Triandis, H. C. (1995). *Individualism and collectivism*. Boulder, CO: Westview Press.
- Triandis, H. C. (2001). Individualism-collectivism and personality. *Journal of Personality, 69*(6), 907-24. doi:10.1111/1467-6494.696169
- Tsai, D. C., & Pike, P. L. (2000). Effects of acculturation on the MMPI-2 scores of Asian American students. *Journal of Personality Assessment, 74*(2), 216-30. doi:10.1207/S15327752JPA7402_4
- Tupes, E. C., & Cristal, R. E. (1961). Recurrent personality factors based on trait ratings. *Technical report ASD-TR-61-97*. Lackland Air Force Base, TX: Personnel Laboratory, Air Force Systems Command.
- U.S. Census Bureau. (2010). *Census interactive population search*. Retrieved from <http://www.census.gov/2010census/popmap/index.php>
- van de Vijver, F. J. R., & Hemert, D. A. (2008). Cross-cultural personality assessment. In G. J. Boyle, G. Matthews, & D. H. Saklofske (Eds.), *Handbook of personality theory and testing: Personality measurement and assessment* (Vol. 2, pp. 55-72). London: Sage.

- van de Vijver, F. J. R., & Leung, K. (1997). *Methods and data analysis for cross-cultural research*. Newbury Park, CA: Sage.
- Wang, C. L. & Lin, X. (2009). Migration of Chinese consumption values: Traditions, modernization, and cultural renaissance. *Journal of Business Ethics*, 88(3), 399-409. doi:10.1007/s10551-009-0308-5
- Wong, J. (2006). *Democracy's promise: Immigrants & American civic institutions*. Ann Arbor, MI: University of Michigan Press.

APPENDIX A
Recruitment Flyer

WHAT IF I HAVE QUESTIONS?

If you are interested in finding out more about the project or have questions, please do not hesitate to contact me. The following is my contact information:

Amy Wong, M. Ed.
Pepperdine University
Graduate School of Education and Psychology
6100 Center Drive
Los Angeles, CA 90045
(877) 778-9393
hingmanamy.wong@pepperdine.edu

You may also contact Dr. Asamen who supervises my research project. Below is her contact information.

Joy Asamen, Ph.D.
Pepperdine University
Graduate School of Education and Psychology
6100 Center Drive
Los Angeles, CA 90045
(310) 568-5654
joy.asamen@pepperdine.edu

HOW DO I LET YOU KNOW IF I WANT TO PARTICIPATE?

If you are interested in participating in this research project, you may contact me in one of two ways:

1. You can attend one of the scheduled group meetings. Please refer to the insert for the dates and times of the meetings at your site.
2. You can email me at hingmanamy.wong@pepperdine.edu and I will send you the study materials by either U.S. mail or electronically – please indicate your preference. Also, please indicate in your email with which group you identify – Chinese American, Mexican American, or Caucasian.

PARTICIPATION IN THIS RESEARCH PROJECT IS STRICTLY VOLUNTARY

Pepperdine University

Graduate School of Education and Psychology

How Culture Shapes Personality: A Preliminary Study



VOLUNTEERS ARE NEEDED FOR A STUDY

WHO IS CONDUCTING THE RESEARCH STUDY?

My name is Amy Wong, and I am a doctoral student in clinical psychology at Pepperdine University, Graduate School of Education and Psychology.

I am working on my dissertation, which is supervised by Joy Asamen, Ph.D., Professor of Psychology.

WHAT IS THE STUDY?

There are research findings that demonstrate how particular personality traits are more common in some cultures than others, and for some cultural groups, acculturation might be related to the findings. Hence, the purpose of this study is to further examine these observations.

WHO CAN PARTICIPATE?

To participate in the study, you must be:

- At least 18 years old
- A student in either a community college or college/university
- Identify as Mexican American, Chinese American, or Caucasian American
- Able to read English
- Have access to email



WHAT IS INVOLVED?

If you decided to participate in the study, it will involve the completion of questionnaires.

The questionnaires ask for:

- Background information about you
- Information about your cultural customs, beliefs, and behaviors
- Information about how you view yourself, others, and your cultural groups
- Information about the degree to which particular personality traits describe you.

The questionnaires should take no more than 20-25 minutes to complete.

Those who return the questionnaires may enter a drawing for a \$50 Best Buy e-gift card.



APPENDIX B

Announcement of Study

Announcement of Study

Hello, everyone. My name is Amy Wong and I am a doctoral student in the clinical psychology program at Pepperdine University, Graduate School of Education and Psychology. As part of my doctoral program, I must complete a dissertation, which is supervised by Joy Asamen, Ph.D., who is a Professor of Psychology at Pepperdine.

The reason that I am here today is because I am in need of volunteers who will help me with my study. I am interested in finding out how people of different ethnic groups view aspects of themselves and how these views might be related to culture. I have brought some brochures for you to review so you can decide if you are eligible to participate in the study and if this is something that you might be interested in doing. I want to make sure you know that participating in my study is *strictly voluntary* and has no effect on your relationship with [*insert organization/church/college name here or your grade in this course*]. If you decide this is something you are interested in doing, please join me at [*provide details about when and where on campus the meeting will occur*] or contact me by email for a copy of the questionnaires. If you contact me by email, please indicate the following: (a) whether you prefer receiving the materials by U.S. mail or electronically: and (b) with which group you identify – Chinese American, Mexican American, or Caucasian. Study participants may enter a drawing for a \$50 Best Buy e-gift card.

Are there any questions? I have also included my contact information on the brochure in the event you think of questions after I leave. If you know of friends who might qualify for this study and who might be interested in participating, please feel free to share the information with them.

Thank you for taking the time to listen. I hope to hear from you or see you at the meeting.

APPENDIX C

Listserv Announcement for Study

VOLUNTEER NEEDED FOR A STUDY

How Culture Shapes Personality: A Preliminary Study

My name is Amy Wong, and I am a doctoral student in clinical psychology at Pepperdine University, Graduate School of Education and Psychology. I am working on my dissertation, which is supervised by Joy Asamen, Ph.D., Professor of Psychology.

There are research findings that demonstrate how particular personality traits are more common in some cultures than others, and for some cultural groups, acculturation might be related to the findings. Hence, the purpose of this study is to further examine these observations.

To participate in the study, you must be:

- At least 18 years old
- A student in either a community college or college/university
- Identify as Mexican American, Chinese American, or Caucasian American
- Able to read English
- Have access to email

If you decide to participate in the study, it will involve the completion of questionnaires that should take no more than 20-25 minutes to complete. The questionnaires ask for:

- Background information about you
- Information about your cultural customs, beliefs, and behaviors
- Information about how you view yourself, others, and your cultural groups
- Information about the degree to which particular personality traits describe you.

Those who return the questionnaires may enter a drawing for a \$50 Best Buy e-gift card.

If you are interested in finding out more about the project, have questions, or are interested in participating in the study, you may contact me at hingmanamy.wong@pepperdine.edu. If you are interested in participating in the study, please indicate the following: (a) whether you prefer to receive the materials by U.S. mail or electronically; and (b) with which group you identify – Chinese American, Mexican American, or Caucasian.

You may also contact Joy Asamen, Ph.D., who supervises my research project, at joy.asamen@pepperdine.edu.

I hope to hear from you.

APPENDIX D
Demographic Questionnaire

Demographic Questionnaire

INSTRUCTIONS: The following questions are designed to obtain information about your background. Please read each question carefully and provide your response by writing out the requested information or by placing an "X" in the appropriate space.

1. What is your age? _____ years

2. What is your gender?
 - ____ Female
 - ____ Male
 - ____ Transgender

3. What is your current educational level?
 - ____ Community college student
 - ____ College or university student
 - ____ Graduate or professional school student
 - ____ Other (Please specify: _____)

4. What language is mainly spoken in your home?
 - ____ Mandarin
 - ____ English
 - ____ Spanish
 - ____ Other (Please specify: _____)

5. Which of the following best describes you?
 - ____ Caucasian American
 - ____ Chinese American
 - ____ Mexican American
 - ____ Other (Please specify: _____)

6. Were you born in the United States? ____ Yes ____ No

7. If you immigrated to the United States from another country, please answer the following questions. If you did not immigrate to the United States, please go to Question 8.
 - a. From what country did you immigrate?

 - b. What was your age at the time of immigration? _____ years
(if younger than 1-year-old, just enter 1)

 - c. How long have you resided in the United States? _____ years
(if less than 1 year, just enter 1)

- d. Did you attend elementary school in the United States?
 Yes No
- e. Did you attend middle or junior high school in the United States?
 Yes No
- f. Did you attend high school in the United States?
 Yes No

8. Which of the following best describes the educational level of your father and mother?

If you were not raised by your parents, please indicate the educational level of your primary caretaker(s).

(Please check one option for each parent or caretaker)

	Father	Mother	Other Caretaker	Other Caretaker
Less than 7 th grade				
Junior high or middle school (grades 8-9)				
Some high school (grades 10-11)				
High school diploma or GED				
Some college (at least 1 year)				
Community, junior, or technical college degree				
Bachelor's degree				
Master's degree or doctoral degree				
Do not know				

9. Which of the following best describes the typical type of work of your father and mother? If your father or mother immigrated to the U.S., please indicate the typical type of work he or she did after arriving in the United States.

If you were not raised by your parents, please indicate the typical kind of work of your primary caretaker(s). If your caretaker(s) immigrated to the U.S., please indicate the typical type of work he or she did after arriving in the United States.

(Please check one option for each parent or caretaker)

	Father	Mother	Other Caretaker	Other Caretaker
Executives (such as CEO, CFO, etc.), large business owners, major professionals (such as attorney, physician, university professor, scientist, etc.), government officials (such as judge, senator, etc.)				
Business or other types of administrators, medium business owner, professionals (such as nurses, accountants, clergy, high school teachers, etc.)				
Business or other types of managers, small business owner, professions not requiring advanced degrees (such as sales, entertainers, preschool teacher, etc.)				
Technicians and other specialized professions (such as law enforcement, computer programmer, legal or medical secretaries, photographer)				
General clerical and sales work (such as bank teller, cashiers, etc.)				
Crafts or trades (such as baker, carpenter, electrician, mechanics, etc.)				
Machine operators and specialized skilled workers (such as chauffeur, assembler, drill press operator, seamstress, file clerks, etc.)				
Non-specialized skilled workers or entry level jobs (such as busboys, office runners, food server, etc.)				
Jobs requiring limited or no training (such as dishwasher, newspaper delivery, vehicle washers, etc.)				
No occupation (such as stay-at-home parent, long-term unemployment)				
Do not know				

APPENDIX E

Cover Letter to Participants – For Mailed Packet

Date

Thank you for being interested in participating in my dissertation research. Included with this letter are the following materials:

1. Two copies of the form entitled, *Informed Consent for Participation in Research Activities*.
2. Packet of questionnaires.
3. Postcard for entry into the drawing.
4. For those of you who are mailing the materials back to me, I have also included an addressed, postage-paid envelope.

Please read over the *Informed Consent for Participation in the Research Activities* form carefully. If you have questions about its contents, do not hesitate to speak with me.

If you received the questionnaires by mail, please do not hesitate to contact me by telephone (877) 778-9393 or email (hingmanamy.wong@pepperdine.edu) with your questions.

If you agree to the terms of the study, **please sign and date ONE copy of the Informed Consent form and return it** to me. The second copy of the form is for you to keep.

To participate in the study, you must be 18 years of age or older, a student at a community college or college/university, feel comfortable reading in the English language, and identify as one of the following: Mexican American, Chinese American, or Caucasian American.

The following are the key elements of the Informed Consent form that I feel it is important to highlight.

- Your participation in the study is **strictly voluntary**.
- You may elect to discontinue completing the questionnaires at any time or refuse to answer questions you prefer not to answer without penalty.
- The questionnaires ask items pertaining to your background; about your cultural customs, beliefs, and behaviors; how you view yourself, others, and your cultural group; and the degree to which particular personality traits describe you.
- The study should not take more than 20-25 minutes to complete.
- The study poses no more than minimal risk. If for some reason you do not feel comfortable about answering any of the questions, just skip them, or you have the right to not complete the questionnaires.
- You will not directly benefit from participating in this study, but the findings may help psychologists better understand the relationship of culture to one's personality style.
- To protect your privacy, you are asked NOT to put your name on the questionnaires. If the findings are published or presented at professional

conferences, I will only present the results for the group as a whole, not information about specific individuals.

- Your data may be shared with other investigators who are doing similar research. If the data are shared, the data will be released without any personally identifying information so that you cannot be identified.
- I will keep the original questionnaires, consent forms, and postcards for the drawing locked in a cabinet to which I will be the only person who has access.
- The information you provide is treated confidentially so it will not be released to others, unless such disclosure is required by law. These exceptions are the suspected abuse or neglect of a child; abuse or neglect of an elder or dependent adult; or if a person wishes to inflict serious harm to him/herself, to someone else, or to someone's property that would involve harm to others.

If you are interested in being entered into the drawing for a \$50 e-gift card to Best Buy, please complete the postcard with your name and email address.

Again, I want to thank you for being interested in participating in my study.

Sincerely,

Amy Wong, M. Ed.
Doctoral Student
Pepperdine University
Graduate School of Education and Psychology
(877) 778-9393
hingmanamy.wong@pepperdine.edu

APPENDIX F

Cover Letter to Participants – For Electronic Packet

Date

Thank you for being interested in participating in my dissertation research. Included with this letter are the following materials:

1. A copy of the *Informed Consent for Participation in Research Activities*.
2. Packet of questionnaires.
3. Postcard for entry into the drawing.

Please read over the *Informed Consent for Participation in the Research Activities* form carefully. If you have questions about its contents, please do not hesitate to contact me by telephone (877) 778-9393 or email (hingmanamy.wong@pepperdine.edu) with your questions.

If you agree to the terms of the study, **please check the boxes, found at the end of the form, that apply to you. It is also important that you print your name and the date. Make sure to attach the consent form to your email when you return the questionnaires. Please save the form in a safe place in case you wish to refer to it in the future.**

To participate in the study, you must be 18 years of age or older, a student at a community college or college/university, feel comfortable reading in the English language, and identify as one of the following: Mexican American, Chinese American, or Caucasian American.

The following are the key elements of the Informed Consent form that I feel it is important to highlight.

- Your participation in the study is **strictly voluntary**.
- You may elect to discontinue completing the questionnaires at any time or refuse to answer questions you prefer not to answer without penalty.
- The questionnaires ask items pertaining to your background; about your cultural customs, beliefs, and behaviors; how you view yourself, others, and your cultural group; and the degree to which particular personality traits describe you.
- The study should not take more than 20-25 minutes to complete.
- The study poses no more than minimal risk. If for some reason you do not feel comfortable about answering any of the questions, just skip them, or you have the right to not complete the questionnaires.
- You will not directly benefit from participating in this study, but the findings may help psychologists better understand the relationship of culture to one's personality style.
- To protect your privacy, you are asked NOT to put your name on the questionnaires. If the findings are published or presented at professional conferences, I will only present the results for the group as a whole, not information about specific individuals.

- Your data may be shared with other investigators who are doing similar research. If the data are shared, the data will be released without any personally identifying information so that you cannot be identified.
- I will keep the original questionnaires, consent forms, and postcards for the drawing locked in a cabinet to which I will be the only person who has access.
- The information you provide is treated confidentially so it will not be released to others, unless such disclosure is required by law. These exceptions are the suspected abuse or neglect of a child; abuse or neglect of an elder or dependent adult; or if a person wishes to inflict serious harm to him/herself, to someone else, or to someone's property that would involve harm to others.

If you are interested in being entered into the drawing for a \$50 e-gift card to Best Buy, please complete the postcard with your name and email address. If you wish to be entered into the drawing, please do not forget to attach the postcard file to your email when you return the questionnaires.

Again, I want to thank you for being interested in participating in my study.

Sincerely,

Amy Wong, M. Ed.
Doctoral Student
Pepperdine University
Graduate School of Education and Psychology
(877) 778-9393
hingmanamy.wong@pepperdine.edu

APPENDIX G

Informed Consent for Participation in Research Activities – For Mailed Version

Informed Consent for Participation in Research Activities

How Culture Shapes Personality: A Preliminary Study

I authorize Amy Wong, M. Ed., a doctoral student in the clinical psychology program at Pepperdine University, Graduate School of Education and Psychology, to include me in a dissertation research project examining how culture shapes personality. The research project is being supervised by Joy Asamen, Ph.D., Professor of Psychology.

There are research findings that demonstrate how particular personality traits are more common in some cultures than others, and for some cultural groups, acculturation might be related to the findings. Hence, the purpose of this study is to further examine these observations. Please read the remainder of this form carefully as it provides information that will help you decide whether you are interested in completing the questionnaires.

I understand the completion of the questionnaires is **strictly voluntary**. I also understand that I am free to choose to not complete all items on the questionnaires or to discontinue the questionnaires at any time without penalty. In other words, if I am a student, neither my grades will be affected nor my standing in the college; if I am a member of an organization or a church, my relationship with the organization or church will not be affected.

I have been asked to participate in this study because I am 18 year old; a student in either a community college or a college/university; comfortable reading in the English language; and identify as Mexican American, Chinese American, or Caucasian American. I understand my participation in this study will involve the completion of questionnaires concerning my background characteristics (e.g., age; gender; language spoken in home; immigration information, if relevant; parents' education and occupation); cultural customs, beliefs, and behaviors; view about myself, others, and my cultural group; and the degree to which particular personality traits describe me. The questionnaires should take less than 20-25 minutes to complete.

By returning the questionnaires and submitting a postcard with my name and email address, I understand that I will be entered into a drawing for a \$50 Best Buy e-gift card. The drawing will not occur until the researcher has completed collecting all the data required to finish the study. The winner will be notified by email and the rest of the participants who entered the drawing will be notified that the drawing has been completed.

I understand that this study involves no more than minimal risk. If for some reason I do not feel comfortable about answering any of the questions, I may skip them. I may also choose to discontinue participating in the study at any time. The researcher may also ask that I not continue completing the questionnaires if she feels it is not in my best interest.

Although I may not directly benefit from completing the questionnaires, the answers to the questions may help individuals who study and work in the field of psychology to better understand the relationship of culture to one's personality style. Such knowledge

may help psychologists to become more aware of the extent to which cultural processes impact key personality characteristics.

To protect my privacy, I have been asked to not write my name or other information that can identify me on the questionnaires. It is possible that the findings of this study may be published or presented at professional conferences. If the findings are presented, only the information that describes the group as a whole will be provided; no information about individual participants will be disclosed. My data may also be shared with other investigators who are doing similar research. If my data are shared, the data will be released without personally identifying information that can identify me.

Only the researcher will have access to the original questionnaires, consent forms, and postcards for the drawing. The information that is collected will be kept for at least 3 years in a secure manner, and will be destroyed by Amy Wong when the data are no longer required for research purposes.

I understand the information that I provide will be treated in a confidential manner. In other words, no one will be told what I have disclosed in the questionnaires. Under California law, there are some exceptions to confidentiality. These exceptions are the suspected abuse or neglect of a child; abuse or neglect of an elder or dependent adult; or if a person wishes to inflict serious harm to him/herself, to someone else, or to someone's property that would involve harm to others. In these cases, the researcher is required to report the situation to the proper authority.

If I have questions concerning this study, I understand that I may contact Amy Wong at (877) 778-9393 or via email at hingmanamy.wong@pepperdine.edu. I may also contact Joy Asamen, Ph.D., at the following for answers to my questions: Pepperdine University, Graduate School of Education and Psychology, 6100 Center Drive, Los Angeles, CA 90045; (310) 568-5654. If I have any questions about my rights as a participant in this study, I understand I may contact Yuying Tsong, Ph.D., Chairperson of the Graduate and Professional Schools Institutional Review Board, Pepperdine University, Graduate School of Education and Psychology, CA ; 6100 Center Drive, Los Angeles, CA 90045; (310) 568-5763.

I have read the information provided in this form and understand what my study participation will entail. I am 18 years or older and voluntarily agree to participate in this research project.

Name of Participant (please print): _____

Participant's signature

Date

APPENDIX H

Informed Consent for Participation in Research Activities – For Electronic Version

Informed Consent for Participation in Research Activities

How Culture Shapes Personality: A Preliminary Study

I authorize Amy Wong, M. Ed., a doctoral student in the clinical psychology program at Pepperdine University, Graduate School of Education and Psychology, to include me in a dissertation research project examining how culture shapes personality. The research project is being supervised by Joy Asamen, Ph.D., Professor of Psychology.

There are research findings that demonstrate how particular personality traits are more common in some cultures than others, and for some cultural groups, acculturation might be related to the findings. Hence, the purpose of this study is to further examine these observations. Please read the remainder of this form carefully as it provides information that will help you decide whether you are interested in completing the questionnaires.

I understand the completion of the questionnaires is **strictly voluntary**. I also understand that I am free to choose to not complete all items on the questionnaires or to discontinue the questionnaires at any time without penalty. In other words, if I am a student, neither my grades will be affected nor my standing in the college; if I am a member of an organization or a church, my relationship with the organization or church will not be affected.

I have been asked to participate in this study because I am 18 year old; a student in either a community college or a college/university; comfortable reading in the English language; and identify as Mexican American, Chinese American, or Caucasian American. I understand my participation in this study will involve the completion of questionnaires concerning my background characteristics (e.g., age; gender; language spoken in home; immigration information, if relevant; parents' education and occupation); cultural customs, beliefs, and behaviors; view about myself, others, and my cultural group; and the degree to which particular personality traits describe me. The questionnaires should take less than 20-25 minutes to complete.

By returning the questionnaires and submitting a postcard with my name and email address, I understand that I will be entered into a drawing for a \$50 Best Buy e-gift card. The drawing will not occur until the researcher has completed collecting all the data required to finish the study. The winner will be notified by email and the rest of the participants who entered the drawing will be notified that the drawing has been completed.

I understand that this study involves no more than minimal risk. If for some reason I do not feel comfortable about answering any of the questions, I may skip them. I may also choose to discontinue participating in the study at any time. The researcher may also ask that I not continue completing the questionnaires if she feels it is not in my best interest.

Although I may not directly benefit from completing the questionnaires, the answers to the questions may help individuals who study and work in the field of psychology to better understand the relationship of culture to one's personality style. Such knowledge

may help psychologists to become more aware of the extent to which cultural processes impact key personality characteristics.

To protect my privacy, I have been asked to not write my name or other information that can identify me on the questionnaires. It is possible that the findings of this study may be published or presented at professional conferences. If the findings are presented, only the information that describes the group as a whole will be provided; no information about individual participants will be disclosed. My data may also be shared with other investigators who are doing similar research. If my data are shared, the data will be released without personally identifying information that can identify me.

Only the researcher will have access to the original questionnaires, consent forms, and postcards for the drawing. The information that is collected will be kept for at least 3 years in a secure manner, and will be destroyed by Amy Wong when the data are no longer required for research purposes.

I understand the information that I provide will be treated in a confidential manner. In other words, no one will be told what I have disclosed in the questionnaires. Under California law, there are some exceptions to confidentiality. These exceptions are the suspected abuse or neglect of a child; abuse or neglect of an elder or dependent adult; or if a person wishes to inflict serious harm to him/herself, to someone else, or to someone's property that would involve harm to others. In these cases, the researcher is required to report the situation to the proper authority.

If I have questions concerning this study, I understand that I may contact Amy Wong at (877) 778-9393 or via email at hingmanamy.wong@pepperdine.edu. I may also contact Joy Asamen, Ph.D., at the following for answers to my questions: Pepperdine University, Graduate School of Education and Psychology, 6100 Center Drive, Los Angeles, CA 90045; (310) 568-5654. If I have any questions about my rights as a participant in this study, I understand I may contact Yuying Tsong, Ph.D., Chairperson of the Graduate and Professional Schools Institutional Review Board, Pepperdine University, Graduate School of Education and Psychology, CA ; 6100 Center Drive, Los Angeles, CA 90045; (310) 568-5763.

Please check the appropriate response for each of the following items:

- I have read the information provided in this form and understand what my study participation will entail.
- I am 18 years or older and voluntarily agree to participate in this research project.
- I am residing in the state of California.

Name of Participant (please print): _____

Date

APPENDIX I

Postcard for Drawing

Thank you for returning the study materials. If you are interested in being entered into the drawing for the \$50 Best Buy e-gift card, please provide the following information:

Name: _____

Email address: _____

The drawing will not occur until the researcher has completed collecting all the data required to finish the study.

The winner will be notified by email and the rest of the participants who entered the drawing will be notified that the drawing has been completed.

APPENDIX J

Instrument Packet Distribution Table

Instrument Packet Distribution Table

	Demographic Questionnaire	Brief RIC	ARSMA-II	SL-ASIA	CPAI-2: Interpersonal Relatedness Scale
Caucasian Americans	X	X			X
Chinese Americans	X	X		X	X
Mexican Americans	X	X	X		X