ABSTRACT

Title of Document: WELL-BEING AND NEGATIVE MOOD OF SOUTH ASIAN AMERICAN COLLEGE STUDENTS: CONTRIBUTIONS OF ADULT ATTACHMENT, ACCULTURATION, AND RACIAL IDENTITY

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Traditional psychological theories of development (e.g., attachment theory) have been criticized for their inability to fully explain well-being and negative mental health outcomes in ethnic and racial minority populations. Specifically, the intersection of developmental theories and salient sociocultural variables in predicting the well-being of Asian Americans has not been well elucidated, as little research has been conducted in this area. Yet, the need for understanding the mechanisms underlying the well-being of Asian Americans has been rising as the Asian American population is the fastest growing racial/ethnic group in the United States. The goal of this study was to extend knowledge regarding the applicability of attachment theory using a cross-cultural lens. Specifically, this study examined the joint contributions of a traditional developmental theory and sociocultural variables to better understand optimal development and well-being among South Asian Americans. This study advanced knowledge by finding that for South Asian American college students, adult attachment, acculturation and racial identity account for robust variance in the prediction of self-esteem, anxious mood, and depressed mood. Adult attachment, acculturation and racial identity accounted for variance in self-esteem,
and more specifically, avoidant attachment, anxious attachment, and racial identity’s internalization accounted for unique variance in self-esteem. The variance in anxious mood was accounted for by adult attachment, acculturation, and racial identity, with racial identity’s conformity status accounting for unique variance in anxious mood. Finally, adult attachment, acculturation and racial identity accounted for variance in depressed mood. Implications for research and practice are discussed.
WELL-BEING AND NEGATIVE MOOD OF SOUTH ASIAN AMERICAN COLLEGE STUDENTS: CONTRIBUTIONS OF ATTACHMENT, ACCULTURATION, AND RACIAL IDENTITY

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CHAPTER 1

Introduction

Traditional psychological theories of development (e.g., attachment theory) have been criticized for their inability to fully explain well-being and negative mental health outcomes in ethnic and racial minority populations (Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000; Wang & Mallinckrodt, 2006). Specifically, the intersection of developmental theories and salient sociocultural variables in predicting the well-being of Asian Americans has not been well elucidated, as little research has been conducted in this area. Yet, the need for understanding the mechanisms underlying the well-being of Asian Americans has been rising as the Asian American population is the fastest growing racial/ethnic group in the United States (Zhou, 2004).

In the area of mental health, Asian Americans reported similar, if not higher rates of diagnosable mental illnesses as White Americans, but underutilized mental health services compared to other Americans (Uba, 2003). Findings from one study suggested that only 17% of Asian Americans reporting mental health problems sought treatment (United States Department of Health and Human Services, n.d.). Furthermore, psychotherapy treatment outcome and satisfaction were reported to be poorer for Asian Americans than for White Americans (United States Department of Health and Human Services, n.d.). One reason for low rates of seeking and reporting satisfaction with treatment may have been due to the lack of understanding among mental health providers as to what contributed to well-being among sub-groups of Asian Americans, and how to implement culturally competent treatment interventions. Thus, the purpose of this study
was to advance knowledge regarding predictors of well-being and negative mood of South Asian Americans by studying adult attachment, acculturation, and racial identity.

**Purpose of Study**

Wei, Russell, Mallinckrodt, and Zakalik (2004) investigated the relation between adult attachment style and negative mood in college students across four ethnic groups: African Americans, Asian Americans, Hispanic Americans, and Whites. Results indicated differences across groups in attachment style, mood, and the relations between attachment and mood. Asian Americans and Hispanic Americans reported higher levels of anxious attachment than Whites and Blacks. Asian Americans and Blacks demonstrated higher levels of avoidant attachment than White students. Anxious attachment was related to negative mood across all four groups, but held a stronger relationship for Asian Americans than for Blacks and Whites.

This study advanced the work of Wei et al. (2004) by examining acculturation and racial identity in addition to adult attachment style. Furthermore, the outcome variables in this investigation included both well-being and negative mood. Finally, only South Asian Americans were studied to focus on a single Asian sub-group to increase knowledge regarding the well-being of this population. By examining additional cultural variables and well-being, this study advanced knowledge regarding the findings that emerged in Wei et al.’s (2004) study.

**Adult Attachment**

The contribution of attachment theory to the understanding of well-being and pathology has been researched widely in Counseling Psychology. Bowlby (1988) claimed that people were biologically predisposed to pursue and develop attachments to others as
a source of protection. During stressful times, attachment behaviors (e.g., crying) were activated to elicit safety and security. Attachment behaviors were adaptive and developed through early interactions with a primary caregiver, often cited as the mother. A parent responsive to the child experiencing threat encouraged the development of healthy attachment behaviors so that the child was able to eventually internalize these responses and self-soothe when feeling threatened in future relationships. Through early repeated attachment related experiences, internal representations of the self (e.g., how acceptable they are) and of others (e.g., how reliable they are) developed.

The findings from Ainsworth et al. (1978) Strange Situation Study suggested that children demonstrated three types of attachment behaviors, all of which have became popularized in attachment theory. Secure attachments, considered healthy, reflected an internal representation of self as worthy and others as responsible and reliable. Insecure attachment behaviors include anxious-ambivalent and avoidant responses. Caregivers of anxious-ambivalent infants were inconsistent in their responses to their children, and these children were fearful and viewed others as unreliable. Exploration and confidence relied on the presence of a supportive attachment figure. Avoidant children had caregivers who tended to reject providing care. These children experienced themselves as unwanted and expected others to be rejecting. These attachment behaviors have been found to be replicated through adult relationships (Lopez, 1995).

Attachment theory has been criticized for not adequately explaining the development of racial minorities, such as Asian Americans. Sue (2004) asserted that psychological assessments and interventions should include clients’ cultural background, acculturation, enculturation and experiences with oppression. Moreover, romantic attachment style has
been minimally studied in Asian Americans. In a literature search examining the terms “Asian American” (and individual Asian ethnic groups) and “attachment” revealed research with findings that supported an association between romantic attachment and social support from U.S. friends (Chen, Mallinckrodt, & Mobley, 2002), ego development (Reich & Siegel, 2002), personal dedication commitment style (Pistole & Vocaturo, 1999), romantic feelings and experiences (William, Hatfield, Thompson, & Choo, 1994), self-construal (Kim & Zane, 2004), intimacy and positive expectations (You & Malley-Morrison, 2000), and abusive behavior (Malley, You, & Mills, 2000). Yet, the relationship between attachment and well-being has not been examined within an interpersonal context.

**Acculturation**

Acculturation was defined as a cultural process influential in shaping the experiences and behaviors of ethnic minorities, and has been widely examined for its relationship to healthy and unhealthy functioning. Acculturation referred to the cultural adjustment in behaviors, attitudes and values of immigrants, refugees and American born ethnic minorities (Tsai, Chentsova-Dutton, & Wong, 2002). Psychologists suggested that acculturation plays a role in the well-being of ethnic minorities (Phinney, 1992; Smith, 1991). Smith (1991) wrote:

Acceptance of one’s ethnic group as a positive reference group leads to positive self-esteem, whereas rejection…leads to self-estrangement and maladaptive psychological behavior. A sense of ethnic belonging is psychologically important for people, because it serves to anchor the individual’s relatedness to others in society. (p.186)
It was suggested that acculturation levels were important to consider when understanding the well-being of Asian Americans, as the mechanisms that underlie well-being may differ cross-culturally. Kim, Atkinson and Yang (1999) suggested that some of these values that differ from Western values included an emphasis on collectivism, interpersonal harmony, placing other’s needs ahead of one’s own, and self-effacement. Self-esteem and self-concept was thought to derive more from relationships in collectivistic cultures (Singelis, 1994). Therefore, acculturation levels may determine the extent to which a Western-based psychological theory of development can explain well-being for Asian Americans. Most research done in the past 15 years generally revealed that acculturation plays a role in the well-being of Asian American college students, but conflicting findings suggested that the nature of the relationship between this variable and well-being is complicated (Benet-Martinez & Karakitapoglu-Aygun, 2003; Chung, Bemak & Wong, 2000; Iwamasa & Kooreman, 1995; Padilla, Wagatsuma, & Lindholm, 1985; Rahman & Rollock, 2004; Yasuda & Duan, 2002). The examination of attachment theory and acculturation together has the potential to reconcile some of these inconsistencies.

**Racial Identity**

Racial identity was another important variable to consider when understanding what contributes to the well-being of Asian Americans (Alvarez & Helms, 2001). Racial identity theory explains that people of color evolve in the racially-influenced representations they hold of themselves. These representations included seeing themselves according to the racial group to which they are identified as belonging, as well as by individuals belonging to the dominant racial group (Thomson & Carter, 1997).
Racial identity theorists held that race has been a key organizing feature of American society and experiences, and yet, like other sociocultural experiences, has not been considered in traditional models of personality development (Carter, 1995). Some evidence, though, suggested that racial awareness developed for some children at the age of 3, and that this awareness affected them in cognitive, affective and other dimensions (Carter, 1995). Since personality has been thought to mature within a context of belonging to a racial group, racial identity and personality likely work together to influence each other as they develop. Yet, it was unclear how racial identity related to relational interactions (Carter, 1995).

Racial identity’s contribution to the well-being of racial minorities in the United States had been well-supported in research (Pierre & Mahalik, 2005). Few studies, though, specifically examined the role of racial identity in the functioning and well-being of Asian Americans. Among Asian Americans, racial identity has been found to relate to attitudes towards diversity-related behavior (Linnehan, Konrad, Reitman, Greenhalgh, & London, 2003), collective self-esteem (Alvarez & Helms, 2001), and awareness of racism (Alvarez & Helms, 2001). Racial identity was found to be associated with cultural values (Yeh, Carter, & Pieterse, 2004), gender role conflict and male role norms among men (Liu, 2002), racial mistrust, overall group impression, racial stereotypes of African Americans and quality of racial contact (Kohatsu, Dulay, Lam, Concepcion, Perez, Lopez, & Euler, 2000), psychosocial development (Pope, 2000), and career maturity (Carter & Constantine, 2000).
Well-being

Well-being comprised dimensions of positive affective, cognitive, and behavioral functioning and has had important implications for optimal functioning in multiple areas of one’s life (e.g., social support, financial security, personality) (Diener & Diener, 1995; Lent, 2004). Findings from psychological research suggested that the mechanisms leading to optimal functioning differed cross-culturally. In fact, psychological research produced mixed findings with regards to the well-being of Asian Americans (Chang, 2002; Okazaki, 2002). Understanding the mechanisms that underlie well-being and negative mood among Asian Americans necessitated examination of salient sociocultural influences (e.g., acculturation, racial identity) within a cultural context (Chang, 2002). The sociocultural environment defined mental illness, as it is culture that determines the norms and deviations of healthy behavior and relational interactions (Kagawa-Singer & Chung, 2002). Moreover, identity, self-worth and sense of belonging were derived through cultural values and beliefs.

Acculturation was important when examining the mental health of Asian Americans. The ethnic group an individual identified as belonging to provided information on the cultural values, beliefs, and norms regarding behavior and expressions of distress and health held by an individual. For example, Asian values traditionally hold that identity, worth, and security are interrelated with the family, creating a sense of optimal self that is less autonomous and more fluid than how healthy self is defined in Western cultures.

Racial identity was another variable that underlied well-being among Asian Americans, as race influenced the development of self. While both attachment and racial identity theories overlapped in emphasizing the role that representations of self and other
perceptions play in well-being, they differed on the origins of the representations. Racial identity’s relationship to attachment style had not been examined.

This study examined the independent and joint contributions of attachment, acculturation, and racial identity to negative mood and well-being. This study also extended Wei et al.’s (2004) study that examined attachment theory and mood outcomes across four racial and ethnic groups by examining the contributions of cultural variables to the well-being of South Asian Americans.

Finally, this study focused on the unique experiences of South Asian Americans. Asian ethnic groups vary in their context of immigration, languages, labor trends, parenting practices, and many other cultural domains. Comprising 11 million individuals in the United States, Asian Americans represent at least 43 ethnic groups, and over 100 languages and dialects. Among Asian Americans, individuals of South Asian descent have differentiated themselves into a sub-group, forming professional, social, political, and cultural organizations that reflect the unique interests and needs of individuals from the subcontinent. The South Asian Public Health Association (SAPHA) formed in 1998 to address the unique health needs of these individuals. SAPHA published the “Brown Paper: A review of health research and literature on South Asians in the United States” to add to advance public knowledge. After reviewing the research on South Asian health, SAPHA recommended more research to be conducted on South Asians as a group to better understand the health needs of these individuals. Specifically, they stated that little information exists on the health of South Asians as a group. South Asian Americans comprise roughly 2 million individuals in the United States, and have grown in population over 106% from 1990 to 2000. This increase calls attention to the need for
more information regarding the health and health-related needs of individuals in the United States of South Asian descent. Since September 11th, the racial distinctions between South Asian Americans and other Asian Americans had become increasingly meaningful, necessitating examination of the unique determinants of well-being among South Asian Americans. In this study, South Asian Americans included participants who identified as Afghani, Bangladeshi, Bhutanese, Indian, Indo-Caribbean, Maldives, Nepalese, Pakistani, Sri Lankan, or Tibetan. People of South Asian origin have a distinct immigration history to the United States, first arriving in the mid-1800’s as farmers in California. From the early 1900’s to 1965, South Asian immigration to the United States stopped due to restrictive immigration laws (Prathikanti, 1997). The Immigration and Naturalization Act of 1965 opened the doors for the next wave of South Asian immigrants, allowing the migration of young, English-speaking professionals with advanced degrees in fields that were considered desirable by the United States. The newer arrivals were more diverse in education, socioeconomic status, and other demographics, as they included sponsored family members of the earlier wave. Some areas in which South Asians differ from Westerners include the concept of family (flexible, fluid, spanning multiple generations and households), values (e.g., modesty, self-effacement), phenomena of adopting select Western values (and thus experiencing cultural switching), and the experience of racism (Prathikanti, 1997).

To summarize, the overall goal of this study was to extend knowledge regarding the applicability of attachment theory using a cross-cultural lens. Specifically, this study examined the joint contributions of a traditional developmental theory and sociocultural variables to better understand optimal development and well-being among South Asian
Americans. Attachment, acculturation, and racial identity were hypothesized to explain variance in well-being and negative mood among South Asian Americans.
CHAPTER 2

Literature Review

This literature review presented a summary of research and theory that examined the contributions of adult attachment, acculturation, and racial identity in the prediction of well-being and negative mood of South Asian Americans. First, a brief review of the literature on South Asian Americans and well-being was provided. A discussion on attachment theory and cross-cultural considerations was then presented, followed by the research that examined attachment theory in populations of Asian descent within the United States. Subsequently, an overview of acculturation theory was discussed, followed by research examining the contributions of acculturation towards the well being of South Asian American college students. Finally, a review of the theoretical and empirical literature on racial identity and well-being of South Asian American college students was summarized. Due to the very little research on South Asian college students and the paucity of mental health data regarding “Asian Americans”, specific Asian and South Asian sub groups are also included when comprehensive information on South Asian Americans was unable to be found in the areas of well-being, negative mood, attachment, acculturation, and racial identity. Previous reports regarding South Asian American health also has utilized data on “Asian Americans” and specific Asian sub-groups to provide comprehensive information on South Asian American health (SAPHA, 2002).

South Asian Americans

Grouping Asian Americans together in research has had benefits (e.g., larger sample size, political value in identifying them as one group), but also resulted in problems. Clearly, Asian Americans were distinct from other racial groups in the United States. As
a result of being grouped together to belonging to one cultural group, there may have been shared experiences held by this group, such as adjusting to being a racial and ethnic minority (Tanaka, Ebreo, Linn & Morera, 1998). Many Asian Americans shared certain cultural values (e.g., interdependency, collectivism) as well as common race-based experiences. Also, despite some shared values, salient differences existed among subgroups of Asian Americans. Moreover, meaningful differences between Asian ethnic groups were minimized when data on Asian Americans are aggregated.

South Asian Americans were defined as individuals who identify as Afghanistani, Bangladeshi, Bhutanese, Indian, Indo-Caribbean, Maldives, Nepalese, Pakistani, Sri Lankan, or Tibetan. Racial distinctions among Asian Americans always have existed, but have potentially further widened upon September 11, 2001. Those racially identified as South Asian or Middle Eastern have been grouped together due to fears of terrorism and the current stereotype of a terrorist. Therefore, it was likely that the meaning of being South Asian in the United States had changed as a result of changing views held by American majority culture towards South Asians. This change in the cultural context likely led to changes in the perception South Asians held of themselves as minorities in America, influencing their acculturative experiences and racial identity. Moreover, experiencing perceived group and personal discrimination within the United States likely affected individuals’ acculturation and sense of belonging to their host country, and well-being. Both Rahman and Rollock (2004) and Lee (2003) found that perceived prejudice or discrimination contributed to depression among South Asians and Asian Indians.

Moreover, South Asians shared a common immigration history to the United States, with a large wave emigrating to the United States through the Immigration and
Naturalization Act of 1965 (Prathikanti, 1997). South Asian immigrants who were considered to have advanced education in medicine, engineering, or science characterized those allowed entry into the United States. Sponsored family members characterized the newer wave of immigrants, and reflected a broader range of education and skills. The major religions in South Asia are Buddhism, Christianity, Hinduism, Islam, and Sikhism. Moreover, individuals from the South Asian subcontinent are often distinguished from other Asians, reflecting a shared cultural and racial identity. Also, many South Asians shared a history of British colonization, and it was suggested that this may have resulted in greater English language proficiency among these individuals than other Asian Americans (Frey & Roysircar, 2006). Differential exposure to English language and customs may have led to a different acculturation process for South Asians (Frey & Roysircar, 2006). For example, differences were found in the relationship between acculturation and use of help-resources for East Asian Americans and South Asian Americans (Frey & Roysircar, 2006). A positive relationship was supported between utilization of helping resources and acculturation to U.S. culture among South Asian Americans, but this relationship has not been supported among East Asian Americans (Frey & Roysircar, 2006).

South Asian cultural values included self-effacement, which could have been mistaken in the United States as low self-worth (Prathikanti, 1997). While adapting to Western values at work, these individuals have been expected to use South Asian values to guide other areas of their lives, including family, food, dress, and social behaviors. Thus, cultural switching has been adaptive for South Asian Americans (Prathikanti, 1997). Frey and Roysircar (2006) suggested differences between East Asians and South
Asians in mental health. Specifically, differences have been found in coping strategies, with the latter engaging in active, problem solving behaviors while the former engaged in more avoidant strategies (Luk & Bond, 1992). Few psychological studies examined South Asian Americans, with even less having examined the differences among Asian Americans.

**South Asian Americans and Well-Being**

The model minority myth was used to explain the little attention given to the mental health struggles encountered by Asian Americans, including examination of the well-being and distress in this population (Lee, Lei, & Sue, 2001). Depression was found to be at least prevalent, if not more so, among this population than in Whites (Lee et al., 2001). High rates of anxiety had been reported in Asian Americans and were thought to be associated with adjustment-related stressors (Lee et al., 2001). Among these individuals, several cultural variables (e.g., intergenerational conflict, acculturation) have been examined for their relation to well-being. An area of research that necessitated further examination was that of the fit of popular, Western theories of development and well-being towards Asian Americans. Specifically, how did sociocultural variables combine with attachment theory to explain well-being among South Asian Americans?

Well-being was a multidimensional construct that referred to optimal functioning and experiences, and was comprised of a variety of affective (e.g., happiness) and cognitive (e.g., positive evaluations of one’s life) dimensions (Lent, 2004). The association of well-being to numerous variables, including personality, income and social support, had been examined in research (Diener & Diener, 1995). The size of the correlation between well-being and other variables (e.g., self-esteem) was found to differ
across nations, indicating that the mechanisms underlying well-being likely differed cross-culturally. For example, the relationship between self-esteem and well-being was found to be stronger for individuals in individualistic societies than those in collectivistic ones.

*Adult Attachment*

Attachment theory has been one of the most influential and widely used theories to understand human development. The theory held that humans innately seek and establish attachments to others for the purpose of survival. These attachment behaviors ensured safety and protection, which was essential for psychological survival (Blustein, Preziso, & Schultheiss, 1995). The findings from Ainsworth’s now-famous “Strange Situation” study provided a catalyst to the development of attachment theory (Ainsworth et al., 1978). Ainsworth and her colleagues created situations involving brief separations and reunions between mothers and their infants, and included times spent by the infant alone as well as time with a stranger. Observations of the children’s responses to separation from their moms and their exploratory behavior in the presence of their mothers were used to identify distinct attachment styles.

*Attachment through a Lifespan.* At birth, the infant used a variety of behaviors to elicit closeness to their caregiver, which included crying. The baby moved from indiscriminatory to discriminatory behaviors, depending on who was responding to the behaviors. Midway through the first year, developmental changes (e.g., more active behaviors) affected attachment behaviors and facilitated the formation of an internal representation of the principal caregiver. Upon creating these representations, the experience of separation anxiety occurred. The infant became attached to other familiar
persons. During the first year, the child’s experiences with attachment figures led to the development of expectations from others and messages regarding self-worth. Between three to four years, the child started to become capable of “goal-corrected partnership” due to developmental changes. The child now was able to convince their parents to alter or shape their plans to do what the child wants them to do. Language allowed the child and parent to negotiate their plans, and trust in the stability of this mutual understanding becomes part of the child’s working model of self and others. During adolescence, developmental shifts included seeking romantic partners (and attachments). The nature of attachment style may have experienced changes due to hormonal, neurophysiological, and cognitive changes, in addition to the socioemotional experiences (Ainsworth, 1989). Moreover, later relational experiences also may have altered attachment styles. The attachment patterns developed during a child’s first year of life are thought to remain throughout an individual’s lifetime. Attachment behaviors, to a lesser degree, influenced relationships with peers.

Assumptions of Attachment Theory. Thus, one assumption of theory was that the internalization of the reliability and responsiveness of the caregiver as the child developed was related to her or his later ability to regulate emotions, and the development of self (Bowlby, 1988). Bowlby (1982) stated that the experience of continuous, positive connections to others necessitated healthy exploration and adjustment.

A second assumption embedded in the theory was that early attachment-related experiences were crucial in forming internal working models of the self and others. Beliefs about one’s self-worth and expectations of others availability and response
specifically were the schemas that developed. During times of stress, they were activated, and organized the way we understood ourselves and others’ behaviors, shaping later social experiences. Ainsworth et al. (1978) found that when a secure infant was able to rely on the caregiver to be accessible and responsive, the attachment relationship became a secure base that encouraged exploratory behavior from the infant and soothed anxiety. These caring responses from the mother facilitated the development of a worthy and competent self and schema of others as responsive and dependable. Furthermore, these particular internal representations facilitated the development of a healthy personality. These infants were identified as secure, and characterized as having optimal health.

Two patterns of insecure infants were also observed. The first was the anxious-ambivalent infant, whose relationships with caregivers were characterized as inconsistent in responsiveness and helpfulness. These infants formed a model of self that was uncertain and fearful, and expectations from others as able to soothe, but unreliable. Consequences for personality development included limited agency and confidence. These individuals desire to explore became contingent upon the support, presence and approval of attachment figures. Healthy formation of emotional self-regulation was halted by this dependency on others.

The second insecure pattern observed was labeled avoidant attachment. This pattern was found in infant-caregiver relationships where the caregiver rejected the child’s attempts to solicit support and protection. This interaction led to the formation of a model of self as alone and unwanted, and expectations of others as rejecting and untrustworthy. Furthermore, as a result of emotionally unresponsive relationship
conditions, these infants were less likely to want to seek closeness, and instead exhibited compulsive self-sufficiency.

A third insecure pattern was later established to reconcile findings from subsequent studies that were unable to place a group of children into any of the three categories. This style was called disorganized/disoriented, and characterized those infants who demonstrated both avoidant and anxious behaviors, and had parents that were highly distressed.

*Adulthood Effects of Early Attachment Bonds.* Early attachment classification had been found to be predictive of later psychological outcomes, including emotional and social adjustment. Secure children showed greater emotional self-regulation, higher empathy and cooperative behavior than insecure children; anxious ambivalent classified infants exhibited more dependency on their teachers as children, and difficulty in their peer relationships; finally, those infants classified as avoidant later demonstrate hostile and distant behaviors and attitudes in their peer relationships, and tended not to seek support from teachers to alleviate distress.

These early attachment bonds were thought to continue through an individual’s lifespan, as they were seen as schemas that influenced what an individual saw, how they processed information, and their interpersonal behavior so to produce schema-consistent experiences. These schemas were considered relational schemas, and shaped the close relationships (intimates, friends, partners) in an individual’s life (Blustein et al., 1995). An infant’s knowledge of relationships was organized according to action and action outcomes (e.g., what to expect) rather than categories (discriminating between similarities and differences) (Main, Kaplan, & Cassidy, 1985).
Rather than an accumulation of numerous mental representations of relationships based on interactions with different caregivers, there are small differences in the representations of people in an infant’s life (Main et al., 1985). This standard representation was considered an internal working model, and defined as a mental representation with both affective and cognitive dimensions (Main et al., 1985). Internal working models actively guided relationship-oriented behavior through adulthood, and operated in a stable yet unconscious manner (Main et al., 1985). The formation of the internal working model occurred in the context of a caregiver relationship where the infant sought to seek closeness and safety. Individual differences in internal working models were due to the caregiver’s responsiveness to the proximity-seeking behavior. Internal working models not only determined the rules of relationship-oriented behavior, but also the appraisals of relationships. These rules influenced attention and memory organization, constricted access to knowledge regarding the self, the attachment figure, and their relationship, as well organization of thought and language related to the attachment. Many of these rules operated unconsciously.

Collins and Read (1994) proposed that four components characterized internal working models: memories of attachment related experience; beliefs, attitudes and expectations about self and others in relation to attachment; attachment-related goals and needs; and strategies and plans associated with achieving attachment goals.

As expected, individuals categorized as secure or dismissive reported higher levels of self-esteem, self-acceptance, and less distress than those categorized as preoccupied and fearful. With regards to their orientation towards others, secure and
preoccupied individuals reported more sociability than dismissive or fearful adults
(Klohnen & John, 1998).

**Attachment and Psychosocial Outcomes.** Adult attachment style was influential in
determining how one adapts to life stress. A secure attachment served as an internal
resource that aided in the successful adaptation to stress. Three specific aspects of the
secure attachment were helpful: an optimistic and benign cognitive appraisal that
encouraged the development of positive coping strategies; a coherent and highly
differentiated sense of self (seeing oneself as positive, but able to acknowledge negative
self-attributes); and cognitive flexibility (Mikulincer & Florian, 1998). Security led to
exploration, which resulted in a variety of positive outcomes (e.g., knowledge of the
world, social competence, career exploration). Security in family relationships was
necessary to engage in the tasks needed to facilitate exploration and risk taking that
would result in experiences enhancing identity formation, and in committing to a clear
and stable ego identity (Blustein et al., 1995). Furthermore, numerous studies
demonstrated relationships between insecure attachment styles and various variables,
including history of separation-loss, interpersonal traumas, parental psychopathology,
and other traumas (Mickelson, Kessler, & Shaver, 1997).

**Attachment Theory and Cultural Differences.** Most of the research testing
attachment theory was conducted on White college student samples, bringing into
question the generalizability of the theory with diverse samples. Bowlby claimed that the
core concepts of the theory were universal. Ainsworth and her colleagues also advocated
for the universality of attachment theory, and subsequent researchers claimed that cross-
cultural differences might lie in the expression of attachment behaviors. Support for the
cross-cultural applicability of the theory was evidenced by findings from empirical studies conducted in Uganda.

*Universality of attachment theory*

Issues that have surfaced regarding the universality of attachment theory mostly centered around the normality of “secure” attachment (e.g., self-construal and attachment both concern relationships with regards to self and others) and the cross-culturally validity of the methods used to assess attachment. Measures examined attachment through affective, cognitive and behavioral dimensions, and cultural bias may influence any of these three areas (Grossman & Grossman, 1990; Wang & Mallinckrodt, 2006). Researchers questioned whether the “strange situation” was an appropriate way to assess attachment cross-culturally, and whether the outcomes and implications across a lifespan were similar cross-culturally (Grossman & Grossman, 1990). While much attention had been put onto this area of research, few definite conclusions were made. Furthermore, very little research had examined the universality of adult attachment (Wang & Mallinckrodt, 2006).

Rothbaum, Weisz, Pott, Miyake, and Morelli (2000) argued that ethnocentric bias was inherent in attachment theory. The concept of relatedness was embedded in Western norms and values. Of concern were the wide-spread implications of this theory of relatedness, as it was one of the most popular frameworks used to understand healthy human development and relationships. Other theories of relatedness had endured more criticism of holding a Western bias (e.g., psychoanalysis and family systems theory), specifically for their emphasis on separation, differentiation and individuation. While there was recognition among theorists that cultural influences needed to be examined
alongside attachment in understanding development, little in-depth critical examination had been done testing the core of attachment theory. The authors explained that attention had focused more heavily on differences in incidents and manifestations of attachment behaviors rather than on closely examining the concept of attachment security (e.g., what leads to it and emerges from it). Rothbaum et al. (2000) provided a critical examination of cultural bias influencing the three core tenets of attachment theory.

The mother’s sensitivity to responding to the child’s attachment behaviors was thought to have the most influence over determining whether the child will develop a secure or insecure attachment style. This core tenet is called the “sensitivity hypothesis”. The second tenet was called the competent hypothesis. Those children who developed secure attachments become socially and emotionally competent children and adults. Western-based research suggested that they are more independent, better able to cope with negative emotions, more able to develop continuous and intimate friendships and have less behavioral problems. While this is a widely accepted hypothesis of attachment theory, there has been little research conducted in non-Western environments to test this hypothesis. The third core tenet of attachment theory was referred to as the secure base hypothesis. When an infant felt safe and protected, they were more likely to engage in exploratory behaviors. Bowlby and Ainsworth defined the link between secure base and exploratory behaviors as universal. A critical evaluation of the cultural influences over the three dimensions of attachment is given, with support provided for how culture influences the way attachment behaviors are expressed, when it occurs and the goal of the behavior.
First, embedded in the four sensitivity scales to assess caregiving was the Western value of autonomy. Ainsworth (1976) inquired whether a mother “values the fact that the baby has a will of its own, even when it opposes hers” to assess acceptance. Similar values of autonomy are found in assessments used for cooperation and sensitivity. Therefore, what was considered sensitive and responsive caregiving reflected larger cultural values. For example, Japanese parents preferred to anticipate their infants’ needs by identifying beforehand situations that may stress their infants and minimizing the stress. In contrast, parents’ responsiveness in the United States manifested as wanting for the children to assert their personal needs and wishes, reflecting a value on autonomy. The authors believed that aspects of maternal sensitivity in Japanese culture reflect a value of dependence and interdependence, whereas in the United States, it reflects autonomy.

The authors (Rothbaum et al., 2000) provided a critical examination of the competence hypothesis proposed by attachment theorists. Western values of individuation were embedded in this hypothesis in several ways. First, social and interpersonal competence was defined as being self-reliant as opposed to dependent on others, clearly associated with Western values of autonomy. Second, secure children and adults exhibited emotional openness, another value associated with Westerners. Third, secure children tended to exhibit positive social behaviors that are also associated with Western norms and values. For example, maintenance of eye contact, open communication with feelings and social interactions with unfamiliar adults. As adults, the aspects of social competence demonstrated by secure individuals are associated with Western values, and viewed negatively in Japanese culture. For example, a person that is
assertive and independent may also have been viewed as young and unrefined. Self-enhancement, a pro-social adult behavior associated with secure attachment was not common or valued among Japanese. Rather, self-criticism and self-effacement were more typical and upheld values, and associated with maintenance of harmony in a group. Securely attached individuals in the West were seen to be more independent and less dependent. Dependent-behaviors (e.g., clinginess, anxiety over acceptance, desire to be connected) were associated with social competence among Japanese.

The third tenet of attachment theory critically examined by Rothbaum et al. (2000) dealt with the importance of the secure base to healthy functioning. A secure attachment has meant to have a relationship where one can use another as a secure base from which to explore. What preceded the development of a secure base is continuous, sensitive responsiveness from a primary caregiver during infancy, and what results from having a secure base is social competence. Rothbaum et al. (2000) asserted that embedded in the connections between secure attachment and exploration, and exploration and individuation are the Western values of exploration and individuation as healthy behaviors and outcomes. The authors argued that while there may be a biological and adaptive basis to the connection between attachment and exploration, the extent to which exploration behaviors were needed and important depended on the cultural context. In collectivistic cultures, the association between attachment and dependence may be more important and central. While exploration led to social outcomes valued in the West (e.g., individuation, autonomy), dependence led to social outcomes valued among Easterners (e.g., accommodation, fitting in with the social environment).
LeVine and Miller (1990) further discussed how prior experiences influenced what was experienced as a strange and stressful situation for infants. The degree to which the physical setting in the Strange Situation was experienced as different from an infant’s normal environment depended on both the physical environment and the quantity of strange environments of which the infant had prior experience. LeVine and Miller (1990) suggested that one year old American infants had more experience in different, foreign environments than Japanese infants, potentially influencing the extent to which they experience the Strange Situation as anxiety provoking and stressful. Also, the infant’s prior experience with physical separation from their mothers may have differed cross-culturally, thus differentially preparing infants for physical separation from their mothers during the strange situation study (Hinde & Stevenson-Hinde, 1990). For example, the authors suggested that it is common for American mothers to watch their babies from a distance, while among other societies, there may be more physical contact in the presence of the baby. Mothers and infants will likely already have a reunion routine prior to the study, and these interactions may be culturally influenced and based, and intended to encourage different meanings. Finally, LeVine and Miller (1990) discussed that culture influences how much attachment to infant is valued, how it should look, what caring for their infant means, close or distant communication styles, autonomy, and the quality of responding to their children.

Trnavsky (1998) and Hinde and Stevenson-Hinde (1990) questioned whether the attachment classifications could be upheld in a non-American, non-White sample. The authors believed that the methods used to assess attachment in the United States are not appropriate universally. For example, cross-cultural differences in parental beliefs
regarding parenting, response to infant behaviors, and the extent to which infants have negative emotional reactions to separation with their mothers brings into question whether the traditional attachment model is enough to understand human relatedness. Lamb, Thompson, Gardner and Charnov (1985) failed to find support for the three attachment categories in a multinational dataset of infants. In their study, they found several differences in the behavioral profiles between the Chinese infants in their study and the ones in the Ainsworth et al. (1978) study. First, Chinese infants maintained interaction-at-a-distance strategies at higher and longer levels. Also, there was some question as to whether the mother’s behaviors (e.g., sitting on a chair) towards the infants were considered foreign, as Chinese moms were likely to be more interactive with their infants than white moms in the United States. Thus, distancing behavior from Chinese infants could be explained as a response to experiencing their mothers as behaving unusually.

Analysis of the attachment behaviors reflected in the infants indicated that the majority met the criteria for securely attached (65.5%). One-tenth of the sample were described as insecure, where they were unable to be comforted by their mothers upon reunification, and showed limited exploratory behaviors. The authors proposed a new attachment category to describe a third set of behaviors: independent. About one fourth of the sample were not bothered by the study, demonstrated a lot of interest in their mother and preferred to interact with her from a distance. Upon reunion, they showed a lot of activity and play, and very little crying in both the presence of the stranger and their mother. The authors believed that calm and independent, instead of insecure, better characterized these infants. Therefore, the traditional method of having a mom sit in a
chair introduces cultural bias and ignores culture-specific parenting practices. Furthermore, this brings into question the appropriateness of classifying children from non-White, Western cultural according to the traditional attachment categories.

Hinde and Stevenson-Hinde (1990) emphasized consideration of the adaptive function of attachment behaviors (psychological, biological, and cultural). Grossman and Grossman (1990) proposed that the different normative and rates of attachment strategies seen in other countries and culturally communities may be reflective of different adaptive strategies for survival. Therefore, while biology may have driven the need to have attachment strategies for survival purposes, the specific strategies considered optimal for health were culturally specific due to what is adaptive and necessary for survival. The child-rearing practices in each culture were such to produce adult personalities that conform to becoming successful in that culture, such as obedience, compliance, or self-assertiveness.

Asian Americans tended to immigrate from communities that emphasized interdependence and community. Those individuals that came from rural/agrarian lifestyles may have more so emphasized collectivism (e.g., farming villages). In these families, teaching obedience may have been adaptive for the family’s survival and well-being, as opposed to parenting to foster autonomy. Immigrants may have parented according to their own values not only for survival purposes, but also to ensure the intergenerational continuance of their values. Also, the circumstances under which recently emigrated families come to the United States may have influenced parenting styles. For some families, working as a unit is necessary for survival purposes in the United States, and therefore, parenting will emphasize obedience and attention to rules.
Parenting may also be geared towards helping children develop the skills to survive and adapt to being a racial minority in a racist society.

_Universality of outcomes._ Another question concerned the universality of the consequences and outcomes associated with the various attachment patterns. In the United States, children who demonstrated secure attachments as infants later in life had long attention spans, persistence, positive affect, empathy, compliance, ego resilience and social competence. Embedded in the definitions of psychological well-being and optimal health were cultural values and norms. Therefore, the “outcomes” that emerged from secure attachment may have been adaptive to cultural norms. What is considered culturally desirable and individually desirable likely overlapped and affected each other (Hinde & Stevenson-Hinde, 1990).

Takahashi (1990) examined three underlying assumptions of attachment theory on Japanese infants in a longitudinal study. Sixty 12-month old infants were assessed and followed until their 42nd month. Contrary to the key assumptions, (a) the stress aroused by the procedure went well beyond the moderate level for the Japanese infants, and some were pushed from type B (secure) to type C (anxious) behavior by the procedure (b) infants did not clearly exhibit avoidant behaviors toward the mother at the reunion with her, resulting in no type A babies (c) the insecurely attached type C infants overcame their 'disadvantage' by the 32nd month at the latest.

These findings were interpreted in terms of Japanese customs of child-rearing and interpersonal interactions. The author (Takahashi, 1990) proposed that Japanese participants expressed high distress when left alone because of differences in parenting styles. While a norm among Americans is to help children learn to cope with stress, the
Japanese moms instead tried to remove stress as part of their parenting practices. Therefore, Japanese babies may have experienced more distress upon being left alone than American infants due to differences in previous experiences with stressful situations.

Two explanations were proposed for why Japanese babies expressed few avoidant behaviors (Takahashi, 1990). First, avoidant behaviors opposed Japanese interpersonal norms emphasizing harmonious interactions, and therefore, the development of these behaviors would be discouraged from moms. Second, Japanese moms may have had different reunion responses, where they emphasized closeness when possible, and did not give space for the infants to give cues of attachment behaviors. Therefore, these moms’ behaviors may not have allowed for the development and expression of avoidant behaviors in the infants.

In conclusion, the data on Japanese infants and moms suggested that the key assumptions of the strange situation procedure were based on the child rearing practices of American White families (Takahashi, 1990).

Empirical research on attachment across cultures. Van Ijzendoorn and Sagi (1999) provided a cultural analysis of the concept of attachment, and discussed research that provided crosscultural support for the core tenets of attachment theory. The authors reviewed a study that linked descriptions of the secure child (as determined by experts within that country) and of the ideal child, according to mothers in each country. They provided this comparison with samples from China, Columbia, Germany, Israel, Japan and the United States. The authors reported large correlations of secure attachment norms to emerge across the different samples, indicating that experts and mothers report similar ideas of what secure attachment looks like in children crossculturally. The themes that
emerged from some cross-cultural data on attachment supports the universality of attachment theory (van Ijzendoorn & Sagi, 1999). Specifically, similar patterns of attachment behaviors had been observed across these studies. The caregiver spending the most time with infants became the attachment figure, and avoidant, secure and resistant attachment behaviors were observed in Western and non-Western cultures, such as Chinese, African and Japanese studies. Yet, these studies were limited in that they surveyed select regions in Japan, Israel, China and Africa, and had even more limited attachment data on individuals from India or Islamic countries. These countries are considered to have strong collectivistic traditions, and normative data collected from these countries may subsequently provide different “secure” attachment behaviors.

In a recent study conducted by Schmitt and his colleagues (2004), data collected from collectivistic countries also suggested different secure attachment behavior norms. The authors wanted to assess whether the model of self and model of other scales were valid across all countries, as the core assumptions of attachment theory have been questioned for their cross-cultural validity. One objective was to assess the validity of the model of self and other scales within many cultures in the world. To determine this, the authors assessed the relationship between the model of self and other scales with expected outcomes, such as self-worth and reactions to others. A second objective was to examine whether the internal working models of self and other had similar relationships with romantic attachment style cross culturally. Objective three was to assess whether the secure attachment style was normative in all cultural regions and the fourth objective was to assess whether East Asians reported higher scores of preoccupied attachment style. The fifth objective was to determine whether cultures with more resources, less social
stress and less children would have populations with more individuals reporting secure attachment styles.

Data were collected from 17,804 participants (10,372 women and 7,432 men) across 62 cultural regions around the world. College students comprised participants from most samples and all samples were convenience samples. Measures administered included the Relationship Questionnaire (Bartholomew & Horowitz, 1991), Self-Esteem Scale (Rosenberg, 1965), Big Five Inventory (Benet-Martinez & John, 1998), and indices of sociocultural correlates of romantic attachment. Cross-cultural support was evidenced for the validity of the model of self and other attachment scales. Results also indicated that the model of self and other dimensions was not associated with the four attachment styles consistently across cultural regions. While the secure attachment was normative in the majority of the countries surveyed, results from East Asian, South Asian and Southeast Asian countries reported higher levels of preoccupied attachment styles. Dismissing romantic attachment styles were higher in Bolivia, Belgium, Ethiopia and Malaysia. Insecure romantic attachment styles were associated with higher birth rates, less human development and resources. The results challenged the notion of secure attachment as normative cross-culturally.

Doherty, Hatfield, Thompson and Choo (1994) conducted a study investigating the crosscultural nature of love and attachment, examining whether women and men’s attachment style would differ by ethnicity. The authors proposed that if attachment theory is universal, then culture and ethnicity should not affect the relationship between attachment style and passionate and romantic love. Attachment style was thought to relate to susceptibility and quality of love. Anxious-ambivalents were thought to
experience more passionate love, while avoidants would be less vulnerable to passionate love. Individuals with secure attachment styles would be intermediate in their ability to experience passionate love. With regards to companionate love, secure attachment style holders would be the most capable of this love, while avoidants would be the least capable, and anxious intermediate in their capability. Participants included 184 women and 124 men enrolled at a large university in Hawaii. Participants reflected a diverse background in ethnicity: Chinese Americans (8.1%), European-Americans (29.9%), Japanese-Americans (32.8%), and Pacific Islanders (29.8%). Measures were completed on individualism/collectivism, attachment style, likelihood of being in love, passionate love, and companionate love.

No differences were found in attachment style across ethnic groups. Furthermore, ethnicity did not predict passionate or companionate love. Relationships were found between individualism/collectivism and passionate love, where high levels of individualism were associated with lower levels of passionate love. A similar relationship was found with companionate love, where lower levels of this form of love were associated with higher levels of individualism. Support was found for the hypothesized relationship between attachment style and love. Anxious-ambivalent participants reported significantly higher levels of passionate love than avoidant subjects. Differences in companionate love were found between secure and avoidant subjects, with the former reporting higher levels. The findings suggested that sociocultural variables influenced the relationship between attachment style and psychosocial outcomes. Future research testing the crosscultural appropriateness of attachment theory should not only compare ethnic
and racial groups, but also examine the relationship between attachment styles and relevant sociocultural variables to well-being, such as acculturation and racial identity.

Kim and Zane (2004) conducted a study investigating the relationship between attachment style, anger and self-construal among European American and Korean American male batterers. Participants included 52 Korean American men and 50 European American who were court-referred and enrolled in treatment programs for batterers’ in southern California. The average age of participants was 40.7 years, with a standard deviation of 9.8. Of the Korean Americans, the men resided an average of 33.6% of their lives in the United States. English and Korean versions of the measures were offered to participants. All Korean American participants choose the Korean version.

The results indicated that anxious attachment was associated with higher levels of physical violence among Korean American male batterers, consistent with findings from the general United States population. Korean American men with a stronger independent self-construal experienced more anger. Ethnic differences emerged in anger control, with Korean American men controlling their anger less than European American men. This difference was mediated by an independent self-construal. Korean American men also reported more avoidant and less anxious attachment styles, while European American batterers were more heavily reporting more anxious attachment and less avoidant attachment styles. Those participants reporting low levels of independent self-construal demonstrated more anxious attachment styles. Individuals with lower levels of interdependent self-construal reported more avoidant attachment styles. A negative relationship was found between independent self-construal and anxious attachment and
interdependent self-construal and avoidant attachment. The results also indicated that an ethnic effect in the differences in avoidant attachment was mediated by lower levels of independent self-construal. The results from this study suggest that rates of attachment styles differ across ethnic lines, and that cultural variables, such as self-construal, are associated with adult attachment styles.

Wang and Mallinckrodt (2006) conducted a study assessing differences in ideal attachment style among Taiwanese and U.S. undergraduates. The authors proposed that the three adult attachment categories (secure, avoidant and anxious) reflected Western cultural ideals and norms regarding intimacy, emotional expression and independence/dependence. The first hypothesis was that Taiwanese undergraduates would provide more avoidant and anxious behaviors in their description of an ideal attachment style than would U.S. students. The second hypothesis was that Taiwanese undergraduate students’ who reported high levels of independent self-construal and low levels of interdependent self-construal would also tend to exhibit beliefs about ideal attachment that were consistent with Western norms (e.g., low avoidance, low anxiety). The last hypothesis was that U.S. undergraduate students would report higher levels of independent self-construal and lower levels of interdependent self-construal. The researchers collected parallel data from a U.S. based undergraduate sample and a Taiwanese based undergraduate sample. Two hundred and ninety-one (76% women and 24% men) undergraduates attending a large, MidWestern public university in the United States participated in the study. Students’ average age was 20.62 years (SD=1.02) and were 90% White, 3% Black/African American, 2% Asian American/Pacific Islander, 2% mixed race/ethnicities, 2% Hispanic/Chicano/Latino/Latina, 1% Native American and 5%
with unreported ethnicities or race. Two hundred and eighty Taiwanese students also participated in the study. This sample was recruited from two universities in Taiwan. Participants were 45% women and 55% men, with a mean age of 19.76 years (SD=1.44).

The participants completed the ECRS (Brennan et al., 1998) with a modified set of instructions. Participants were asked to respond to each item according to their beliefs of how an ideally emotionally and psychologically healthy person of their gender in their culture would answer. The Taiwanese sample was provided a Chinese Version of the ECRS (Mallinckrodt & Wang, 2004). In addition to this measure, participants also completed the Self-Construal Scale (SCS; Singelis, 1994).

The results supported the hypothesis that Taiwanese students would endorse more anxiety and avoidance behaviors in their beliefs of healthy and ideal attachment. The authors speculated that this finding reflected Chinese cultural norms regarding relatedness. Gender differences in ideal attachment emerged. U.S. men, more so than women, reported more avoidant behaviors to be reflective of ideal attachment. Yet, gender differences were not found among Taiwanese men and women. Furthermore, Taiwanese students reported higher interdependent and lower independent self-construal than the United States participants. While attachment anxiety and interdependent self-construal had the expected positive relationship, avoidance and independent self-construal was surprisingly negatively associated. The findings regarding the relationship between interdependent self-construal and attachment anxiety were consistent with previous research and theory. Perhaps other cultural variables are influencing the relationship between avoidant attachment and self-construal.
Pistole and Vocaturo (1999) examined attachment styles and relationship commitment among a multi-ethnic college student sample. One hundred and one females and thirty males (76.9% White, 5.4% African American, 4.6% Asian American, and 3.8% other) ranging in age from 18 to 44 completed measures on adult attachment (Bartholomew & Horowitz, 1991) and commitment (Commitment Inventory; Stanely & Markman, 1992). Results from chi square analyses indicated that no ethnic differences were found among the attachment style groups. The overall results in the study indicated that individuals who reported secure and preoccupied attachment styles also valued commitment and conceptualizing the relationship as a team in higher levels than those who reported dismissing-avoidant attachment styles. Also, these individuals expressed a stronger desire for the strength of the relationship to sustain and minimized vigilance of their partners than did individuals who exhibited fearful-avoidant attachment behaviors. Social pressure, satisfaction with doing things for the partner, and prioritizing the relationship was reported at higher levels by secure, preoccupied and fearful-avoidant individuals. It is unclear how the unequal sample sizes and lack of examination of cultural variables may have influenced the results of the study.

You and Malley-Morrison (2000) conducted a study comparing the role of attachment style in the social intimacy and friendships of Korean and White young adults. The researchers hypothesized that while the predominant attachment style reported by Koreans would be secure, more Koreans than Whites would hold a preoccupied attachment style due to collectivistic cultural norms among Koreans. Furthermore, the authors expected that dismissing styles would be evidenced at higher rates among Whites due to residing in a context where Americans value autonomy and self-reliance. Finally,
the authors hypothesized the White college students would report more friendship intimacy and positive expectations from their friends due to earlier separation from families and closer friendships.

Participants included sixty-two White students enrolled in an introduction to psychology course at a large private university located in the northeastern area in the United States. Of these participants, forty-two were female and twenty were male. The Korean sample included 115 undergraduate (45 female and 70 male) enrolled in a university in Seoul, Korean. All participants completed measures assessing attachment style (Bartholomew & Horowitz, 1991), Social Intimacy (Miller & Lefcourt, 1982) and Expectations (Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996). Translated survey packets were administered to Korean students. The results indicated that Koreans scored higher on preoccupied attachment, lower on intimacy, and lower on friendship expectations. Differences were found between the two groups, with Korean students indicating that they had less intimate friendships and more negative expectations than their White peers. Ethnicity also predicted intimacy and expectations. Furthermore, analyses of variance results indicated that Koreans rated themselves as more preoccupied than Whites. A main effect emerged for gender on the fearful attachment style with females reporting higher levels than males. The results from multiple regression analyses indicated that secure attachment and dismissive attachment styles both contributed towards intimacy and positive expectations in the expected directions. Specifically, secure attachment positively contributes to intimacy and positive expectations, while avoidant attachment style contributed negatively to intimacy and positive expectations.
Rastogi and Wampler (1999) examined and compared the mother-daughter relationship across European-American, Mexican American and Asian Indian American samples. The authors hypothesized that connectedness, closeness, interdependence, dependency, and trust in hierarchy would be reported at highest levels by Asian Indian Americans, followed by Mexican Americans and then European Americans. Ninety-one women participated in the study, with all but two reporting their age to fall in the range of 25 to 35. There were differences between the three ethnic groups in education and income. Participants completed measures on mother and daughter adult relationship (Rastogi, 1998), adult attachment (Collins & Read, 1990). Items from the adult attachment scale were modified so to assess participants’ perceived, actual and ideal closeness and dependency with their mothers. The subscales administered were “close” which assessed participants comfort with intimacy and closeness, and “depend”, which assessed how much they trusted others and were able to depend on them. The level of differentiation of individuals within a family system was also assessed.

The results indicated that Asian Indian American women reported more connectedness, closeness, dependency and trust in hierarchy than the European American participants. The results from the “ideal” set of scores indicated that European American and Asian Indian American women reported higher scores on closeness than the Mexican American women. The European American group valued both autonomy and caring, while the Asian Indian American group emphasized a secure relationship. The women in the Mexican American group emphasized practical and emotional closeness. With regards to dependence, the results differed by measure. The results from the measure assessing mother-daughter relationship showed no differences across groups, yet the
attachment measure produced results indicating that the Asian Indian American group reported higher means on actual dependency than the European American women, and higher means on ideal dependency than the Mexican American women. Limitations from the study include potential influences and biases from demographic differences between the group (e.g., education and income). Furthermore, the sample size was small and non-random, potentially influencing the results of the study. The differential results for dependence from the two measures questions the extent to which the measures were assessing dependence for this sample.

Wei et al. (2004) sought to compare adult attachment in four ethnic-racial groups within the U.S. (African American, Asian American, Hispanic and White). A second goal was to use structural equation modeling (SEM) techniques to examine whether the latent variables of adult attachment anxiety and avoidance are represented by indicator variables equivocally across the four groups. Specifically, the authors investigated for ethnic-racial differences in the levels of anxiety or avoidance. The last question was to assess whether associations between negative mood and adult attachment avoidance or anxiety varied across the four groups.

Participants were 831 students, including 377 men and 452 women (2 did not indicate gender). Self-reports of ethnic group membership was collected, with results indicating 176 (21%) as African American, 196 (24%) as Asian American, and 163 (20%) as Hispanic American. Attachment was measured using the Experiences in Close Relationships Scale (ECRS; Brennan et al., 1998). Participants rated how well each statement described their typical feelings in romantic relationships. Anxiety taps fears, abandonment, and rejection, whereas Avoidance taps into discomfort with dependence
and intimate self-disclosure. Negative mood assessed using the Depression and Anxiety subscales of the Depression Anxiety and Stress Scale-Short Form (DASS; Lovibond & Lovibond, 1995). The authors only used depression and anxiety because these two forms of distress have previously been associated with adult attachment.

One finding supported the hypothesis that measures of adult attachment were equivalent across the four groups (Wei et al., 2004). The second set of results found differences in attachment among the ethnic groups. Asian Americans and Hispanic Americans reported greater attachment anxiety than did White students. African Americans and Asian Americans reported greater attachment avoidance than Whites. Subsequently, the relationship between attachment and mood also differed between the groups. Attachment anxiety was associated with negative mood for all four ethnic groups, but the strength of the association was greater for Asian Americans than for African American or White students. Attachment avoidance was associated with negative mood for Hispanic Americans and White students. Several limitations to the research were discussed, and suggestions were made for extensions of this study.

One limitation to the study was in grouping all Asian Americans together as opposed to separating them by ethnicity, and not reporting ethnic membership. Several meaningful differences exist among Asian Americans (e.g., cultural heritage, religion, context of immigration to the United States, history of colonialism, class systems, language) that may affect normative attachment patterns and expressions of behaviors and symptoms. Second, another limitation to this study was not including sociocultural variables that may explain attachment configurations. Wei and her colleagues (2004) hypothesized that racial identity and acculturation could account for differences in attachment
configuration. Those more acculturated towards American culture might exhibit attachment configurations that are found normal to the United States, while those more acculturated towards South Asian culture might exhibit different attachment configurations. Wei and her colleagues (2004) also hypothesized that differential levels of racial identity may be associated with specific attachment behaviors, and account for the relationship between attachment behavior and mood. An example provided was that higher levels of attachment avoidance (excessive self-reliance) may exist for minorities in the resistance and immersion stage. This study replicated and extended Wei et al. (2004)’s study by testing the additional contributions of acculturation and racial identity to the negative mood and well-being of South Asian Americans.

**Summary of Cross-cultural Research on Attachment.** In summary, the findings from these studies suggested that sociocultural variables may influence the relationship between attachment and psychosocial outcomes, such as mood and well-being. For example, attachment style was found to be related to self-construal among Asian Americans, yet findings indicated that the exact nature of the relationship is unclear. Furthermore, racial and ethnic groups varied in their levels of secure and insecure attachment, suggesting that sociocultural variables may have influenced attachment norms. Specifically, levels of preoccupied attachment were found to be higher in some studies in Asian American and Asian individuals. Further research was needed to understand how adult attachment and cultural variables together inform the well-being of ethnic and racial minorities.

**Acculturation**
One of the single most examined variables in the research on Asian Americans was acculturation. Acculturation generally referred to the cultural adjustment in behaviors, attitudes and values of immigrants, refugees and American born ethnic minorities (Tsai, Chentsova-Dutton, & Wong, 2002). Acculturation and mental health were thought to have a complex relationship, with acculturation to U.S. and Asian cultures having a variety of effects on mental health (Roysircar, 2002). There have been numerous ways acculturation has been operationalized and conceptualized, with no consistent definition or method for measurement (Rahman & Rollock, 2004). Of the acculturation models, unidimensional and bidimensional models were two of the most commonly used (Tsai et al., 2002). The unidimensional model held that cultural orientation to the host culture is considered inversely related to the cultural orientation of the native culture. Under this framework, an individual was on a continuum of being acculturated towards one or the other culture. An example of such measure was the frequently used Suinn-Lew Asian Self-Identity Acculturation Scale (Suinn, Ahuna, & Khoo, 1992). This acculturation model was created to capture the process by which European immigrants became American in late 19th century and early 20th century (Gordon, 1964). The emphasis on multiculturalism and ethnic consciousness during the civil rights movement influenced an evolution in acculturation theories.

Multidimensional models emerged, assuming that cultural orientations (e.g., to U.S. and Chinese culture) are independent of each other, as opposed to inversely related. Berry (1980) developed the well-known model that placed acculturation strategies into four categories: assimilation (strong orientation to host culture and weak orientation to native culture), separation (strong orientation to native culture and weak orientation to
host culture), marginalization (weak orientation to both cultures), and integration (strong orientation to both cultures). Other models emerged that examined acculturation in its various domains (e.g., perception of prejudice, language proficiency and preference) separately (Birman & Trickett, 2001; Sodowsky & Plake, 1991). In this study, acculturation was measured by constructs thought to be relevant to the experiences of South Asian Americans.

Acculturation and South Asian Americans. Since little research existed examining the role of acculturation in South Asian Americans well-being, a review was conducted of the literature on acculturation and Asian American college students. Most studies generally revealed that acculturation and ethnic identity play a role in the well-being of Asian American college students, but conflicting findings suggested that the nature of the relationship between these cultural variables (acculturation and ethnic identity) and well-being is complicated. The findings from several studies supported a relationship between aspects of ethnic identity and acculturation towards ethnic culture, and positive well-being for Asian American college students (Lee, 2003, 2005; Phinney & Alipuria, 1990; Rahman & Rollock, 2004; Tsai, Ying, & Lee, 2001; Yasuda & Duan, 2002).

Some findings suggested that dimensions of acculturation and identification with American culture was associated with positive well-being (Chung, Bemak, & Wong, 2000; Iwamasa & Kooreman, 1995; Padilla, Wagatsuma, & Lindholm, 1985; Tsai, Ying, & Lee, 2001). Gender differences also have been found in some studies in the relationship between acculturation and ethnic identity and well-being (Chung et al., 2000; Rahman & Rollock, 2004).

Chung, Bemak and Wong (2000) attempted to understand the postmigration psychosocial adjustment of Vietnamese refugee college students by examining the relationship of three variables: acculturation, social support, and psychological distress. The authors hypothesized that the students who arrived during the first wave of Vietnamese migration to the United States would be more acculturated and report more satisfaction with social support than the second wave. The last hypothesis was that women would report greater acculturation to the United States than men. Participants consisted of 167 women and 191 men attending college in Southern California. Students were recruited from Vietnamese student organizations and Asian American studies courses.

Psychological distress was assessed using the Hopkins Symptom Checklist-21 (Green, Walkey, McCormick, & Taylor, 1988). A modified version of the Suinn-Lew Self, Identity and Acculturation Scale (Suinn et al., 1987) was used to assess acculturation. Five of the original items were not included, and two new items were created and added for this sample. A factor analysis was conducted, with the results indicating three factors: language preference, ethnic interaction, and ethnic identity and pride. Social support was assessed using the Social Support Questionnaire (Sarason et al., 1983). Low level of acculturation to the United States was associated with psychological distress. The second wave Vietnamese students reported more psychological distress than the first wave. The second and third hypothesis was also supported, as the first wave reported greater acculturation to the United States and satisfaction with their social support than the second wave. Women reported more acculturation to United States than
the men among the second wave of immigrants (earlier immigrants), but not the first wave.

Padilla et al. (1985) explored the relationship between stress (conceptualized as difficulties arising from differences in language, cultural and environment), acculturation, and personality traits considered relevant to stress (e.g., self-esteem, introversion-extroversion, and locus of control). The authors hypothesized that Japanese and Japanese-Americans less acculturated to the United States would experience higher amounts of stress, and that immigrants would experience greater stress than non-immigrants. Finally, the last hypothesis was that high stress and low stress participants would differ in their personality traits.

Participants were 71 women and 43 men Japanese American students spanning multiple generations living in Southern California. Students completed measures assessing self-esteem (as measured by the Coopersmith’s Self-Esteem Inventory; Coopersmith, 1967), locus of control (as measured by the Internal-External Locus of Control Scale; Rotter, 1980), introversion and extroversion (as measured by a subscale of the Personality Index; Comrey, 1970) and family, attitudinal, social and environmental stressors (as measured by the Familial, Attitudinal, Social and Environmental Scale; Padilla, Alvarez, & Lindholm, 1986). Two additional measures were created by the authors in this study to assess participants’ values (Japanese versus Western) and acculturation (scale factors were cultural awareness and ethnic loyalty).

The results indicated that self-esteem accounted for the most variance (39%) in the prediction of stress, with acculturation accounting for an additional 14% of the variance. Generational status and values accounted for an additional 1% of variance.
Additionally, those who were less acculturated to the United States experienced greater stress, and were more likely to be first generation. In contrary, those more acculturated to the United States experienced less stress and were more likely to be third generation and beyond. Second generation students were lower in self-esteem than third generation students.

In another study, Tsai, Ying and Lee (2001) sought to further our understanding of why Asian Americans reported lower self-esteem than their White counterparts by examining the relationship between specific types of cultural orientation (language, social affiliation, and cultural pride) to self-esteem. The authors hypothesized that cultural orientation, above and beyond age, gender, GPA and SES, would influence these college students’ self-esteem. The authors next hypothesized that Asian Americans oriented towards Asian culture would report lower levels of self-esteem because of a cultural value of self-effacement, while those engaged in American cultural domains would report a positive relationship with self-esteem, consistent with a norm of self-enhancement.

Participants were 179 female and 174 male Chinese American college students in the San Francisco Bay Area recruited through multiple avenues, including word-of-mouth, Asian American student organizations, and a subject pool. Orientation towards Asian and American culture was assessed using the General Ethnicity Questionnaire (Tsai et al., 2000). The survey assessed cultural orientation through three domains: language use and proficiency, social affiliation, and cultural pride. Self-esteem was examined using Rosenberg’s (1965) Self-Esteem instrument. Cultural orientation accounted for variance towards self-esteem. English language proficiency was positively associated with self-esteem, and Chinese social affiliation was negatively correlated with
self-esteem for all participants, partially supporting the hypothesis that those holding Asian cultural orientations would relate to self-esteem differently than those with an American cultural orientation. Yet, pride in Chinese culture and Chinese language proficiency were associated positively with self-esteem.

Yasuda and Duan (2002) tested the following hypothesis: ethnic identity would predict emotional well-being for Asian American and Asian international students, while acculturation would do so for Asian international students. Sixty-three Asian Americans (35 women and 28 men) and 55 Asian international students (22 women and 33 men) from two predominantly White, MidWestern universities were recruited from Asian student organizations. The ethnic composition of the Asian American group was 24% Vietnamese, 21% Chinese, 19% Indian, 9% Philippines, 7% Korean, 7% Japanese, 3% Thai, and 10% from other East Asian countries. Of the Asian international student group, 42% were Chinese, 24% Korean, 12% Malaysian, 12% Japanese, 4% Indian, 4% Singaporean, and 2% Indonesian. Measures were completed on ethnic identity (as measured by a modified version of the MEIM; Roberts et al., 1999), acculturation (as measured by the SL-ASIA; Suinn et al., 1987). Emotional well-being was assessed through depression and happiness (as measured by the Depression-Happiness Scale (McGreal & Joseph, 1993). Asian American and Asian International students differed in their acculturation and ethnic identity, yet reported similarly high scores on emotional well-being. Second, only ethnic identity predicted emotional well-being for Asian American students. Last, neither ethnic identity nor acculturation contributed variance to the prediction of emotional well-being for the Asian international group.
Rahman and Rollock (2004) performed a study assessing whether intercultural competence and acculturation contributed to depression among South Asian college students, and whether forms of intercultural competence contributed additional variance towards the prediction of depression over and beyond acculturation. One hundred and ninety-nine international students from South Asia (Bangladesh, India, and Pakistan) participated in the study. One hundred and thirty one students were enrolled in the undergraduate program, while 68 were in the graduate school. One hundred and sixty seven of the participants were men, while only 32 were women.

Participants’ acculturation level was assessed using a multidimensional acculturation measure, the Minority-Majority Relations Survey (Sodowsky & Plake, 1991). Intercultural competence in social, academic, career, and cultural domains was assessed using the Intercultural Competence Concerns subscale of the Cultural Adjustment Difficulties Checklist (Sodowsky & Lai, 1997). An additional measure was designed that asked participants to indicate the importance of each intercultural competence skill inquired of in the previous measure for their success in the United States. Participants self-reported depression symptoms were measured using the Center for Epidemiological Studies-Depression Scale (Radloff, 1977). The results of the study demonstrated that acculturation predicted level of depressive symptoms. Of the acculturation domains, only perceived prejudice contributed unique variance towards the prediction of depressive symptoms.

Summary of research on acculturation and well-being among Asian Americans

Most studies generally revealed that acculturation plays a role in the well-being of Asian American college students, but conflicting findings suggest that the nature of the
relationship between acculturation and well-being is complicated. Several limitations were found across the studies. Many issues around sampling emerged. Potentially due to difficulties obtaining an adequate sample size, data were combined on multiple Asian ethnic groups, and within-group differences were not assessed. The conflicting findings surrounding the role of ethnic identity and acculturation in the well-being of Asian Americans suggest within-group differences. Lee (2003) asserted that some Asian ethnic groups might experience more discrimination because of responses to their physical features.

*Empirical Research on Acculturation and Attachment.* Wang and Mallinckrodt (2006) examined the contributions of acculturation and attachment on the psychosocial adjustment of Chinese and Taiwanese international students. Specifically, the authors hypothesized that insecure attachment (anxiety and avoidance) would be associated negatively with U.S. acculturation and would predict trouble with sociocultural adjustment and psychological problems. Additionally, reports of high acculturation to U.S. culture yet high cultural identification with Chinese/Taiwanese culture would predict less difficulty adjusting to the sociocultural setting and psychological distress. Finally, the authors further investigated interaction effects between acculturation and attachment on the psychosocial outcomes, and which independent variable (acculturation or attachment) contributed the most variance towards the psychosocial outcomes. Ninety-five graduate students and nine undergraduate international students identified as Taiwanese or Chinese, and enrolled in two large Midwestern universities participated in the study. Fifty-four women and fifty men completed measures on attachment (ECRS; Brennan et al., 1998), acculturation (Acculturation Index; Ward & Kennedy, 1994),
sociocultural adjustment (Socio-Cultural Adaption Scale; Ward & Kennedy, 1999), and psychological distress (Brief Symptom Inventory-18; Derogatis, 2000).

The results provided partial support for the authors’ first hypothesis: a negative relationship emerged only between attachment anxiety and U.S. culture acculturation, but not with attachment avoidance and acculturation. Second, attachment anxiety and avoidance predicted both sociocultural adjustment problems and psychological distress. Both insecure attachment styles and acculturation to the U.S. (not acculturation to Chinese/Taiwanese culture) predicted psychosocial distress. Only attachment avoidance contributed variance towards sociocultural adjustment. No moderating effect was found. The authors advocated for further research examining the relationships between salient moderating variables in understanding the psychosocial adjustment of interactions students.

A second study examined and compared the relationships among attachment styles, attachment dimensions, acculturation, and parental caregiving among Hispanic (Mexican-American) and non-Hispanic White women college students (Tacon & Caldera, 2001). Ninety-six Mexican-American and 59 non-Hispanic white undergraduate women students from a large university in the Southwest completed measures on attachment dimension (Adult Attachment Scale; Collins & Read, 1990), attachment style (Adult Attachment Scale; Collins & Read, 1990), relationship with parents (Hazan & Shaver, 1987), and acculturation (Short Acculturation Scale; Marin, Sabogal, Marin, Otero-Sabogal, & Perez-Stable, 1987). The results indicated that acculturation was not associated with attachment style, dimensions, or relationships with parents.
Summary of research on acculturation and attachment. While the relationship between acculturation and several psychosocial outcomes has been examined, only one study was found examining the relationship of acculturation to adult attachment style among Asian American college students, and only one found using Hispanic college women students. Perhaps the above conflicting findings will be reconciled if examined in addition to other variables that are associated with well-being, such as attachment style and racial identity.

Racial Identity

Racial identity theory considered race to be a sociopolitical phenomenon. Specifically, race denoted power, and individuals’ experienced different conditions of oppression and treatment based on their perceived racial membership. Race affected access to resources, relationships, and several areas of one’s life, and also composed one’s identity. Racial identity characterized one’s identification with their racial group and describes the process of how individuals psychologically adapt to being a racial minority and encounter race based oppression (Alvarez & Helms, 2001). Specifically, Helms (1990) proposed that racial identity schemas describe how people make sense of race-related information. Helms (2001) stated that since people of color have a shared experience of dealing with race-based oppression, they may have developed similar coping mechanisms in response to these experiences.

The racial identity schemas proposed by Helms (2001) include conformity, dissonance, immersion-emersion, internalization and integrative awareness. Encounters with different racial material facilitated the evolution and changes in their racial identity status. Conformity (Pre-Encounter) is characterized by minimizing race and racial issues.
The beliefs and values of the dominant white culture, including the idea that it is better to be white, have been absorbed, and the personal and social significance of one’s racial group membership has not yet been realized. There may be an idealization of white culture, accompanied by disdain towards one’s own race. Oftentimes, this status had been associated with poor self-concept, low self-esteem, anxiety and depression. Experience with a series of events where one was confronted with racism precipitated a shift to the next status, dissonance (encounter). This status was characterized by nervousness and uncertainty about race and racial issues, as one is dealing with awareness of the significance of race, and subsequently, belonging to a group that is oppressed by racism, and a recognition of the impact of racism and race on one’s self-concept. Individuals experienced a variety of feelings: confusion, fear, depression, guilt, anger, and anxiety as they came to this awareness.

The next status, Immersion-Emersion, described individuals who idealized their own racial group, and understood the effects of racism on their racial group. The anger shifted towards self-discovery and deeper exploration of their culture. These racial minorities tended to be hypersensitive towards racial issues and stimuli.

Finally, Internalization was characterized by a commitment towards one’s racial group, as well as how an individual responded to members of the dominant group. Integrative Awareness was the most sophisticated status, and reflected an ability to value and understand one’s racial identity, and empathize and connect with the experiences of members of other oppressed groups. This last status was characterized by cognitive complexity and more sophisticated understanding of race and racial issues.
**Racial Identity and South Asian Americans.** Most of the research examining contextual influences on the development, identity and experiences of Asian Americans (and South Asian Americans specifically) focused on cultural factors (e.g., acculturation, ethnic identity), and underemphasized racialized experiences (Alvarez & Helms, 2001). Specifically, research on well-being among Asian Americans often examined the variables of nonracial sources of stress, characteristics of mental illness and variables associated with the underutilization of mental health services (Alvarez & Helms, 2001; Uba, 1994). Alvarez and Helms (2001) found the people of color racial identity model to apply to Asian Americans. The psychological research on Asian Americans overwhelmingly focused on the role of ethnic variables. Chen, LePhuoc, Guzman, Rude, and Dodd (2006) expressed that by drawing attention solely to ethnic variables to understand the sociocultural influences on Asian Americans development, the experience of racism and oppression is made invisible. The authors stated that examining the racial lives of this population would hopefully provide information that will more fully capture the health and well-being of Asian Americans.

**Empirical Research on Racial Identity and Asian Americans.** Carter, Williams, Juby, and Buckley (2005) examined whether racial identity mediated the relationship between gender role conflict and psychological outcomes for African American, Hispanic and Asian American men in a two-part study. Participants included 52 African American, 24 Asian American, and 61 Latino undergraduate and graduate student men enrolled in universities in the Northeast and MidWest. Participants completed measures on gender role conflict (Gender Role Conflict Scale; O’Neil, Helms, Gable, David, and Wrightsman, 1986), racial identity (Black Racial Identity Attitude Scale, Helms &
Parham, 1996; Visible Racial/Ethnic Identity Attitudes Scale; Helms & Carter, 1983), and psychological symptoms (SCL-90-R; Derogatis, 1983). The Visible Racial/Ethnic Identity Attitudes Scale is used to assess minority racial identity development through four statuses: Conformity (idealizing White race and disdain for one’s own race), Dissonance (ambivalence and confusion over what race means in one’s life), Resistance (actively avoiding White culture and immersing in one’s own racial culture), and Awareness (pride in one’s racial group and connection to other minority groups). For Asian American men, racial identity status attitudes and gender role conflict was associated, where Dissonance was associated with success, power and competition, and Resistance was associated to restrictive emotionality. Race partially mediated the relationship between gender role conflict and psychological symptoms for Asian American men. Psychological symptoms were positively associated with Resistance status for Asian American men.

Yeh, Carter, and Pieterse (2004) investigated whether racial identity attitudes predicted cultural values for Asian Americans. One hundred and twenty two Asian American undergraduate and graduate students participated in the study. Of this sample, 78 were women and 44 were men. Participants completed measures assessing racial identity (VREIAS; Helms & Carter, 1991) and cultural values (Intercultural Values Inventory; Carter & Helms, 1990a). The results indicated that individuals reporting lower racial identity status (Conformity) also indicating holding Eurocentric values. Participants who indicated having attitudes reflective of Integrative Awareness also reported holding bicultural values. Finally, participants who reported Resistance racial identity also indicated Asian cultural values.
Kohatsu et al. (2000) conducted a study investigating whether racial identity predicted racial mistrust of African Americans for Asian Americans. Eighty-eight women and seventy-two students attending universities and colleges on the West Coast participated in the study. Participants were 40% Chinese, 22% Korean, and 12% Filipino. Measures were completed assessing racial identity (VIAS; Helms & Carter, 1990), cultural mistrust (Cultural Mistrust Inventory; Terrell & Terrell, 1981), social desirability (Marlow-Crowne Social Desirability Scale; Crowne & Marlow, 1960), and racial contact (Racial Contact Scale; Kohatsu et al., 1994). The results indicated that racial identity predicted racial mistrust and racial contact. Those with higher levels of Conformity and Resistance perceived high interpersonal racism and strongly held racial stereotypes of African Americans. High Integrative Awareness predicted less perceived interpersonal racism.

Carter and Constantine (2000) investigated the relationship between racial and ethnic identity, career maturity and life role salient for one hundred and thirteen Black and sixty eight Asian American college students. Participants completed measures on racial identity, ethnic identity, career maturity and life role salience. Cultural identity was associated with career maturity for Asian Americans. For Black college students, racial identity attitudes was associated with life role salience.

Pope (2000) conducted a study to examine the relationship between psychosocial development and racial identity among undergraduate students. The goal of the study was to contribute to information on the development of racial minority college students, and specifically the roles and influence of race and racial identity. The research questions that guided this investigation were whether racial identity predicted psychosocial
development of racial minority college students, and what differences existed among the three racial groups in psychosocial development and racial identity.

Participants included 539 college students ranging in age from 17 to 24, and attending 44 colleges and universities (Pope, 2000). Sixty-five percent of the participants were women and 35% were men. The racial and ethnic composition of the sample was as follows: 115 (21%) Asian American, 309 (57%) Black American, and 115 (21%) Latino American. Participants completed the Student Development Task and Lifestyle Inventory (SDTLI; Winston & Miller, 1987), the Racial Identity Attitudes Scale-B (RIAS-B; Parham & Helms, 1981), the Visible Racial and Ethnic Identity Scale (VREI; Helms & Carter, 1986) and provided personal data. The results indicated racial identity was related to the tasks associated with psychosocial development. Specifically, the results indicated that as the scores increased in the statuses of racial identity development, they increased on each of the psychosocial development tasks. As students moved from Status 1 to Status 4, they demonstrated increased psychosocial development. Relationships between race and psychosocial development also emerged. Black American and Latino American students scored higher on specific tasks than did Asian American students, indicating that the former were progressing further in aspects of their career development than Asian American students.

Summary of Research on Racial Identity and Asian Americans. In summary, there was very little literature on the role of racial identity in the psychological experiences of Asian Americans, and more specifically, South Asian Americans. Research did support the link between racial identity and psychosocial outcomes for this population, but further exploration was necessary to inform our understanding of the role of racial identity in the
Hypotheses

1. Attachment, acculturation and racial identity would explain variance in the well-being of South Asian Americans.
   a. Attachment would contribute unique variance to the prediction of well-being of South Asian Americans.
   b. Acculturation would contribute unique variance to the prediction of well-being of South Asian Americans.
   c. Racial identity would contribute unique variance to the prediction of well-being of South Asian Americans.

2. Attachment, acculturation and racial identity would explain variance in the negative mood (as measured by anxiety) in South Asian Americans.
   a. Attachment would contribute unique variance to the prediction of negative mood (as measured by anxiety) in South Asian Americans.
   b. Acculturation would contribute unique variance to the prediction of negative mood (as measured by anxiety) in South Asian Americans.
   c. Racial identity would contribute unique variance to the prediction of negative mood (as measured by anxiety) in South Asian Americans.

3. Attachment, acculturation and racial identity would explain variance in the negative mood (as measured by depression) of South Asian Americans.
   a. Attachment would contribute unique variance to the prediction of negative mood (as measured by depression) in South Asian Americans.
b. Acculturation would contribute unique variance to the prediction of negative mood (as measured by depression) in South Asian Americans.

c. Racial identity would contribute unique variance to the prediction of negative mood (as measured by depression) in South Asian Americans.
CHAPTER 3

Method

Procedure

The principal investigator for this study was an Asian-Indian American woman doctoral student in the doctoral program in counseling psychology at the University of Maryland College Park. The research assistant for this study was an Asian-Indian American woman undergraduate student majoring in psychology at the University of Maryland College Park. Together, they compiled a list of student organizations serving the interests of South Asian college students at two large midwestern universities. The research assistant and principal investigator contacted members of the student organizations to invite them to participate in this study.

Prior to data collection, the research assistant was educated about the study and data collection procedures. At the time of data collection, the research assistant and principal investigator requested participation by explaining the purpose of the study and answering any questions or concerns raised by potential participants. Participants read and signed the informed consent forms. Second, the research assistant and principal investigator administered the survey packets. All surveys were administered in English.

Participants

One hundred and seventy four undergraduate students with one or more South Asian parents were invited to participate in this study by in-person invitations at student organization meetings. Participants included 157 South Asian undergraduate students in the mid-atlantic region of the United States. Fifteen participants completed less than 75% of the survey packet or had unusual responses (i.e., marking the same response
throughout the survey) and thus were not included in the sample. The final number of participants included in the study was 142, resulting in a response rate of 82%.

Sixty percent of the participants were female and 39% were male. Twenty-one percent of participants reported being in their first year of college, while 27% reported second year, 21% reported third year, 23% reported fourth year, 2% reported fifth year and 4% reported beyond fifth year.

Seventy-five percent of students reported their mother’s ethnicity to be Indian, while 9% reported Pakistani, 4% reported Bangladeshi, and less than 1% reported Afghanistani, Nepalese, Sri Lankan, and Indo-African. One hundred and seventeen students reported their father’s ethnicity to be Indian, while 16 reported Pakistani, 5 reported Bangladeshi, and 1 reported Afghanistani, Nepalese, Sri Lankan, Indo-African, and Saudi Arabian. Forty-seven percent of the participants were born in the United States, whereas 30% were born outside of U.S., 21% were born outside of the U.S. but spent more than 2/3rd of their life in the U.S., less than 1% reported being 3rd generation (participant and both parents were born in the U.S., but all grandparents were born in another country) and less than 1% reported being 4th generation (participant and both parents were born in the U.S., not all grandparents were born in the U.S.).

The religious affiliation of the household in which participants were raised included: 5% Christian, 57% Hindu, 4% Jain, 18% Muslim, and 16% Sikh. Current religious affiliation of the participants included: less than 1% Buddhist, 5% Christian, 54% Hindu, 3% Jain, 18% Muslim, 15% Sikh, 4% Atheist or Agnostic, and 1% other.

Measures
Demographics. Information regarding gender, age, year in college, generation status, year of immigration, father and mother’s ethnicity, religious affiliation of household and current religious affiliation, relationship status, and the race of their romantic partner was collected by means of a demographic questionnaire (see Appendix I).

Adult Attachment. Adult attachment was assessed using a modified version of the Experiences in Close Relationships Scale (ECRS; Wei, Russell, Mallinckrodt, & Vogel, 2007). The modified scale consisted of 12 items on a 7-point Likert scale. Students were asked to mark the extent to which each item reflected their normal experiences in romantic and closest relationships. Possible responses ranged from 1, indicating “disagree strongly”, to 7, indicating “agree strongly.” The measure consisted of an Anxiety and Avoidance subscale.

The Anxiety subscale consisted of 6 items, and assessed the extent to which one is afraid of abandonment. An example of an item was “I often worry that my partner doesn’t really love me.” The one item that was reverse scored was “I do not often worry about being abandoned.” Individual items were summed and a mean was calculated. High scores indicated strong levels of anxious attachment. The coefficient alpha for this subscale was .82 (Wei et al., 2007). In this sample, the coefficient alpha was .71. Support for convergent validity was provided from positive relationships between this subscale and the Penn State Worry Questionnaire (PSWQ; Meyer, Miller, Metzger, & Borkovee, 1990), which assessed the extent to which one worries.

The Avoidance subscale consisted of 6 items, and assessed the extent to which one was comfortable with needing others, and sharing personal information in their
romantic and closest relationships. An example of an item was “I try to avoid getting too close to my partner.” Three items were reverse scored. An example of one of these items was “It helps to turn to my romantic partner in times of need.” A mean score of all items was calculated and high scores indicated endorsement of an avoidant attachment style. Wei et al. (2007) reported the test-retest reliability to be .89. In this sample, the coefficient alpha was .66. Data regarding convergent validity came from positive relationships with this subscale and a Touch Avoidance subscale and negative relationships with an Affectionate Proximity subscale (Fairchild & Finney, 2006). Both subscales were part of the Touch Scale (Brennan, Wu, & Love, 1998), which assessed touch within a romantic relationship.

Acculturation. Acculturation was assessed using the Minority-Majority Relations Survey (Sodowsky & Plake, 1991). This measure assessed acculturation in three dimensions: perceived prejudice (by mainstream Americans), social customs (traditional versus American cultural behavior) and language usage (native versus English language usage, preference and proficiency). Twenty items comprised the Perceived Prejudice subscale, which was created to assess non-US born participants’ experiences with stereotypes, the extent to which they find their cultural and racial appearance to be devalued by Americans, and their social isolation from Americans. An example of an item from this subscale was “No matter how adjusted to American ways I may be, I will be seen as a “foreigner” by Americans”. Participants responded to each item on a 6-point Likert scale, with 1 indicating “disagree strongly” and 6 indicating “agree strongly.” Means were calculated to provide subscale scores. The coefficient alpha for this subscale was reported as .88. For this sample, the coefficient alpha for perceived prejudice was
Support for the validity of the subscale was provided in a study examining the relationship between generational status and perceived prejudice among Asian American students (Sodowsky, Lai, & Plake, 1991). A negative relationship emerged, where first generation Asian American students reported more perceived prejudiced than later generations (Sodowsky et al., 1991).

The second subscale was the Social Customs subscale. This subscale was made up of 11 items, and assessed cultural preferences in a variety of domains (e.g., friendships, identity, entertainment). An example of an item from the acculturation subscale was “I seek the friendship and support of people from my country in the city/town I am living.” A 6-point Likert scale was used, with 1 reflecting “disagree strongly” and 6 reflecting “agree strongly.” Mean scores were calculated. The coefficient alpha for this subscale was .79 (Sodowsky & Plake, 1991). Validity evidence for the subscale was provided in a study examining the relationship between generational status and social customs among Asian American students (Sodowsky et al., 1991). As expected by the authors, earlier generation Asian American students reported less acculturation to the United States than later generations (Sodowsky et al., 1991).

Six items composed the Language Usage subscale. This subscale assessed the ease of speaking in one’s national language is spoken, the extent to which it is used to talk to members of one’s own nationality, and in which language thinking occurs. An example of an item from this subscale was “The language(s) I speak well is(are)” with the responses being English only, Mostly English with some of my first language, English and my first language equally well, Mostly my first language and some English, and my first language only. Questions were phrased as a mix of Likert scale and multiple-
choice items. High mean scores reflected strong levels of identification with one’s family native culture while low scores reflect high levels of affiliation with Americans. Middle scores indicate biculturalism, or comfort with both cultural identities. The coefficient alpha by the author was reported as .82 (Sodowsky & Plake, 1991). In this sample, the coefficient alpha for acculturation (including social customs and language usage) was .73.

Validity support for the Minority-Majority Relations Survey was provided in a study examining the relationship between generational status and language usage among Asian American students (Sodowsky et al., 1991). First generation Asian American students reported less English language use than later generations (Sodowsky et al., 1991). According to Frey and Roysircar (2004) and personal communication with the author (G. Roysircar, personal communication, March 17, 2008), the social customs and language usage measures are combined to create the acculturation subscale. The perceived prejudice items comprise a second subscale of the MMRS. In this sample, the coefficient alpha for acculturation was .73 and the coefficient alpha for perceived prejudice was .88.

Racial identity. Racial identity was assessed using The People of Color Racial Identity Attitudes Scale (PRIAS; Helms, 1995). This 50-item measure tapped into the five identity statuses proposed by Helms in her Racial Identity Theory. The first status was Conformity (Pre-Encounter), characterized by minimizing race and racial issues. Eleven items comprised this subscale. An example of an item from this subscale was, “I feel more comfortable being around Anglo-Americans (Whites) than I do being around people of my own race.” Participants responded to each item according to the extent to
which they agreed, reflecting their attitude on race and ethnicity on a 5-point Likert scale. Responses ranged from 1 to 5, with 1 indicating “strongly disagree” and 5 indicating “strongly agree.” A score was obtained by summing items in this subscale. Scores were then transformed to T scores (mean=50, SD=10). The reported coefficient alpha in an Asian American population was .75 (Alvarez & Helms, 2001). In this sample, the coefficient alpha was .85. Conformity was found to have a negative association with awareness of institutional racism and collective self-esteem, providing support for convergent validity for this subscale (Alvarez & Helms, 2001).

The Dissonance (Encounter) subscale was composed of 14 items and assessed nervousness and uncertainty about race and racial issues. An example of an item from this subscale was, “I am embarrassed by some of the things I feel about my people.” Participants were instructed to respond to each item according to the degree to which they agreed, reflecting their opinion of race and ethnicity on a 5-point Likert scale (1 indicated “strongly disagree” and 5 indicated “strongly agree”). A subscale score was obtained by summing the items, and then this score was transformed to a T score (mean=50, SD=10). Alvarez and Helms (2001) reported the coefficient alpha to be .78. In this sample, the coefficient alpha was .86. Dissonance was found to be associated with low levels of awareness of interpersonal racism, supporting the convergent validity of the subscale (Alvarez & Helms, 2001).

The next status, Immersion-Emersion, described individuals who idealized their racial group, and understood the effects of racism on their racial group. Fifteen items comprised this subscale, with an example item being, “I am determined to find my cultural identity.” Participants were asked to respond to each item according to the extent
to which the item reflects their opinion of race and ethnicity on a 5-point Likert scale, with 1 indicating “strongly disagree” and 5 indicating “strongly agree.” A score was obtained by summing all items, and then scores were transformed to T scores. The reported coefficient alpha for this status among Asian Americans was .83 (Alvarez & Helms, 2001). In this sample, the coefficient alpha was .82. The convergent validity of this subscale was supported by the positive association between immersion-emersion and awareness of racism (Alvarez & Helms, 2001).

Internalization was characterized by a commitment towards one’s racial group. Integrative Awareness reflected the ability to value and understand one’s racial identity, and to empathize and connect with the experiences of members of other oppressed groups. The internalization subscale reflected both of these statuses, and contained 10 items. An example of an item was “My cultural background is a source of pride to me.” Participants responded to each item according to the extent to which they agreed, reflecting their attitude of race and ethnicity on a 5-point Likert scale, with 1 indicating “strongly disagree” and 5 indicating “strongly agree.” Scores were obtained by summing all items in the subscale, and then converting the score to a T score. The reported coefficient alpha for an Asian American college student population was .61 (Alvarez & Helms, 2001). In this sample, the coefficient alpha was .88. Alvarez and Helms (2001) and Kohatsu (1992) found support for the convergent validity of this scale with an Asian American population when this racial identity schema related to awareness of racism.

Self-esteem. Self-esteem was assessed using the Rosenberg Self-Esteem Scale (Rosenberg, 1989). The scale contained 10 items, with an example being “I feel that I have a number of good qualities.” Participants were asked to respond the extent to which
they agreed that each item captures general feelings about themselves on a 4-point Likert scale, ranging from “strongly agree” to “strongly disagree”. Possible scores ranged from 0 to 30, with high scores indicating higher self-esteem. Items 3, 5, 8, 9, and 10 were reverse-scored. Coefficient alphas in previous studies have been reported as high, ranging from .77 to .88 (Blascovich & Tomaka, 1993). In this sample, the coefficient alpha was .89.

**Life Satisfaction.** The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) assessed global life satisfaction. Participants responded to five items on a 7-point Likert scale ranging from 1 ”strongly disagree” to 7 ”strongly agree”. An example of an item was “I am satisfied with my life”. Overall satisfaction with life score was determined by summing items, with high scores reflecting high levels of life satisfaction. Previous studies have reported high reliability of .88 (Paolini, Yanez, & Kelly, 2006). In this sample, the coefficient alpha was .81. Positive correlations with self-esteem and health have been presented as support for the validity of the scale (Pavot & Diener, 1993).

**Negative mood.** Anxiety and depression was assessed using the Depression and Anxiety subscales of the Depression, Anxiety, and Stress Scale-Short Form (DASS; Lovibond & Lovibond, 1993). The DASS-Short Form consisted of 3 subscales measuring depression, anxiety and stress, with 21 items total. Wei et al. (2004, 2005) used the depression and anxiety subscales in a study examining outcomes associated with attachment behaviors of African American, Asian American, Hispanic, and White students.
The Anxiety subscale consisted of 7 items, and assessed anxiety symptoms grouped by “automatic arousal”, “skeletal muskeletal effects”, “situational anxiety”, and “subjective experience of anxious affect” (Lovibond & Lovibond, 1995). Respondents were instructed to indicate the degree to which they experienced each symptom in the previous week. An example of an item from this scale was “I felt terrified.” Participants responded to each item on a 4 point scale from 0 “did not apply to me at all” to 3 “applied to me very much or most of the time.” The items on the subscale score were summed, with high scores indicating high amounts of anxiety. The reported coefficient alpha for this subscale was .89 (Lovibond & Lovibond, 1995). In this sample, the coefficient alpha was .81. Validity support for the anxiety subscale was provided by a positive relationship between the Beck Anxiety Inventory and the Anxiety subscale (Antony, Bieling, Cox, Enns, & Swinson, 1998).

The Depression subscale consisted of 7 items, and assessed the following depressive symptoms: dysphoria, hopelessness, devaluation of life, self-deprivation, lack of interest/involvement, anhedonia, and inertia. An example of an item from this subscale was “I felt that life was meaningless.” Participants were asked to answer each question according to the extent to which they experienced the symptom in the previous week on a 4-point Likert scale. Responses ranged from 0 “did not apply to me at all” to 3 “applied to me very much or most of the time.” Items on the subscale were summed, and total scores ranged from 0 to 21. Low scores reflected low levels of depression. Coefficient alpha for this subscale was reported as .96 (Lovibond & Lovibond, 1995). In this sample, the coefficient alpha was .88. Further support for validity of the depression subscale was
provided from a positive relationship between the Depression subscale and the Beck Depression Inventory (Lovibond & Lovibond, 1995).

**Social Desirability.** The impact of positive self-presentation bias on the variables in this study was assessed using a short form of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982). This short form contained 13 items, with an example being “I sometimes feel resentful when I don’t get my way.” Participants were asked to answer whether each statement is true or false as it pertains to them personally. Participants received a point for marking each of the following items false: 1, 2, 3, 4, 6, 8, 11, and 12 and for marking each of these items true: 5, 7, 9, 10, and 13. High scores reflected a strong tendency to respond in a socially desirable manner. Coefficient alpha for the subscale was reported as .76, similar to the reliability of the standard form (Reynolds, 1982). In this sample, the coefficient alpha was .62. The 13-item short form was highly correlated with the standard form and the Edwards Social Desirability Scale, providing support for the concurrent validity of the sale.

**Analyses**

First, all variables were examined for accuracy of data entry, missing values, and normality of distribution. Missing items were replaced with the group mean for those items. All values for skewness and kurtosis except for one fitted into an acceptable range (i.e., below the absolute value of 2), indicating a normal distribution of scores. The kurtosis value for the Internalization subscale of Racial Identity was 2.49. Due to the kurtosis value being close to the acceptable range, no modifications were made to the Internalization subscale.
Two multivariate analyses of variance (MANOVA) were conducted to test for significant differences across gender and location of data collection in the dependent variables. No significant differences were found, thus the data were aggregated for the rest of the analyses. Descriptive data were collected for all variables (see Table 1). For all analyses, a .01 level of significance was used to lessen the probability of Type I error.

A correlation analysis was computed to assess the relationships among attachment, acculturation, racial identity and dependent variables (see Table 1). Next four hierarchical multiple regression analyses were conducted (see Tables 2, 3, and 4). Attachment, acculturation, and racial identity were entered into four multiple regression equations to predict the dependent variables (life satisfaction, self-esteem, anxiety, and depression) for South Asian Americans. Attachment was entered first (as a block) as attachment was hypothesized to occur prior to acculturation and racial identity. The acculturation scales were entered (in a block) second, followed by the racial identity scales (also entered as a block). Acculturation was hypothesized to affect racial identity, thus acculturation preceded the racial identity variable in the regression equation.
CHAPTER 4

Results

Means, standard deviations, range, and reliabilities of the variables are reported in Table 1. The bivariate correlations among all variables also can be found in Table 1.

Description of sample

Adult Attachment. Generally, these participants reported moderate levels of insecure attachment. Specifically, students reported a moderate level of being afraid of rejection and abandonment from others, as well as needing much reassurance and approval from others. Additionally, these students also reported moderate levels of dependency and intimacy fears, and the need to be overly self-reliant. Compared to the Asian American students in Wei et al. (2004) study, the students in this study appeared to report lower levels of anxious and avoidance attachment.

Acculturation. These students reported strong acculturation towards their ethnic culture. They reported moderate abilities and usage of their ethnic language, such as speaking, dreaming, and thinking in their ethnic language. Additionally, they reported comparable participation in both American and ethnic activities, and socializing equally with individuals from both the majority group and their ethnic group. This sample identified with the characteristics of both majority culture and their ethnic culture.

Racial Identity. This sample reported moderate levels of conformity to the racial majority, unawareness of racial issues, and a dismissing of their race. These students appeared to report higher levels of conformity status than an Asian American college student sample enrolled in a university in the West Coast (Alvarez, Juang, & Liang, 2006). The study sample reported similar levels of confusion and beginning awareness
around race and racial issues than an Asian American college student sample in the West Coast (Alvarez, Juang, and Liang, 2006). They reported average levels of immersion into their ethnic group, and avoidance of the majority group, similar to a comparable sample of Asian American students in a west coast university (Alvarez et al., 2006). Finally, this sample of students showed high levels of internalization of their racial identity as well as acceptance of White people, and was similar to a comparable sample of Asian American students (Alvarez et al., 2006).

**Self-Esteem.** This sample showed moderate levels of self-worth and self-acceptance. Compared to a sample of Asian American men, these students appeared to report lower self-esteem (Liu & Iwamoto, 2006).

**Life Satisfaction.** This sample reported high levels of satisfaction with their lives.

**Negative Mood.** This sample reported experiencing very little anxiety or depression in the past week. These students appeared to report less anxiety and depression than the Asian American students in the Wei et al. (2004) study.

**Social Desirability.** This sample showed moderate amounts of wanting to present themselves in a manner that would be viewed as favorable by others.

**Correlational Analyses.**

**Adult Attachment.** Avoidant attachment demonstrated low positive associations with anxious attachment, racial identity’s immersion/resistance status, and depressed mood. Avoidant attachment evidenced moderate positive associations with racial identity’s conformity status and racial identity’s dissonance status. Avoidant attachment evidenced low negative associations with racial identity’s internalization status and life satisfaction. Avoidant attachment demonstrated moderate negative associations with self-
esteem. Anxious attachment demonstrated low positive correlations with perceived prejudice, racial identity’s immersion/resistance status, and anxious mood. Anxious attachment demonstrated moderate positive association with racial identity’s conformity status, racial identity’s dissonance status and depressed mood. Anxious attachment demonstrated low negative association with social desirability. Anxious attachment evidenced moderate negative associations with self-esteem.

**Acculturation.** Perceived prejudice evidenced moderate positive associations with acculturation, racial identity’s conformity status, racial identity’s dissonance status, racial identity’s immersion/resistance status, anxious mood and depressed mood. Perceived prejudice was moderately and negatively associated with self-esteem and social desirability. Acculturation evidenced low positive association with social desirability. Acculturation demonstrated positive and moderate associations with racial identity’s immersion/resistance status.

**Racial Identity.** Racial Identity’s Conformity status demonstrated moderate positive associations with Racial Identity’s Immersion/Resistance status and anxious mood.

The Conformity status demonstrated high positive associations with Racial Identity Dissonance status. Racial Identity’s Conformity status evidenced low negative associations with life satisfaction, and moderate negative associations with Racial Identity’s Internalization status, self-esteem, and social desirability. Racial Identity’s Dissonance status demonstrated moderate positive associations with anxious and depressed mood and high positive associations with Racial Identity’s Immersion/Resistance status. The Dissonance status evidenced low negative associations

**Dependent Variables.** Self-esteem was positively and moderately correlated with life satisfaction and social desirability. Self-esteem demonstrated a negative and moderate correlation with anxious mood and depressed mood. Life satisfaction demonstrated a negative and low correlation with depressed mood and a positive and low correlation with social desirability. Anxious mood was highly and positively associated with depressed mood. Depressed mood demonstrated a low and negative association with social desirability.

**Regression Analysis.**

Four hierarchical multiple regression analyses were computed to assess the proportion of variance accounted for by the independent variables in the prediction of self-esteem, life satisfaction, anxious mood and negative mood.

**Prediction of self-esteem.** Attachment, acculturation and racial identity accounted for 44% of the variance in the prediction of self-esteem (see Table 2). Attachment variables as a group explained 35% of this variance. Racial identity accounted for 7% additional unique variance over and above that accounted for by attachment and
acculturation. When all variables were entered into the regression, avoidant attachment, anxious attachment, and racial identity’s internalization status served as unique predictors of self-esteem.

Prediction of life satisfaction. Attachment, acculturation and racial identity did not account for variance in the prediction of life satisfaction (see Table 3).

Prediction of anxious mood. Attachment, acculturation and racial identity accounted for 34% of the variance in the prediction of anxious mood (see Table 4). Attachment variables as a group explained 9% of this variance. Acculturation accounted for 9% additional unique variance over and above that accounted for by attachment. Racial identity accounted for 16% additional unique variance over and above that accounted for by attachment and acculturation. When all variables were entered into the regression, racial identity’s conformity status served as a unique predictor of anxious mood.

Prediction of depressed mood. Attachment, acculturation and racial identity accounted for 45% of the variance in the prediction of depressed mood (see Table 5). Attachment variables as a group explained 19% of this variance. Acculturation accounted for 9% additional unique variance over and above that accounted for by attachment. Racial identity accounted for 17% additional unique variance over and above that accounted for by attachment and acculturation. When all variables were entered into the regression, none served as a unique predictor of depressed mood.
CHAPTER 5

Discussion

This study advanced knowledge by finding that for South Asian American college students, adult attachment, acculturation and racial identity account for robust variance in the prediction of self-esteem, anxious mood, and depressed mood. Adult attachment, acculturation and racial identity accounted for variance in self-esteem, and more specifically, avoidant attachment, anxious attachment, and racial identity’s internalization accounted for unique variance in self-esteem. The variance in anxious mood was accounted for by adult attachment, acculturation, and racial identity, with racial identity’s conformity status accounting for unique variance in anxious mood. Finally, adult attachment, acculturation and racial identity accounted for variance in depressed mood.

*Self-esteem.*

Overall, the students in this study reported average levels of self-esteem. The level of self-esteem reported by these students appeared to be similar to that reported by a sample of Asian American men (Liu & Iwamoto, 2006). Moreover, attachment, acculturation and racial identity accounted for variance in self-esteem. Both forms of attachment (avoidant and anxious) emerged as unique predictors of self-esteem. Attachment is associated with an individual’s sense of self. For example, an individual with secure attachment is thought to have positive self worth and positive expectations from others. Individuals with insecure attachments may have low self worth, poor expectations of others’ responsiveness to their needs, and negative appraisals of close relationships. Our finding was consistent with research and theory on attachment, suggesting that insecure attachment relates to negative self-worth and value (Mikulincer
& Florian, 1998; Quimby & O’Brien, 2006). Transitioning into college may be a stressful time for minority students, as they may experience adjusting to an environment culturally and racially different from their homes. For example, South Asian students may experience an adjustment to being a minority in their living environment, as well as experiences of prejudice and discrimination. Additionally, there may be different cultural norms in the college campus day to day living then those governing a South Asian household. Thus, attachment styles may be activated during this potentially stressful time, and salient to the well-being of South Asian college students.

Of the racial identity variables, only internalization status emerged as a unique predictor of self-esteem. Internalization reflects a healthy and affirming sense of being South Asian, and thus, is likely to predict self-esteem. Mahalik, Pierre and Wan (2006) found that for Black men, self-esteem was positively related to internalization racial identity status. Twenge and Crocker (2002) suggested that when one’s racial group membership is important to one’s self concept, self-esteem will be high. Moreover, holding a favorable view of ones’ membership in their racial group as well as identification with other oppressed and marginalized groups is important to self worth and value. Twenge and Crocker (2002) also suggested that having a positive racial identity may be self-protective. Students belonging to a devalued social group may redefine the negative characteristics associated with the group in positive terms (Twenge & Crocker, 2002). Additionally, interpersonal experiences of racial discrimination may be less likely to be understood as due to personality differences (i.e., unlikable) as opposed to related to racism and prejudice for individuals whose racial identity is positive and central to their self-concept.
Acculturation did not account for unique variance over attachment in self-esteem. Perhaps a third variable mediates the relationship between acculturation and self-esteem for South Asians. Moradi and Risco (2006) found personal control, specifically environmental mastery, to mediate the relationship between acculturation and self-esteem. Personal control may be related to the present findings of an association between acculturation and self-esteem. A sense of mastery and control over one's environment is thought to be associated with self-esteem. Chronic experiences of prejudice and discrimination, as well as adjustment to a culturally different living environment may over time undermine individuals' sense of control and mastery over their environment. Thus, acculturation may have been related indirectly to self-esteem through personal control. Moradi and Hasan (2004) found personal control to fully mediate the relationship between perceived discrimination (a subscale of acculturation in this study) and self-esteem for Arab Americans.

Alternatively, there is a wide variation in how acculturation is defined and measured. The measure in this study assessed acculturation on two dimensions: perceived prejudice and acculturation. Perhaps an alternative measure of acculturation would have found different results. For example, perhaps a multidimensional measure of acculturation assessing acculturation on several dimensions: behavioral, language, and identity, would have been a better assessment of acculturation. The variance accounted for in attachment may be shared by acculturation. Anxious attachment and the perceived prejudice dimension were related positively, and perceived prejudice and self-esteem were related negatively. Farver, Narang, and Bhada (2002) found that Asian Indian adolescents reported that the hardest aspect of living in the United States was racial
discrimination. While the model minority myth suggests that South Asian Americans experience positive stereotypes, research suggested that Asian Americans perceive racial stereotypes of themselves also to be negative (Oyserman & Sakamoto, 1997). Thus, internalization of White or dominant American attitudes towards South Asian Americans may lead to internalized racism, negatively affecting South Asians self-esteem.

Alternatively, another measure assessing cultural values salient to Asian Americans that would differ according to acculturation (i.e., independent or interdependent self-construal) may have captured the possible effects of acculturation on self-esteem. For example, Berkel and Constantine (2005) found relational-interdependent to contribute to well-being among Asian American women.

Life Satisfaction.

Overall, the students in this study reported average amounts of life satisfaction. The level of life satisfaction reported by these students appeared to be similar to a sample of Asian American and African American women college students (Berkel & Constantine, 2005).

Surprisingly, none of the independent variables accounted for variance in life satisfaction, suggesting that attachment, acculturation, and racial identity were not contributors to the life satisfaction of South Asian American college students. Berkel and Constantine (2005) found other relational and sociocultural variables (relational-interdependent self-construal), relationship harmony, and perceived family conflicts) to account for variance in the life satisfaction of Asian American women. Perhaps other relational constructs, rather than attachment, are related to life satisfaction for this sample.
Anxious Mood.

Overall, the students in this study reported low levels of anxious mood. The level of anxious mood reported by these students appeared to be lower than a sample of Asian American college students (Wei et al., 2004). It may be that social desirability influenced the accuracy of these students’ reports of negative mood, as they also reported moderate levels of social desirability. In our study, social desirability was associated with attachment, acculturation and racial identity statuses. The more acculturated these students were towards South Asian culture, the more they responded in a socially desirable manner. South Asian students who reported high social desirability may have been doing so to secure social approval as opposed to having an unrealistic view of themselves. The motivation to secure interdependence, belongingness, and social approval may have influenced students to respond to items in a manner they expected to reflect the social norms of their environment (i.e., secure attachment, positive racial identity, little mood problems, and more satisfaction with their lives). Also, higher amounts of social desirability were associated with lower levels of insecure attachment, lower levels of racial identity’s conformity status, and higher levels of racial identity’s internalization status. Thus, students may have understated their attachment insecurities and overstated having a positive racial identity.

Attachment, acculturation and racial identity accounted for variance in the prediction of anxious mood. Of the independent variables, racial identity’s conformity status emerged as a unique predictor of anxious mood. Therefore, devaluing one’s race, and idealizing and wanting to be accepted by White culture may be a risk factor for anxiety. Carter (1991) found that for African American college students, preoccupation
with being accepted by Whites and denial of their race was associated with anxiety. Pre-encounter attitudes also predicted psychological distress for African American students (Carter, 1991). Anxiety may emerge from being preoccupied with wanting to be accepted by White people, and actively trying to avoid, dismiss and reject contact with people of their race. Also, the lack of belonging with either Whites or South Asian racial group may contribute to anxiety. Thus, the hypotheses were supported in that both psychological and sociocultural variables were necessary to understand the mechanisms underlying negative mood among South Asian college students. Yet, racial identity’s conformity status emerged as being especially salient in contributing towards the anxious mood of these students, perhaps more so than attachment and acculturation.

**Depressed Mood.**

Overall, the participants in this study reported low levels of depressed mood, with the levels of depressed mood reported by these students appearing to be lower than that of a sample of Asian American college students (Wei et al., 2004). It may be that social desirability influenced the reports of actual depressed mood. Social desirability was associated with depressed mood, so that the more the tendency to respond in a socially desirable manner, the more the tendency to understate depressed mood.

Attachment, acculturation, and racial identity all accounted for variance in depressed mood. Wei et al., (2005) suggested that those with anxious attachments are more vulnerable to depressed mood due to a higher need of validation from external sources, as opposed to internal sources. Therefore, this finding was consistent with previous research on insecure attachment and negative mood. Acculturation contributed additional variance above and beyond attachment. For South Asians, there may be more
emphasis on external sources to determine psychological well-being (i.e., self-esteem, positive mood), due to cultural values of social approval and interpersonal harmony. Additionally, perceived prejudice was a dimension of acculturation in this study. Zakalik and Wei (2006) found perceived discrimination to contribute additional variance above and beyond attachment, suggesting that perceived discrimination made their sample of gay men vulnerable to distress. Rahman and Rollock (2004) found acculturation to predict depressive symptoms for South Asians. Among the dimensions of acculturation, perceived prejudice emerged as uniquely contributing to depression. Thus, concerns of prejudice were important to South Asian students’ mental health, and should be attended to when working with these students. Finally, racial identity contributed variance in depressed mood. According to the correlations, high levels of racial identity’s conformity, dissonance and immersion/resistance were associated with reports of higher amounts of depressed mood. High levels of racial identity’s internalization status were associated with low depressed mood. Consistent with previous research, endorsement of lower statuses racial identity was associated with depressed mood (Pyant & Yanico, 1991). The consequences of idealizing the dominant race, and devaluing their race may be self-alienating, and consequently, increase risk of depression. Additionally, holding a positive identification with South Asian cultures, and also with other marginalized and oppressed social groups may allow these students to expand their social network and the numbers of groups and people to whom they are connected on campus. Perhaps the reason why this sample of students reported low levels of depressed mood was due to their involvement in student organizations serving the interests of South Asian Americans. Students who are involved in South Asian organizations are likely to be low
in conformity, and higher in internalization. Thus, being in higher racial identity statuses may have been a protective factor against depressed mood for this sample.

Wei et al. (2004) study.

This study extended Wei et al.’s (2004) study examining the relationship between attachment and negative mood among Asian Americans, African Americans, Hispanic Americans, and Whites. Wei et al. (2004) found that Asian Americans reported higher levels of anxious attachment than African American and White students, and higher levels of avoidant attachment than White students. Also, a stronger relationship emerged between anxious attachment and negative mood for Asian Americans than for African American and White students. In our study, attachment, acculturation and racial identity all contributed to the negative mood of South Asian students. Specifically, our results suggested that racial identity’s conformity status was a unique predictor of anxious mood. Perhaps high levels of racial identity’s conformity status contributed to the high amount of anxious mood in the Asian American students in Wei et al.’s (2004) study. In our study, anxious attachment was moderately and positively associated with racial identity’s conformity status. Perhaps the variance in anxious attachment in the Wei et al. (2004) study was accounted for by racial identity’s conformity status, thus explaining some of the strength in the relationship between anxious attachment and anxious mood for Asian Americans.

Ideas for Intervention

One purpose of this study was to replicate and extend Wei et al.’s (2004) study to examine whether sociocultural variables, in addition to adult attachment, explained the well-being and negative mood of South Asian American college students. The results of
this study indicated that in addition to adult attachment, acculturation and racial identity are meaningful contributors towards understanding the negative mood and well-being of South Asian American students.

Counseling interventions intended to address the negative mood of South Asian American college students could include attention paid to be relational variables (i.e., attachment), as well as their acculturative experiences, and racial identity. Specifically, assessments could be conducted to explore these students’ feelings and thoughts towards their race, and perceptions of their race held by those in the racial majority. Interventions that address students’ sense of worth and the value of their membership in their racial group could improve negative mood. Counselors can facilitate exploration of students’ judgments, values, and emotions regarding their membership as a South Asian, and their idealization of dominant racial groups.

Another way to address negative mood would be to validate and explore different areas of acculturative distress. For example, counselors can explore how students experience and negotiate cultural differences in their family environment versus their school environment. Also, counselors can validate and empathize with experiences with prejudice, as they occur on societal, institutional, and interpersonal dimensions. Additionally, mental health professionals should pay attention to concerns of prejudice, helping students identify and respond to these issues.

Psychologists and educators can create interventions to encourage and support healthy racial identity among South Asian students. For example, psychologists can aid in the development of organizations on campus that serve the interests and needs of South Asian students. Moreover, psychologists and educators can encourage their students’
involvement in such organizations. Also, psychologists and educators also can support the recruitment of South Asian psychologists and educators among their staff to serve as role models for South Asian students.

A final way that counselors and educators can create an environment that fosters the well-being of South Asian students is by emphasizing the importance of low acculturative distress, and high levels of racial identity’s internalization status in positive self-esteem. Educators can emphasize the importance of these sociocultural variables in the well-being of these students in counselor training, supervision, and in Psychology courses.

Limitations

One of the limitations in this study was that differences between the South Asian ethnic sub-groups were not examined, as the data was aggregated. These differences were not studied due to unequal sample sizes, with most students being of Indian descent. Therefore, it was unclear whether meaningful sub-group differences were minimized, and the extent to which these results could be generalized to all South Asian Americans.

Another limitation to this study was that the sample reflected students who were active in student organizations serving the interests of South Asian college students and those South Asians interested in this topic. Therefore, these results may not be reflective of South Asian college students primarily in conformity statuses or with low acculturation to South Asian culture. Therefore, these participants may not be representative of all South Asian Americans at these two universities.

Another weakness of this study was that these students attended racially diverse 4-year public universities in a mid-Atlantic state. It is uncertain how the racial climate of
these two universities and geographical area affected the racial identity and acculturative experiences of these students. The amount and quality of prejudice and discrimination varies by geographical location, and likely affect the amount of prejudice perceived and reported by South Asians. Therefore, these results may not be generalized to the experiences of South Asian college students in other geographical locations, due to differences in geography and racial climate.

Another limitation to this study was the low reliability of the adult attachment measure. Additionally, collective self-esteem importance of identity and social desirability also had low reliabilities. Perhaps the wording of the items conveyed a different meaning to South Asian students, due to cultural differences. Researchers have questioned whether a cultural bias exists in attachment measures. These measures assess attachment through affective, cognitive and behavioral dimensions, and cultural bias may influence any of these three areas (Grossman & Grossman, 1990; Wang & Mallinckrodt, 2006).

A limitation to this study was the inability to compare groups of students by generational status to assess for differences in the independent and dependent variables. Participants’ responses were inconsistent on items assessing generational status. Therefore, data related to generational status were not analyzed.

Future Ideas for Research

Future research on South Asian Americans should include a broader representation of South Asians to elucidate possible differences between the South Asian sub groups. Furthermore, this study could be replicated by examining the contribution of salient sociocultural variables to the relationship between attachment and well-being
among other racial minority groups. For example, how do the relationships between attachment, acculturation, racial identity, well-being and negative mood differ for Hispanic Americans and African Americans? Additionally, other salient sociocultural variables, such as sense of belonging and intergenerational conflict, could be assessed for their contributions to well-being and negative mood of South Asian Americans.

Future qualitative research could be conducted to inquire as to what is considered the ideal attachment and healthy well-being for South Asians, and how this differs from how they understand ideal attachment and healthy well-being for Westerners. Moreover, research could examine strategies South Asian parents have taught their children to adapt to cultural differences, and cope with racism-related and acculturative distress. Future research could examine the effectiveness of these strategies, and be used to help counselors and educators better understand South Asian American students.

The low reliability of the ECRS (Wei et al., 2007) suggested that this measure may have limited cross-cultural validity, particularly with South Asian Americans. Future research could examine culturally appropriate assessments of relationship attachment for this population. As of now, there is no measure that is accepted for use with this population. Alternatively, perhaps romantic attachment is not the best way to assess attachment style among South Asians. Adult attachment was assessed by asking participants about their experiences in romantic relationships. It is unclear how many of these participants have been in romantic relationships, and whether or not they date. Several participants reported that they have not been in a romantic relationship before. For many South Asian families, dating is either openly discouraged, or only acceptable as a step towards marriage. Furthermore, partners often are selected according to how they
fit with the family (i.e., culturally, religiously, economically), and it is not uncommon for families and family friends to be involved in the match-making process. Therefore, the culture of dating for South Asians often is different from non-South Asians, and therefore, “romantic” attachment style may not be a relevant question for all individuals from South Asian descent. Future studies could examine alternative ways of assessing adult attachment, for example, examining relationships with parents and friends.

In addition, research could examine the relevance of self-esteem for individuals of South Asian descent, as well as what variables comprise well-being and healthy functioning for this population. Self-esteem, which assesses an individuals’ sense of self-worth and value, may be is more relevant for individuals that are acculturated toward the American culture and have lived in the United States for most, if not all, of their life. Future research could examine more closely the relationship between generation status and self-esteem. Alternative variables that reflect well-being for South Asians, such as connectedness with family and community, and sense of belonging, also should be examined as outcome variables.

The results of this study could be used to design a counseling intervention study, where South Asian students presenting with distress were randomly assigned to different counseling conditions. The conditions would differ according to whether counselors focused on attachment, acculturation or racial identity. Pre and post measures would assess changes in distress, and compare the outcomes among the three conditions.

Conclusion

To conclude, for the South Asian college students in this study, adult attachment, acculturation and racial identity contributed to their well-being and negative mood.
Counseling psychologists can apply their understanding of the negative mood and well-being of South Asian college students in psychotherapy and counselor training. For example, it is important to note that both psychological and sociocultural variables are important to examine when assessing what is contributing to the distress and problems of these students. These findings can contribute to both the research and education on attachment theory, as well as toward the psychological well-being of South Asian Americans. Moreover, these findings lend importance to viewing individuals through an ecological model, where the interplay of social systems and individual variables are emphasized to facilitate an understanding of healthy development among understudied populations.
Table 1

Bivariate Correlations Among Scales and Internal Consistency Estimates, Means, Standard Deviations, Actual Scale Ranges and Possible Scale Ranges of the Measured Variables

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<td><strong>Independent Variables</strong></td>
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<td>2. Anxious Attachment</td>
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Appendix A
Experiences in Close Relationships Scale – Short Form (ECRS; Brennan, Clark, & Shaver; 1998)
The following statements concern how you feel in romantic relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

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1. It helps to turn to my romantic partner in times of need. 1 2 3 4 5 6 7
2. I need a lot of reassurance that I am loved by my partner. 1 2 3 4 5 6 7
3. I want to get close to my partner, but I kept pulling back. 1 2 3 4 5 6 7
4. I find that my partner(s) don’t want to get as close as I would like. 1 2 3 4 5 6 7
5. I turn to my partner for many things, including comfort and reassurance. 1 2 3 4 5 6 7
6. My desire to be very close sometimes scares people away. 1 2 3 4 5 6 7
7. I try to avoid getting too close to my partner. 1 2 3 4 5 6 7
8. I do not often worry about being abandoned. 1 2 3 4 5 6 7
9. I usually discuss my problems and concerns with my partner. 1 2 3 4 5 6 7
10. I get frustrated if romantic partners are not available when I need them. 1 2 3 4 5 6 7
11. I am nervous when partners get too close to me. 1 2 3 4 5 6 7
12. I worry that romantic partners won’t care about me as much as I care about them. 1 2 3 4 5 6 7
Appendix B  
Rosenberg Self-Esteem Scale (Rosenberg, 1989)  
Below is a list of statements dealing with your general feelings about yourself. If you **strongly agree**, circle SA. If you **agree** with the statement, circle A. If you **disagree**, circle D. If you **strongly disagree**, circle SD.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel that I’m a person of worth, at least on an equal plane with others.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>2. I feel that I have a number of good qualities.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>3. All in all, I am inclined to feel that I am a failure.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>4. I am able to do things as well as most other people.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>5. I feel I do not have much to be proud of.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>6. I take a positive attitude toward myself.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>7. On the whole, I am satisfied with myself.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>8. I wish I could have more respect for myself.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>9. I certainly feel useless at times.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
<tr>
<td>10. At times I think I am no good at all.</td>
<td>SA</td>
<td>A</td>
<td>D</td>
</tr>
</tbody>
</table>
Appendix C

Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985)

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

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

Please place the appropriate number on the line preceding the item:

1. In most ways my life is close to ideal.
2. The conditions of my life are excellent
3. I am satisfied with my life
4. So far I have gotten the important things I want in life
5. If I could live my life over, I would change almost nothing.
### Appendix D
Depression Anxiety Stress Scales – Short Version (DASS21; Lovibond & Lovibond, 1993)

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

*The rating scale is as follows:*

- **0** Did not apply to me at all
- **1** Applied to me to some degree, or some of the time
- **2** Applied to me to a considerable degree, or a good part of time
- **3** Applied to me very much, or most of the time

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<tbody>
<tr>
<td>1</td>
<td>I was aware of dryness of my mouth.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>I couldn't seem to experience any positive feeling at all.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion).</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>I found it difficult to work up the initiative to do things.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>I experienced trembling (eg, in the hands).</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>I was worried about situations in which I might panic and make a fool of myself</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>I felt that I had nothing to look forward to.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>I felt down-hearted and blue.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>I felt I was close to panic.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td></td>
<td>Statement</td>
<td>Score</td>
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<td>---------------------------------------------------------------------------</td>
<td>-------</td>
<td></td>
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<tr>
<td>10.</td>
<td>I was unable to become enthusiastic about anything.</td>
<td>0 1 2 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>I felt I wasn’t worth much as a person.</td>
<td>0 1 2 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I was aware of the action of my heart in the absence of physical exertion (e.g., sense of heart rate increase, heart missing a beat).</td>
<td>0 1 2 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I felt scared without any good reason.</td>
<td>0 1 2 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>I felt that like was meaningless.</td>
<td>0 1 2 3</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>
Appendix E
People of Color Racial Identity Attitudes Scale (PRIAS; Helms, 1995)

This questionnaire is designed to measure people’s social and political attitudes concerning race and ethnicity. Since different people have different opinions, there are no right or wrong answers. Use the scale below to respond to each statement according to the way you see things. Be as honest as you can. Beside each item number, circle the number that best describes how you feel.

<p>| | | | | | |</p>
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<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Uncertain</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

1. In general, I believe that Anglo-Americans (Whites) are superior to other racial groups. 1 2 3 4 5
2. I feel more comfortable being around Anglo-Americans (Whites) than I do being around people of my own race. 1 2 3 4 5
3. In general, people of my race have not contributed very much to American society. 1 2 3 4 5
4. Sometimes, I am embarrassed to be the race I am. 1 2 3 4 5
5. I would have accomplished more in life if I had been born Anglo-American (White). 1 2 3 4 5
6. Anglo-Americans (Whites) are more attractive than people of my race. 1 2 3 4 5
7. People of my race should learn to think and act like Anglo-Americans (Whites). 1 2 3 4 5
8. I limit myself to White activities. 1 2 3 4 5
9. I think racial minorities blame Anglo-Americans (Whites) too much for their problems. 1 2 3 4 5
10. I feel unable to involve myself in Anglo-Americans’ (Whites’) experiences, and am increasing my involved in experiences involving people of my race. 1 2 3 4 5
11. When I think about how Anglo-Americans (Whites) have treated people of my race, I feel an overwhelming anger. 1 2 3 4 5
Appendix E continued
People of Color Racial Identity Attitudes Scale (PRIAS; Helms, 1995)

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<table>
<thead>
<tr>
<th>Item Number</th>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td>I want to know more about my culture.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13.</td>
<td>I limit myself to activities involving people of my own race.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14.</td>
<td>Most Anglo-Americans (Whites) are untrustworthy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15.</td>
<td>American society would be better off if it were based on the cultural values of my people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16.</td>
<td>I am determined to find my cultural identity.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17.</td>
<td>Most Anglo-Americans (Whites) are insensitive.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18.</td>
<td>I reject all Anglo-American (White) values.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19.</td>
<td>My most important goal in life is to fight the oppression of my people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20.</td>
<td>I believe that being from my cultural background has caused me to have many strengths.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21.</td>
<td>I am comfortable wherever I am.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22.</td>
<td>People, regardless of their race, have strengths and limitations.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23.</td>
<td>I think people of my culture and the White culture differ from each other in some ways, but neither group is superior.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24.</td>
<td>My cultural background is a source of pride to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Appendix E continued  
People of Color Racial Identity Attitudes Scale (PRIAS; Helms, 1995)

This questionnaire is designed to measure people’s social and political attitudes concerning race and ethnicity. Since different people have different opinions, there are no right or wrong answers. Use the scale below to respond to each statement according to the way you see things. Be as honest as you can. Beside each item number, circle the number that best describes how you feel.

<table>
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<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tbody>
<tr>
<td>25. People of my culture and White culture have much to learn from each other.</td>
<td></td>
<td></td>
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<tr>
<td>26. Anglo-Americans (Whites) have some customs that I enjoy.</td>
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<tr>
<td>27. I enjoy being around people regardless of their race.</td>
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<tr>
<td>28. Every racial group has some good people and some bad people.</td>
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<td></td>
<td></td>
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<tr>
<td>29. Minorities should not blame Anglo-Americans (Whites) for all of their social problems.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>30. I do not understand why Anglo-Americans (Whites) treat minorities as they do.</td>
<td></td>
<td></td>
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<tr>
<td>31. I am embarrassed about some of the things I feel about my people.</td>
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<tr>
<td>32. I’m not sure where I really belong.</td>
<td></td>
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<tr>
<td>33. I have begun to question my beliefs.</td>
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<tr>
<td>34. Maybe I can learn something from people of my race.</td>
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<td></td>
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<tr>
<td>35. Anglo-American (White) people can teach me more about surviving in this world than people of my own race can, but people of my race can teach me more about being human.</td>
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<tr>
<td>36. I don’t know whether being the race I am is an asset or a deficit.</td>
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</tbody>
</table>
Appendix E continued
People of Color Racial Identity Attitudes Scale (PRIAS; Helms, 1995)

This questionnaire is designed to measure people’s social and political attitudes concerning race and ethnicity. Since different people have different opinions, there are no right or wrong answers. Use the scale below to respond to each statement according to the way you see things. Be as honest as you can. Beside each item number, circle the number that best describes how you feel.

1  2   3   4   5
Strongly Disagree  Disagree  Uncertain  Agree  Strongly Agree

37. Sometimes I think Anglo-Americans (Whites) are superior and sometimes I think they’re inferior to people of my race.  
38. Sometimes I am proud of the racial group to which I belong and sometimes I am ashamed of it. 
39. Thinking about my values and beliefs takes up a lot of my time. 
40. I’m not sure how I feel about myself. 
41. White people are difficult to understand. 
42. I find myself replacing old friends with new ones who are from my culture. 
43. I feel anxious about some of the things I feel about people of my race. 
44. When someone of my race does something embarrassing in public, I feel embarrassed. 
45. When both White people and people of my race are present in a social situation, I prefer to be with my own racial group. 
46. My values and beliefs match those of Anglos (Whites) more than they do people of my race. 
47. The way Anglos (Whites) treat people of my race makes me angry.
Appendix E continued
People of Color Racial Identity Attitudes Scale (PRIAS; Helms, 1995)

This questionnaire is designed to measure people’s social and political attitudes concerning race and ethnicity. Since different people have different opinions, there are no right or wrong answers. Use the scale below to respond to each statement according to the way you see things. Be as honest as you can. Beside each item number, circle the number that best describes how you feel.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
<tr>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Uncertain</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
</tbody>
</table>

48. I only follow the traditions and customs of people of my racial group.  
1  2  3  4  5

49. When people of my race act like Anglos (Whites) I feel angry.  
1  2  3  4  5

50. I am comfortable being the race I am.  
1  2  3  4  5
Appendix F
Minority-Majority Relations Survey (MMRS; Sodowsky & Plake, 1991)

This questionnaire attempts to understand some experiences of minority people (e.g., first, second, third, and fourth generation immigrants, permanent residents, naturalized citizens, and U.S. citizens) in the U.S.A.

The term “majority people/group” in this questionnaire means the “White Anglo People” in the U.S.A.

Please check the response that you think describes you the best.

1. The language I speak well is:
   1. English only
   2. Mostly English, some my ethnic language
   3. English and my ethnic language equally well
   4. Mostly my ethnic language, some English
   5. My ethnic language only

2. When I am with people from my ethnic group I speak
   1. English only
   2. Mostly English, some my ethnic language
   3. English and my ethnic language equally
   4. Mostly my ethnic language, some English
   5. My ethnic language only

3. Friends with whom I am close are
   1. Majority people only
   2. Mostly majority people, some people from my ethnic group
   3. Majority people and people from my ethnic group equally
   4. Mostly people from my ethnic group, some majority people
   5. People from my ethnic group only

4. When I think my ideas and images best operate
   1. In English only
   2. Mostly in English, some in my ethnic language
   3. In English and my ethnic language equally
   4. Mostly in my ethnic language, some in English
   5. In my ethnic language only

5. People I trust and turn to when I need help are
   1. Majority people only
   2. Mostly majority people, some my family
   3. Majority people and my family equally
   4. Mostly my family, some majority people
   5. My family only
Appendix F continued
Minority-Majority Relations Survey (MMRS; Sodowsky & Plake, 1991)

This questionnaire attempts to understand some experiences of minority people (e.g., first, second, third, and fourth generation immigrants, permanent residents, naturalized citizens, and U.S. citizens) in the U.S.A.

The term “majority people/group” in this questionnaire means the “White Anglo People” in the U.S.A.

Please check the response that you think describes you the best.

6. I like to eat
   1. Only American food (e.g., hamburgers, casseroles, fried chicken, meat and potatoes)
   2. Mostly American food, some my ethnic food
   3. American and my ethnic food equally
   4. Mostly my ethnic food, some American food
   5. Only my ethnic food

7. When I have strong feelings (e.g., when I am very happy or angry), I express myself more easily in
   1. English only
   2. English mostly, some my ethnic language
   3. English and my ethnic language equally
   4. My ethnic language mostly, some English
   5. My ethnic language only

8. I believe my group identity is best represented by
   1. The majority group
   2. Mostly the majority group and some my ethnic group
   3. The majority group and my ethnic group equally
   4. Mostly my ethnic group, some the majority group
   5. Only my ethnic group

9. I believe myself to be an individual
   1. With most similarities with the majority people
   2. With more similarities with the majority people
   3. Equally similar to the majority people and to my ethnic group
   4. With more similarities with my ethnic group
   5. With most similarities with my ethnic group
Appendix F continued
Minority-Majority Relations Survey (MMRS; Sodowsky & Plake, 1991)

This questionnaire attempts to understand some experiences of minority people (e.g., first, second, third, and fourth generation immigrants, permanent residents, naturalized citizens, and U.S. citizens) in the U.S.A.

The term “majority people/group” in this questionnaire means the “White Anglo People” in the U.S.A.

Please check the response that you think describes you the best.

10. My pride in people from my ethnic group in the U.S.A. can be best described as
   1. None
   2. Low
   3. Moderate
   4. Strong
   5. Very strong

11. In my sleep when I dream the people in my dreams speak in
   1. English only
   2. Mostly English, some of my ethnic language
   3. English and my ethnic language equally
   4. Mostly my ethnic language, some English
   5. My ethnic language only

12. I read and write
   1. English only
   2. Mostly English, some my ethnic language
   3. English and my ethnic language equally
   4. Mostly my ethnic language, some English
   5. My ethnic language only
Appendix F continued
Minority-Majority Relations Survey (MMRS; Sodowsky & Plake, 1991)

Mark each of the following statements according to how much you agree or disagree with it. There is no right or wrong answer. The best answer is your personal opinion. Please express what you actually believe to be true rather than what you wish were true. If you do not have a definite opinion about a statement, choose a degree of agreement or disagreement (from 6 agree strongly to 1 disagree strongly) that comes closest to what you think.


13. The majority people try to fit me into the stereotypes that they have about my ethnic group 1 2 3 4 5 6
14. I find the majority people overly concerned about their personal needs 1 2 3 4 5 6
15. I find that when I am with people from the majority group they almost always talk to each other and ignore me 1 2 3 4 5 6
16. The majority group thinks my ethnic clothes/fashions are attractive but meant only for my ethnic festivals and occasions 1 2 3 4 5 6
17. American institutions (e.g., professional associations, major Universities, or government agencies) are trying to place official or unofficial restrictions on me or people from my ethnic group gaining admission into educational, work, or professional areas in which my ethnic group has achieved visible numbers or success 1 2 3 4 5 6
18. I am often overlooked for recognition (e.g., an award for academic achievement) special projects, hiring, or promotion because of my ethnicity 1 2 3 4 5 6
19. No matter how adjusted I may be to the ways of the majority people, I will be seen as an outsider by this group 1 2 3 4 5 6
20. If I did not have some family members, or relatives, or some friends from my ethnic group where I live or work or study, I would feel isolated 1 2 3 4 5 6
21. My ethnic physical characteristics do not match the standards that the majority group has about good looks. 1 2 3 4 5 6
22. I believe people from the majority group are only interested in me on the surface level. 1 2 3 4 5 6
23. I prefer my ethnic group’s music, dances, and entertainment most of all. 1 2 3 4 5 6
24. The majority group thinks that my ethnic group observes strange, primitive customs. 1 2 3 4 5 6
25. I prefer my ethnic group’s food most of all. 1 2 3 4 5 6
Appendix F continued
Minority-Majority Relations Survey (MMRS; Sodowsky & Plake, 1991)

Mark each of the following statements according to how much you agree or disagree with it. There is no right or wrong answer. The best answer is your personal opinion. Please express what you actually believe to be true rather than what you wish were true. If you do not have a definite opinion about a statement, choose a degree of agreement or disagreement (from 6 agree strongly to 1 disagree strongly) that comes closest to what you think.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>26. The majority group does not care to know about the history, culture, religion, values, or life style of my ethnic group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>27. I have more friends from the majority group than from my ethnic group</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>28. I believe I will never fully understand how to function successfully in the American bureaucracy or ”system” (educational, governmental, professional, or business operations)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>29. I adhere strictly to my ethnic cultural values</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>30. I feel I am not fully accepted in organizations (e.g., private social clubs, professional associations, fraternities, sororities, or physical health fitness clubs) which have mostly members from the majority group.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>31. The majority people are too assertive and verbal for my liking</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>32. I celebrate the majority group’s religious or social festivals more than I celebrate my ethnic group’s religious or social festivals</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>33. I seek the friendship and support of people from my ethnic group in the city/town I am living</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>34. People from the majority group that I study or work with feel threatened by my strengths and successes (e.g., hard work and professional/academic progress)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>35. In my study or work environment I follow ways and standards of the majority group, but at home I follow many customs of my ethnic group</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>36. The majority people believe that my ethnic accent, or nonfluent English , or lack of knowledge of American expressions is a sign of ignorance.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>37. I believe it is more proper to marry someone from one’s ethnic group than a person from the majority group</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>38. I am rarely invited to the homes or parties of my American classmates, colleagues, or neighbors.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Appendix G
Marlowe-Crowne Social Desirability Scale (MC-Form C; Reynolds, 1982)

Listed below are statements concerning personal attitudes and traits. Please read each item and decide whether the statement is true or false as it pertains to you personally.

Please respond to the following items as being either True (T) or False (F).

True  False

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

The following are a few questions about your background. Please remember your answers will be kept anonymous and confidential.

1. Gender: Female_____ Male_____ Transgender_____

2. Age: _______

3. What is/are your mother’s ethnic group(s) (Check all that apply):
   _____ Afghanistan
   _____ Bangladeshi
   _____ Bhutanese
   _____ Indian
   _____ Indo-Caribbean
   _____ Maldives
   _____ Nepalese
   _____ Pakistani
   _____ Sri Lankan
   _____ Tibetan
   _____ Other (please specify)_____________________________________

4. What is/are your father’s ethnic group(s)? (Check all that apply):
   _____ Afghanistan
   _____ Bangladeshi
   _____ Bhutanese
   _____ Indian
   _____ Indo-Caribbean
   _____ Maldives
   _____ Nepalese
   _____ Pakistani
   _____ Sri Lankan
   _____ Tibetan
   _____ Other (please specify)_____________________________________

6. What is your generation status?
   _____ 1 (you were born outside of the U.S.)
   _____ 1.5 (born outside of the U.S.; but spent more than two-thirds of life in U.S.)
   _____ 2nd (you were born in the U.S.; either parent born in the country of origin)
   _____ 3rd (you and both parents born in the U.S.; all grandparents born in country of origin)
   _____ 4th (you and both parents born in the U.S.; not all grandparents born in U.S.)
   _____ 5th (you, both parents, and all grandparents born in the U.S.)

If not born in the United States, how long have you resided in the United States? ___yrs
Appendix H continued
Demographic Questionnaire

7. What is the religious affiliation of the household in which you were raised (check all that may apply)?
   ____ Buddhist
   ____ Christian
   ____ Hindu
   ____ Jain
   ____ Muslim
   ____ Sikh
   ____ Atheist/Agnostic

8. What is your current religious affiliation (check all that may apply)?
   ____ Buddhist
   ____ Christian
   ____ Hindu
   ____ Jain
   ____ Muslim
   ____ Sikh
   ____ Atheist/Agnostic
   ____ Other (Please specify ____________________)

9. What is your sexual orientation?
   ____ Heterosexual
   ____ Lesbian or Gay
   ____ Bisexual

10. Relationship status:
    ____ Single, never married
    ____ Married/partnered/living as married
    ____ Divorced
    ____ Separated
    ____ Widowed
    ____ Other

11. If you are currently in a romantic relationship, what is/are the racial group(s) of your spouse/partner:
    ____ Black or African American
    ____ Latina/o or Hispanic
    ____ White or European American
    ____ Asian/Pacific Island American
    ____ South Asian American
    ____ Native American
    ____ Middle Eastern American
    ____ Other (please specify)___________________________
Appendix H continued
Demographic Questionnaire

12. If you are currently in a romantic relationship, how would you describe it?
   _____ Not serious
   _____ Somewhat serious
   _____ Very serious

13. In what year of college will you be in Fall 2007?
   _____ First Year
   _____ Second Year
   _____ Third Year
   _____ Fourth Year
   _____ Fifth Year
   _____ Beyond Fifth Year

14. Please indicate your family’s approximate yearly income:
   _____ 0-9,999   _____ 10,000-19,000   _____ 20,000-29,000
   _____ 30,000-39,000   _____ 40,000-49,000   _____ 50,000-59,000
   _____ 60,000-69,000   _____ 70,000-79,000   _____ 80,000-89,000
   _____ 90,000-99,000   _____ over 100,000
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