

Attachment Matters:

Patterns of Romantic Attachment across Gender, Geography, and Cultural Forms

David P. Schmitt

Bradley University

Chapter prepared for the *10th Sydney Symposium of Social Psychology (2007)*

Chapter Summary

In this chapter, theories and evidence are reviewed concerning the systematic distribution of romantic attachment styles across gender, geography, and cultural forms. Findings from the International Sexuality Description Project—a survey study of over 17,000 people from 56 nations—are highlighted to reveal that secure romantic attachment is “normative” in a majority of cultures, though preoccupied romantic attachment is particularly prevalent in East Asian cultures. Insecure romantic attachments are associated with high-stress ecological environments, supporting certain evolutionary theories of human sexuality. The degree of gender differentiation in dismissing romantic attachment is predictably associated with different reproductive environments. Contrary to social role theories, national levels of gender equality appear unrelated to gender differences in romantic attachment.

Chapter Outline

- I. Bowlby's Ethological Theory of Attachment
 - A. Evidence of Attachment in Childhood and Beyond
 - B. Internal Working Models and Adult Romantic Attachment
- II. Do Models of Self and Other Underlie Romantic Attachment Styles in the Same Way across All Cultures?
- III. Is the "Secure" Style of Romantic Attachment Normative across All Cultures?
- IV. Are East Asians Particularly Prone to Preoccupied Romantic Attachment?
- V. Are People from Cultures with Low Ecological Stress More Securely Attached than Others?
- VI. Are There Universal Gender Differences in Romantic Attachment?
- VII. Does the Magnitude of Gender Differences in Romantic Attachment Vary according to Evolutionary or Social Role Theories?
 - A. Evolutionary Psychology Theories
 - B. Social Role Theories
- VIII. Concluding Remarks

Attachment Matters:

Patterns of Romantic Attachment across Gender, Geography, and Cultural Forms

In this chapter, I review the extant literature on romantic attachment variability across gender, geography, and cultural forms. This review focuses on six specific questions. First, do the theoretical “internal working models” of attachment—Models of Self and Models of Other—underlie romantic attachment styles in the same way across all cultures (Bartholomew, 1990)? Second, is the “Secure” romantic attachment style normative across all cultures (i.e., is it the most common; see van IJzendoorn & Sagi, 1999)? Third, are East Asians particularly prone to Preoccupied styles of insecure romantic attachment (Soon & Malley-Morrison, 2000), and if so, why?

Fourth, do cross-cultural patterns of attachment relate to local ecologies in ways that support or refute evolutionary theories of human sexuality (Belsky, Steinberg, & Draper, 1991; Chisholm, 1996)? Fifth, are there universal gender differences in romantic attachment, particularly in the dismissing form of romantic attachment (Kirkpatrick, 1998)? Sixth, does cross-cultural variation in the *magnitude* of gender differences in romantic attachment support or refute various evolutionary and social role theories of human mating (Belsky et al., 1991; Eagly & Wood, 1999). Because research on adult romantic attachment has been greatly influenced by theories of childhood attachment (see Cassidy & Shaver, 1999; Mikulincer & Goodman, 2006; Simpson & Rholes, 1998), I begin with a review of attachment theory and the developmental origins of attachment.

I. Bowlby's Ethological Theory of Attachment

According to Bowlby's (1969/1982) ethological theory of attachment, humans possess a behavioral-motivational system that emerges in infancy and protects children as they pass

through several phases of development (Marvin & Britner, 1999). This system is thought to be shared with other primates, having evolved as an adaptive mechanism for monitoring the physical proximity and emotional availability of protective attachment figures (Bretherton & Munholland, 1999; Suomi, 1995). All children are thought to possess the same evolved attachment system (van IJzendoorn & Sagi, 1999), and successful navigation through the stages of attachment is assumed to “normatively” provide children with a secure emotional base from which they competently lead their social lives (Bowlby, 1988; Hazan & Zeifman, 1999).

Early attachment experiences provide a secure emotional base by impacting children’s fundamental feelings of confidence, worthiness, and interpersonal trust (Bowlby, 1973, 1980). Childhood experiences that include responsive, supportive, and consistent caregiving are thought to leave children with an abiding sense of high self-worth and a lasting feeling of comfort about depending on others. These thoughts and feelings eventually crystallize into basic “internal working models” or cognitive-emotional attitudes that securely assert that the self is valuable and worthy of love (i.e., children develop a positive “Model of Self” attitude) and that others are valuable and worthy of trust (i.e., children develop a positive “Model of Other” attitude).

Unresponsive, abusive, or inconsistent caregiving experiences, in contrast, are thought to leave children with negative or dysfunctional internal working models. Dysfunctional models can consist of a negative Model of Other (via distrust and low valuing of the parent), a negative Model of Self (via low self-esteem and sensitivity to rejection), or negative models of both the self and others (Bartholomew, 1990). Eventually, these internal working models can unknowingly become stable parts of the child’s core personality: “once built, evidence suggests, these models of a parent and self in interaction tend to persist and are so taken for granted that they come to operate at an unconscious level” (Bowlby, 1988, p. 130).

A. Evidence of Attachment in Childhood and Beyond. Beginning with the work of Ainsworth and her colleagues (Ainsworth, Blehar, Waters, & Wall, 1978), psychologists have found that early attachment experiences closely connect with children's subsequent feelings toward themselves and others (see Fraley, 2002; Grossman, Grossman, & Waters, 2005). In support of Bowlby's original theory, children from supportive caregiving environments have higher self-esteem and exhibit more trust and kindness, and are generally more prosocial, than other children (Ainsworth, 1991; Cassidy & Shaver, 1999). Although this research often portrays humans as having discrete attachment "styles" in which one is either securely or in some way insecurely attached, attachment orientations can be understood in terms of variation along the fundamental "internal working model" dimensions of Model of Self (also called the Anxiety dimension) and Model of Other (also called the Avoidance dimension; see Brennan, Clark, & Shaver, 1998; Griffin & Bartholomew, 1994). In children, individual differences in Models of Self and Other have been linked to a wide range of emotional and social outcomes (Bretherton & Munholland, 1999), and positive Models of Self and Other are thought to provide the healthiest foundation for psychological functioning (Dozier, Stovall, & Albus, 1999; Greenberg, 1999).

Evidence also suggests that internal working Models of Self and Other tend to persist over time, affecting our ability to relate to others in close personal relationships well into adulthood (Simpson & Rholes, 1998; Simpson, Collins, Tran, & Haydon, 2007; Waters, Merrick, Treboux, Crowell, & Albertstein, 2000), at least at a general level (Overall, Fletcher, & Friesen, 2003). Attachment style categories, and the underlying internal working Models of Self and Other, seem to enduringly influence many social interactions (Collins & Read, 1994; Pietromonaco & Barrett, 1997), including parent-child relations (George & Solomon, 1999), peer relationships and friendships (Allen & Land, 1999; Feeney, Noller, & Patty, 1993), teacher-

student dynamics (Sroufe, 1983), therapeutic interactions (Slade, 1999), even the way people form close relationships with God (Kirkpatrick, 1999, 2005).

B. Internal Working Models and Adult Romantic Attachment. In the mid-1980s, researchers began to investigate how attachment styles and orientations might apply to people's cognitive-emotional attitudes toward romantic love and sexual relationships (Hazan & Shaver, 1987). For example, variation in romantic attachment has been linked to individual differences in motivations for sex (Cooper et al., 2006; Davis, Shaver, & Vernon, 2004; Schachner & Shaver, 2004), sexual coercion (Davis, 2006), and stalking (Wilson, Ermshar, & Welsh, 2006). Over the last decade and a half, a growing body of evidence has shown that attachment deeply influences the way people think and feel about their most important romantic relationships (Feeney & Noller, 1996; Klohnen & John, 1998). Variation in attachment has been linked to romantic relationship patterns of conflict, stress, and affect regulation (Mikulincer, Shaver, & Pereg, 2003; Rholes, Simpson, & Stevens, 1998; Simpson, 1990), romantic satisfaction, love, and harmony (Brennan & Shaver, 1995; Collins & Read, 1990; Heaven, Da Silva, & Carey, 2004; Roberts & Noller, 1998), as well as the temporal duration of romantic relationships (Hazan & Zeifman, 1999; Kirkpatrick, 1998; Simpson, 1999).

In general, people with "Secure" attachment styles tend to experience less conflict, more satisfaction, greater stability, and longer duration in their romantic relationships (Belsky, 1999; Kirkpatrick & Hazan, 1994). From the perspective of internal working models, the reason behind this pattern is that secure individuals—those with more positive Models of Self and Other—have higher self-worth, are less sensitive to rejection, value others more highly, and are more comfortable depending on others (Brennan et al., 1998; Griffin & Bartholomew, 1994).

According to the two-factor model of romantic attachment proposed by Bartholomew and Horowitz (1991), internal working Models of Self and Other are independent dimensions that, in combination, form four basic categories or styles of adult romantic attachment (see also Bartholomew, 1990, 1994). The differing combinations of Model of Self and Other yield four distinctive attitudes toward romantic relationships. People who possess a positive Model of Self and a positive Model of Other, for example, are designated as having a “Secure” romantic attachment style. Secure individuals have a sense of lovability about themselves, a sense that they are worthy of attention from others. Secure individuals also possess an expectation that other people will be accepting and responsive to their expressions of love. Based on Bartholomew and Horowitz’s model, these feelings are thought to be generated by unconscious cognitive-emotional attitudes represented internally as a positive Model of Self and a positive Model of Other.

Dismissing individuals also maintain a positive Model of Self, along with a negative Model of Other. This combination of internal working models leads Dismissing individuals to experience high self-esteem, but they tend to protect themselves against romantic disappointment by avoiding close relationships and maintaining a sense of independence and invulnerability. Preoccupied individuals possess a negative Model of Self and a positive Model of Other. Those with Preoccupied tendencies are inclined to continually strive for self-acceptance by gaining the romantic approval of highly-valued others. Fearful individuals have a negative Model of Self and a negative Model of Other. Fearful individuals tend to avoid loving relationships altogether because they view themselves as unworthy of love, they see the love of others as largely unavailable, and they come to expect romantic rejection from their relationship partners (Bartholomew & Horowitz, 1991). This basic two-dimension/four-category model can be

integrated with other models of adult romantic attachment and has received a good deal of support from subsequent attachment literature (Brennan et al., 1998; Carver, 1997; Feeney, 1999), though follow-up studies of their model have been largely limited to Western cultures (Bartholomew, 1994; Bartholomew & Shaver, 1998; Scharfe & Bartholomew, 1994).

Even though many attachment researchers regard the key developmental processes of attachment—the processes that give rise to internal working Models of Self and Other—as a human universal (Main, 1990; van IJzendoorn & Sagi, 1999), some have argued that the core assumptions of attachment theory are biased toward Western ways of thinking. For example, Rothbaum and his colleagues question whether the secure base of attachment universally fosters adaptation through exploration and individuation (Rothbaum, Weisz, Pott, Miyake, & Morelli, 2000). Indeed, many cultural differences have previously been implicated as moderators of childhood attachment behaviors (Ainsworth & Marvin, 1995). Because the two-dimension/four-category model of romantic attachment has not been widely examined in non-Western cultures (cf. Sümer & Güngör, 1999), it remains unclear whether this model of romantic attachment is a universal feature of human psychology, or whether it differs in important ways across diverse human cultural forms.

II. Do Models of Self and Other Underlie Romantic Attachment Styles in the Same Way across All Cultures?

Given the prominent role that culture plays in child development and parenting (Cote & Bornstein, 2003; Cronk, 1999; Gardner & Kosmitki, 2002), in one's attitudes toward the self and others (Glick, 2006; Markus & Kitayama, 1991), and in romantic relationship desires and dynamics (Hatfield & Rapson, 1996; Tolman & Diamond, 2001), it seems likely that internal working models of romantic attachment may be at least partly influenced or moderated by

culture. The degree to which Models of Self and Other are influenced by culture is to a large degree unknown, however, because very few studies have simultaneously looked at romantic attachment styles across more than two cultures (c.f., Doherty, Hatfield, Thompson, & Choo, 1994; Sprecher et al., 1994). Only one study has examined the two-factor view of romantic attachment, based on Models of Self and Other from the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991), across multiple non-Western cultures (Schmitt et al., 2004a).

If internal working Models of Self represent feelings and attitudes toward the self across all cultures (including whether the self is lovable and worthy of attention; Bowlby, 1988), then within each culture Models of Self as measured by the RQ should positively correlate with measures of self-worth (e.g., self-esteem as measured by the Rosenberg Self-Esteem Scale; Rosenberg, 1965). The tendency for Models of Self to positively correlate with self-esteem was recently documented in a large cross-cultural study of romantic attachment across 56 nations—the International Sexuality Description Project (ISDP; see Schmitt et al., 2004a). This provided some evidence for the universality of the Model of Self construct. Moreover, Model of Self scores from the RQ were largely unrelated to measures unassociated with self-worth, providing cross-cultural evidence of the discriminant validity of the Model of Self construct. Similarly, the Model of Other scale from the RQ—theoretically representing feelings and attitudes toward others (including whether others are valuable, dependable, and worthy of love)—was usually positively correlated with measures of prosociality (e.g., Agreeableness as measured by the BFI; Benet-Martinez & John, 1998) and largely unrelated to measures unassociated with prosociality (see Schmitt et al., 2004a).

Based on the series of statistical tests originally used by Bartholomew and Horowitz (1991), Schmitt and his colleagues (2004a) found conflicting evidence concerning the cultural

universality of the two-dimension/four-category structure of romantic attachment. Some evidence clearly showed that the four-category structure was not universal across all cultures. For example, the four attachment scales of the Relationship Questionnaire did not interrelate across cultures as predicted by the two-dimension/four-category model. Secure and Fearful forms of romantic attachment were negatively correlated, as predicted, in 63% of cultures, but Preoccupied and Dismissing attachment were negatively correlated in only 25% of cultures. The latter percentage clearly falls short of a “cultural universality” threshold. Of particular importance is the fact that specific world regions, and not just those cultures with smaller sample sizes, tended to fail tests of universality. For example, none of the seven African cultures displayed a significant negative correlation between Secure and Fearful attachment. In South/Southeast Asia, the Secure-Fearful relationships were equally inconsistent, with a peculiar correlation in the opposite of the predicted direction in Malaysia. Moreover, factor analyses demonstrated that the four categories of romantic attachment do not align as predicted within two-dimensional space in the world regions of South America, Western Europe, Eastern Europe, the Middle East, Africa, and East Asia (see Schmitt et al., 2004a).

On the other hand, a considerable amount of evidence supported the universality of the basic two-dimensional structure of romantic attachment. For example, the factor analytic results suggested that two dimensions underlie romantic attachment across all world regions. In almost all individual cultures, Models of Self and Other formed independent dimensions. In addition, there was evidence of convergent and discriminant validity for the Model of Self and Model of Other scales within most cultures, as noted above. Individuals with more positive Models of Self tended to have higher self-worth, but did not tend to have higher levels of prosociality.

Individuals with positive Models of Other tend to have higher prosociality, but did not tend to have higher self-worth.

Although it is difficult to draw strong inferences given the sampling limitations of the ISDP (e.g., almost all participants were college students; see Schmitt et al., 2004a), it may be reasonable to tentatively conclude that in nearly all cultures people possess basic cognitive-emotional attitudes that constitute romantic attachment Models of Self and Other. These internal working models likely exist as pancultural constructs, forming independent dimensions that underlie romantic attachment types across cultures. However, the four categories or types of romantic attachment outlined by Bartholomew and Horowitz (1991)—Secure, Dismissing, Preoccupied, and Fearful—seem not to reside within this two-dimensional space in precisely the same way across all regions of the world. It is unclear why cultures would vary in romantic attachment structure, especially given the strong theoretical rationale for thinking that internal working Models of Self and Other are elemental components of human psychology (Bowlby, 1988). Perhaps response biases or translation difficulties were to blame in the ISDP study. What is clear is that more work is needed to reveal why certain cultures vary in the psychological structure of romantic attachment.

Ultimately, if the underlying psychology of specific attachment styles is found to fluctuate across cultures, this may have important implications for our understanding of romantic relationship processes and outcomes (Rholes et al., 1998; Schmitt, 2002, 2005a), as well as for treatments of attachment-related disorders in those cultures (Slade, 1999). For example, if Fearful attachment was found to be unassociated with Models of Other in a given culture, the therapeutic emphasis in that culture for treating symptoms of Fearful attachment should probably not focus on increasing the value that Fearful patients place on others. Instead, clinical efforts

would be more efficiently allocated toward increasing a Fearful individual's positive attitudes toward the self (Blatt, 1995).

III. Is the "Secure" Style of Romantic Attachment Normative across All Cultures?

Previous research has suggested that "Secure" attachment is the most common type of parent-child attachment across cultures (van IJzendoorn & Sagi, 1999). The idea that most children develop (and should develop) secure attachment styles has been called the "normativity hypothesis" and it is a core assumption of attachment theory (though see Rothbaum et al., 2000). Empirically, it does appear that Secure parent-child attachment is the most prevalent form in Westernized cultures (Ainsworth, 1991), and several studies have documented the preponderance of Secure parent-child attachment in non-Western cultures, including in Uganda (57% of children studied were classified as Secure), China (68%), and Japan (68%) (see van IJzendoorn & Sagi, 1999). A logical implication of the normativity hypothesis, combined with the presumption that attachment styles are reasonably stable over time (Simpson et al., 2007; Waters et al., 2000), is that Secure attachment should be the most common form of *romantic* attachment across all cultures.

Given the large number of cultures in the ISDP (i.e., 56 nations across 10 major world regions; Schmitt et al., 2004a), evidence of universality in the ISDP would provide compelling support for the normativity hypothesis. Descriptive information from this diverse collection of cultures also may help to reveal why some clusters of romantic attachment across cultures deviate from this normative trend. In the ISDP, Secure attachment was the highest rated form of romantic attachment across 79% of ISDP cultures, qualifying this as a "near universal" of human psychology (Schmitt et al., 2004a; see also Gaulin, 1997; Lonner, 1980). However, Secure romantic attachment was significantly lower than Dismissing, Preoccupied, or Fearful romantic

attachment in several cultures. In addition, the three forms of insecure attachment, in combination, were typically more prevalent than Secure attachment. These results provide only qualified support for the normativity hypothesis.

Why is Secure attachment not always the highest rated form of romantic attachment across cultures? One possibility is that the local ecologies of some individual cultures may naturally elicit more insecure forms of romantic attachment and sexual behavior (Barber, 2002; Belsky et al., 1991; Pedersen, 1991; Schmitt, 2005b). For example, in several African cultures—cultures that experience high levels of stress—insecure forms of romantic attachment tend to be quite high. In addition, the sociohistorical forces that presumably cause certain people to exhibit more interdependent or collectivist interpersonal orientations across cultures may similarly impact their basic romantic attachment orientations (Markus & Kitayama, 1991). In Japan and Taiwan, for example, levels of Secure romantic attachment are lower than Preoccupied romantic attachment levels (see Schmitt et al., 2004a). Geographic variations in romantic attachment may be further caused by regionally shared religious, political, or socioeconomic factors.

In order to examine the geographic patterns of romantic attachment, Figure 1 displays the average Model of Self and Model of Other score across the 10 major world regions of the ISDP. Models of Self and Other are generally positive, suggesting most regions are typically “Secure” in orientation. However, in Western Europe and Oceania the average Model of Other score drops below zero, suggesting people in these regions may typically develop dismissing romantic orientations. In contrast, the region of East Asia possesses an average Model of Self score nearing the zero point, a score that is dwarfed by their high Model of Other scores. In Southern Europe, as well, Models of Other are, on average, higher than Models of Self. It seems likely that

regionally shared religious, political, or economic factors play a role in these patterned deviations from normative Secure attachment.

IV. Are East Asians Particularly Prone to Preoccupied Romantic Attachment?

Markus and Kitayama (1991) have suggested that Japanese individuals tend to evaluate the self primarily in terms of interdependent relationships. One's self-worth, it is argued, depends in large part on whether one's groups are collectively valued (see also Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997). This has led to the hypothesis that East Asian individuals would be particularly prone to Preoccupied romantic attachments, given that they may strive for self-acceptance by focusing on the approval of highly-valued others (e.g., Soon & Malley-Morrison, 2000).

According to findings from the ISDP, East Asian cultures are particularly high on the Preoccupied form of romantic attachment (Schmitt et al., 2004a). This result may reflect the fact that in many East Asian cultures psychological validation (in this case romantic validation) is heavily dependent upon the opinion of others (Markus & Kitayama, 1991). Such a finding would be consistent with cultural variation in parent-child attachment (van IJzendoorn & Sagi, 1999). As expected, in the ISDP Schmitt and his colleagues (2004a) found that national levels of Preoccupied attachment correlated negatively with national rates of individualism (Hofstede, 2001), $r(47) = -0.45, p < .001$ (see Figure 2). Thus, it appears that more collectivist nations such as those in East Asia tend to judge the romantic self primarily in terms of interconnectedness and the value provided to others (i.e., collective attachments; see also Oishi & Diener, 2001).

V. Are People from Cultures with Low Ecological Stress More Securely Attached than Others?

According to the evolutionary theory of human sexuality proposed by Belsky et al. (1991), early social experiences adaptively channel children down one of two reproductive

pathways. Those people who are socially exposed to high levels of stress—especially insensitive/inconsistent parenting, harsh physical environments, and economic hardship—tend to develop *insecure* attachment styles that are associated with short-term reproductive strategies (see also Kirkpatrick, 1998; Schmitt, 2005a). Individuals from social contexts with lower stress, such as people from cultures with ample resources, should develop more *secure* attachment styles that are associated with long-term reproductive strategies (Belsky, 1997). Chisholm (1996, 1999) has argued further that in cultures with fewer resources, the optimal mating strategy is to reproduce early and often, a strategy rooted in high fertility rates, insecure romantic attachments, promiscuous sexual relationships, and an overall focus on short-term temporal horizons or future discounting (Wilson & Daly, 2006). In cultures that have abundant resources, the optimal strategy is to invest heavily in fewer numbers of offspring, a strategy associated with low fertility, secure romantic attachment, monogamous mating behavior, and long-term temporal horizons.

Findings from the ISDP largely supported these evolutionary theories (see Schmitt et al., 2004a). Those nations possessing higher fertility rates had higher levels of Fearful and Dismissing attachment. Those nations with lower human development indexes had higher levels of Preoccupied, Fearful, and Dismissing attachment. Those cultures with lower GDP per capita had higher levels of Dismissing, $r(54) = -0.31, p < .01$ (see Figure 3), and Preoccupied romantic attachment. Overall, it appears that the most consistent relationship is between indexes of cultural stress and Dismissing attachment, a finding that supports Kirkpatrick's (1998) assertion that Dismissing romantic attachment, among the various forms of insecure attachment, is most closely associated with short-term temporal horizons (Chisholm, 1999) and including short-term mating strategies (Belsky et al., 1991; Clark, 2006; Schmitt, 2005a).

VI. Are There Universal Gender Differences in Romantic Attachment?

According to the early studies of adult romantic attachment (e.g., Hazan & Shaver, 1987), no gender differences were thought to exist in romantic attachment styles. Men and women were equally likely to be secure or insecure, a finding in line with the lack of observed gender differences in childhood attachment (Ainsworth et al., 1978). However, subsequent research using more continuous measures of adult romantic attachment, and employing the four-category model of attachment (Bartholomew & Horowitz, 1991), has found that men are significantly more dismissing in romantic attachment orientation than women (Brennan, Clark, & Shaver, 1998; Scharfe & Bartholomew, 1994). In a review by Kirkpatrick (1998), gender differences in dismissing attachment have also been documented across numerous unpublished studies as well. Generally, the dismissing form of insecure romantic attachment is associated with an avoidance of interpersonal closeness, a discomfort with emotional disclosure, and a desire for relational independence (Bartholomew, 1990).

The finding of gender differences in dismissing romantic attachment seems to fit with common beliefs about social and emotional differences between the sexes, with men usually seen as less emotional, less nurturing, and less willing to connect with others (Bem, 1993; Williams & Best, 1990). Men's greater dismissiveness is consistent with self-report surveys of emotional distance and social restriction. In a review of literature on gender and emotion, Brody and Hall (1993) concluded that men were much less likely than women to express emotions associated with affiliation and social bonding (see also Geary, 1998). Men are also less likely than women to seek emotional support when coping with stress (Tamres, Janicki, & Helgeson, 2002; Taylor et al., 2000). In a large meta-analysis of gender differences in personality traits (Feingold, 1994), men were shown to be less nurturing, trusting, and gregarious than women—a trait profile

closely aligned with the dismissing form of romantic attachment. Research on romantic couples has revealed that men report less comfort with emotional closeness in their relationships (Feeney, 1994), whereas women more often complain of men's lack of closeness (Buss, 1989a) and find more satisfying those men who show fewer indications of dismissing romantic attachment (Collins & Read, 1990; Kirkpatrick & Davis, 1994; Simpson, 1990). Even though within-sex variation in dismissing romantic attachment can be considerable (Bartholomew & Horowitz, 1991), several sources of evidence—social stereotypes, self-perception differences, coping responses, and romantic partner-reported reactions—all seem to converge on the notion that men, on average, are significantly more dismissing in romantic attachment orientation than women.

Still, the preponderance of studies that have profiled men as the more dismissing gender have been conducted in Western cultures, limited primarily to North America, Western Europe, and Australasia (Brennan et al., 1998). In the ISDP, dismissing romantic attachment levels vary widely across non-Western cultures (see Schmitt et al., 2004a). Cultures from South America, Southern Europe, and East Asia display much lower levels of dismissing attachment than other parts of the world. Cultures from Africa, Oceania, and South/Southeast Asia tend to display heightened levels of dismissing romantic attachment. This cross-cultural variability in romantic attachment seems to mirror the results from previous studies of parent-child attachment (van IJzendoorn & Sagi, 1999).

Costa, Terracciano, and McCrae (2001) have found that gender differences in many personality traits, including those linked to dismissiveness such as disagreeableness and introversion, were “most marked among European and American cultures and most attenuated among African and Asian cultures” (p. 327). With substantive variation in dismissing romantic attachment across non-Western cultures, and with inconsistent gender differences in traits linked

to dismissing attachment, it remains unclear whether gender differences in dismissing romantic attachment fully generalize to all cultural regions of the world. On the other hand, there are compelling theoretical reasons to expect pancultural gender differences in dismissing romantic attachment.

Many evolutionary psychological theories of romantic attachment would predict that gender differences in dismissing romantic attachment should generalize across most cultures. For example, Kirkpatrick (1998) has suggested that the psychology of dismissing romantic attachment is conceptually similar to the psychology of short-term mating, perhaps even synonymous with it (see also Belsky, 1999; Simpson, 1999). Adults who report higher levels of dismissing romantic attachment tend to have more accepting attitudes toward casual sex, and to engage in more promiscuous and indiscriminate sex, than people with more secure attachment styles (Bogaert & Sadava, 2002; Brennan & Shaver, 1995; Feeney, Noller, & Patty, 1993; Stephan & Bachman, 1999).

In the ISDP, Schmitt (2005a) documented that short-term mating tendencies were linked with higher levels of dismissing attachment, more so than with any other form of romantic attachment. When combined with the evolutionary premise that men are designed to follow short-term mating strategies and desire indiscriminate sex more than women are (Buss & Schmitt, 1993; Schmitt et al., 2003a; Symons, 1979), this would imply that men may be designed in some ways to exhibit more dismissing romantic attachment orientations than women. Evolutionary psychologists have also argued that men's natural dismissiveness serves an evolved function once in romantic relationships, one in which withholding emotions protects men against women's probes into male commitment and fidelity (Buss, 1994). Based on these evolutionary

perspectives, men may be more dismissing in romantic attachment than women across most cultures because of the evolved design features of men's mating psychology.

It is important to note, however, that evolutionary psychology perspectives do not expect that all cultures should have precisely the same level of gender difference in dismissing romantic attachment, nor that gender differences must be large in magnitude across all cultures if the differences are due, in part, to evolved sexual differentiation. This is sometimes how evolutionary theories are portrayed but it is a distorted picture of the evolutionary perspective on sexual differentiation (Mealey, 2000). If a psychological gender difference does not always appear in every culture, or is somewhat diminished across some cultures, this is not *prima-facie* evidence that the gender difference is largely unrelated to evolved biology (Cronk, 1999; Lonner, 1980). Instead, there are sometimes adaptive reasons why, even though men and women are biologically designed with a propensity to differ in certain ways, they sometimes fail to display the exact same amount of difference across all cultures. For example, evolved gender differences in behavioral aggression, expressed mate preferences, and physical height all seem to require certain developmental inputs before fully manifesting themselves, and are sometimes designed to vary in adaptively ways with local ecological and reproductive conditions (Alexander, 1990; Belsky et al., 1991; Gangestad et al., 2006; Low, 2000).

In the ISDP, small to moderate gender differences in dismissing romantic attachment emerged in most nations (Schmitt et al., 2003b). Expressed in terms of effect size (d ; see Cohen, 1988), previous research (e.g., Bartholomew & Horowitz, 1991) had reported gender differences in dismissing attachment were moderate in size (around $d = 0.50$). Many of the sex differences in the ISDP approached this moderate level of magnitude of effect. However, for most nations gender differences in dismissing attachment were only small in magnitude (around $d = 0.20$),

with only 69% possessing a gender difference greater than 0.10. A few nations possessed the opposite of the predicted pattern, with women slightly more dismissive than men (e.g., Ukraine, Ethiopia, Tanzania, and Botswana). Overall, these findings led Schmitt and his colleagues (2003b) to conclude that greater male dismissiveness is only a “near universal” of human nature (Brown, 1991; Gaulin, 1997), and that some features of culture seem to attenuate its expression.

As seen in Figure 4, the expected gender difference in dismissive romantic attachment was not apparent in the world region of Africa, and the predicted gender effects were smaller in Oceania and East Asia than in other regions (Schmitt et al., 2003b). These regional differences in dismissing attachment were all significant according to multiple post-hoc statistical analyses (e.g., Tukey’s *HSD*). From these results it can be concluded that it is only a “near universal” of human psychology for men to be more dismissing in romantic attachment orientation than women. Men were more dismissing than women in most cultures, but these differences were often quite small in magnitude.

VII. Does the Magnitude of Gender Differences in Romantic Attachment Vary according to Evolutionary or Social Role Theories?

As noted earlier, local ecological conditions likely have effects on levels of insecure romantic attachment (Schmitt et al., 2004a). Ecological conditions also may have a special impact on gender differences in dismissing romantic attachment. Some cultures possess high-stress reproductive environments (Chisholm, 1999; Keller, 1990). Cultures with high levels of pathogens and disease, for example, are thought to present high-stress reproductive environments because raising offspring in disease-prone environments is often associated with higher childhood mortality (see Low, 1990; Gangestad & Buss, 1993). Indeed, mortality rate (or low life expectancy) itself is a strong indicator of environmental or ecological stress load.

Reproductive environments with high fertility rates and scarce resources can also be considered stressful because human children, relative to other primate species, require heavy parental investment and raising multiple offspring makes it more difficult to invest the necessary amounts of care in each child (Eibl-Eibesfeldt, 1989; Harvey & Clutton-Brock, 1985; Trivers, 1972).

A. Evolutionary Psychology Theories. According to Belsky, Steinberg, and Draper (1991), when reproductive environments are particularly stressful women may be designed to shift away from their primary long-term mating strategy with its accompanying low levels of dismissing romantic attachment (Belsky, 1999; Kirkpatrick, 1998), and instead develop a more short-term mating strategy with higher levels of dismissing attachment (see also Chisholm, 1996). In women, this adaptive shift to a dismissing/short-term strategy may have been based in part on early reproduction that allowed their family members to help raise offspring (Burton, 1990; Lancaster, 1989), on mating with multiple men in order to garner resources or protection from more than one putative father (Hrdy, 1981; Smuts, 1985), and on obtaining access via short-term mating to valuable men possessing “good genes,” genes that are better able to withstand the pathogens and developmental stressors of harsh environments (Gangestad, 2001; Gangestad & Simpson, 2000). Thus, women’s dismissing romantic attachment levels may be particularly culturally-contingent, adaptively shifting in accord with the harsh physical environments (Belsky et al., 1991) and high fertility trends (Chisholm, 1996) of their local ecologies (see also Gangestad et al., 2006; Greiling & Buss, 2000).

Men may also be driven toward short-term mating and dismissing attachment in high-stress reproductive environments, but the effect appears to be more pronounced in women (Draper & Harpending, 1982; Ellis, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1999). Perhaps this is due to men having evolved to preferentially follow more of an unrestricted or short-term

reproductive strategy (Kenrick, Sadalla, Groth, & Trost, 1990; Simpson & Gangestad, 1991), at least when doing so was unlikely to have strong negative consequences on survival (Schmitt, 2004b; Schmitt & Buss, 2001). Thus, men's culturally-contingent movement to short-term mating and dismissing romantic attachment in high-stress reproductive environments may be less conspicuous or severe than women's shift.

This evolutionary perspective on romantic attachment leads a series of predictions concerning the magnitude of gender differences in dismissing romantic attachment across cultures. First, gender differences in dismissing romantic attachment should be smaller in cultures with high-stress environments. This hypothesis is based, in part, on the notion that reproductively stressful environments trigger women's tendency toward short-term mating (Belsky et al., 1991; Ellis et al., 1999), including the adaptive desire for briefly mating with men that possess "good genes" (Gangestad, 2001; Gangestad & Simpson, 2000). Because high levels of dismissing romantic attachment are indicative of short-term mating tendencies (Kirkpatrick, 1998; Simpson, 1999), and because men are typically more oriented toward short-term mating via indiscriminate sex than women are (Schmitt et al., 2003a), women's levels of dismissing romantic attachment should become more similar to men's in cultures with high-stress environments.

In the ISDP, in nations with higher stress levels (i.e., higher HIV/AIDS rates), as predicted the difference between men's and women's dismissing romantic attachment was reduced, $r(52) = -0.43, p < .001$. Life expectancy at birth was also strongly correlated with the difference between men's and women's levels of dismissing attachment, $r(54) = 0.52, p < .001$ (see Figure 5). This relationship suggests that as environmental harshness and stress increases (indicated by a lower life expectancy), the gender difference in dismissing attachment decreases,

as predicted by evolutionary theories of human sexuality. Finally, the lower the human development index for a country, the smaller the difference between men's and women's dismissing romantic attachment, $r(52) = 0.48, p < .001$, as predicted.

A second prediction is that gender differences in dismissing romantic attachment should be smaller in cultures with higher fertility rates. Higher fertility levels are associated with less emotional investment in children, a trend that is linked across cultures with the development of dismissing forms of attachment (Chisholm, 1996). High fertility levels are also associated with short-term mating tendencies (Keller, 1990). Because high levels of dismissing romantic attachment are indicative of short-term mating tendencies (Kirkpatrick, 1998; Simpson, 1999), and because men are typically more oriented toward short-term mating via indiscriminate sex than women are (Schmitt et al., 2003a), women's levels of dismissing romantic attachment should become more similar to men's in cultures with higher fertility rates.

In the ISDP, fertility rates were negatively associated with the magnitude of gender difference between men's and women's dismissing attachment, $r(52) = -0.38, p < .01$. This confirmed that cultures with higher fertility levels tend to have reduced differences between men's and women's dismissing romantic attachment levels. Fertility rates were also positively associated with dismissing romantic attachment in men, $r(52) = 0.24, p < .05$, and slightly more so in women, $r(52) = 0.38, p < .01$. Again, this trend seemed to support the view that variation in dismissing attachment gender differences across cultures is more strongly driven by variations in women's level of dismissing romantic attachment. When a culture has high fertility and high ecological stress, women's dismissing attachment increases (more so than men's), and the gender difference in dismissing attachment subsequently decreases.

B. Social Role Theories. In contrast to evolutionary theories, social role theories typically suggest that men and women may sometimes differ in manifest behavior, but not because they have innate sex-differentiated psychologies. When men and women appear to differ, it is argued, this is because they inhabit different social or gender roles and have received dissimilar socialization experiences throughout development (Eagly, 1987; Eagly & Wood, 1999; Wood & Eagly, 2002). In this view, cross-cultural gender differences in dismissing romantic attachment likely stem from men's pancultural socialization to be less comfortable with close emotional relationships than women, and conversely from women's universal socialization to be more nurturing and attendant to the emotions of others (Low, 1989; Munroe & Munroe, 1997). Moreover, once these men and women have been socialized into discrete gender roles, cognitive expectations concerning gender differences in emotional closeness would tend to pervade the activities of men and women throughout social life (Bem, 1993; Wood, Christensen, Hebl, & Rothgerber, 1997). Of course, a proximate social role explanation such as this leaves open the question of why men and women would be socialized differently across all cultures to begin with.

Eagly and Wood (1999) presented a version of social role theory in which they provided an evolutionary rationale for why men and women are socialized differently across all cultures, and they did so while maintaining an emphasis on socialization as the primary causal agent of gender differences in sexual behavior. Eagly and Wood reasoned that physical differences between men and women, and the accompanying division of labor that those differences necessitated throughout human evolution, led to a long and consistent history of men and women filling different social roles or structures. Once in those social structures, men and women are assumed to make rational decisions that "maximize their outcomes within the constraints that

societies establish for people of their sex” (Eagly & Wood, 1999, p. 413). So, although biological differences between men and women initially create different social roles, it is the developmental experience of inhabiting different social roles and structures that directly causes most psychological gender differences. Importantly, the degree to which men and women are forced to inhabit bifurcated gender roles, and eventually develop some degree of psychological difference, is something that can presumably vary across cultures (Williams & Best, 1990).

Using this social structure approach, Eagly and Wood (1999) went on to argue that many of the gender differences previously portrayed by evolutionists as biological adaptations, such as women’s universal preference for mating with partners that have good earning capacity (Buss, 1989b), are instead the result of historical and environmental factors that contribute to gender-differentiated social roles and socialization across cultures (cf. Gangestad et al., 2006). As evidence in favor of this position, Eagly and Wood noted that in cultures where women have more access to political and economic power, gender differences in desires for mating partners with resources were smaller (see also Kasser & Sharma, 1999). Thus, women’s pancultural desire for potential mates with resources can be seen as the reasoned consequence of inhabiting resource-depleted social structures, not a biological adaptation residing within women’s evolved mating psychology (Wood & Eagly, 2002).

From this social structure perspective, gender differences in dismissing romantic attachment and emotional closeness may also result from biologically generated social role differences, especially the different family roles that men and women naturally inhabit. Of crucial importance is the social structure of women more often being assigned the task of child rearing, “The assignment of the majority of child rearing to women encourages nurturant behaviors that facilitate care for children and other individuals. The importance of close

relationships to women's nurturing role favors the acquisition of superior interpersonal skills and the ability to communicate nonverbally" (Eagly & Wood, 1999, p. 413). In most cultures, young girls are usually channeled into nurturing social roles and are socialized to be sensitive to the emotions of others, including their young children (Munroe & Munroe, 1997; Pasternak, Ember, & Ember, 1997). Women's gender roles and socialization experiences, it could be argued, are what cause lower levels of dismissing romantic attachment in women. Differences in the social structures that men and women inhabit as adults, and in the expectations of greater female nurturance in most cultures, may help to reinforce these universal gender differences in emotional sensitivity and dismissiveness (see also Hofstede, 1998).

An important implication of this social structural perspective is that in cultures where women are more severely restricted to childrearing (i.e., cultures with "traditional" sex-role ideologies; see Williams & Best, 1990), gender differences in dismissing attachment should be larger because men and women have been forcibly channeled down separate social roles, with women experiencing more nurturing-based roles and social expectations. Within cultures that possess more "modern" or "progressive" sex-role ideologies, however, women are allowed to explore a wider array of social roles, including those that may involve less nurturing and the development of more dismissing attachment orientations. Indeed, both men and women enjoy less burdensome and gender-constraining social structures in cultures with modern sex-role ideologies. Consequently, gender differences in dismissing romantic attachment should be smaller, or perhaps even absent, in cultures where either gender can take on the role of family nurturer, "when men and women occupy the same specific social role, sex differences would tend to erode" (Eagly & Wood, 1999, p. 413).

This social role perspective on romantic attachment leads to a series of predictions concerning the magnitude of gender differences in dismissing romantic attachment across cultures. First, gender differences in dismissing romantic attachment should be smaller in cultures with more modern or progressive sex-roles ideologies. In the ISDP, gender differences in dismissing romantic attachment were related to the overall level of “Cultural Masculinity” across the 49 nations that were part of both Hofstede’s (2001) IBM data set and the ISDP. Gender differences in dismissive attachment were unrelated to Cultural Masculinity levels, $r(47) = 0.12, p = .21$. The correlation was in the predicted direction, however, with higher Cultural Masculinity scores associated with larger gender differences.

Second, gender differences in dismissing romantic attachment should be smaller in cultures where women have access to political and economic power. Women’s access to power across cultures has been associated with smaller differences in men’s and women’s sexual psychology (Eagly & Wood, 1999; Kasser & Sharma, 1999; Wood & Eagly, 2002). Thus, in cultures with more political-economic gender equality, men and women should be more similar in dismissing romantic attachment. Gender differences in dismissing romantic attachment were related to an index of political and economic equality across nations, the Gender Empowerment Measure (GEM) (United Nations Development Programme, 2001). However, the GEM was not significantly associated with gender differences in dismissing attachment. The correlation that was found was in the positive direction, $r(34) = 0.08, p = .33$, suggesting that if a relationship does exist, women gaining more access to economic and political power is associated with larger differences between men and women. Gender differences in dismissing romantic attachment were also related to the level of “Gender Development” across nations. Gender differences in men’s and women’s levels of dismissing romantic attachment tended to increase as the GDI

increased, $r(51) = 0.49$, $p < .001$. Because the differences between men and women *increase* as women gain economic equality, these findings seemed to run directly counter to social role theory.

VIII. Concluding Remarks

This review focused on six specific questions concerning culture and romantic attachment. First, do the “internal working models” of attachment—Models of Self and Models of Other—underlie romantic attachment the same way across all cultures (Bartholomew, 1990)? Some evidence suggested that Models of Self and Models of Other serve as a fundamental two-dimensional structure of romantic attachment within most cultures, though these dimensions do not always underlie the four categories of attachment (Secure, Dismissing, Preoccupied, and Fearful) in the same way across all cultures. In some non-Western cultures, the three insecure attachment styles tend to cluster together, resulting in some problems with the four-category model of attachment (see Schmitt et al., 2004a).

The second question was whether the Secure form of romantic attachment style was normative across cultures. In most studies of children, the “Secure” style of attachment has been the most common classification of parent-child attachment (van IJzendoorn & Sagi, 1999). However, in the ISDP Secure romantic attachment among adults was normative across only 79% of cultures. In addition, in most cultures the three types of insecure attachment were, in combination, more common than secure attachment (Schmitt et al., 2004a).

The third question was whether East Asians were particularly prone to Preoccupied styles of insecure romantic attachment. In the ISDP, East Asians were particularly prone to Preoccupied romantic attachment, and this trend was cross-culturally linked to national levels of collectivism. Other geographic patterns of attachment were evident (see also Rohner & Britner,

2002), including the finding that Dismissing romantic attachment was prevalent in African cultures (Schmitt et al., 2004a).

The fourth question was whether cross-cultural patterns of attachment were related to local ecologies in ways that support or refute evolutionary theories of human sexuality (Belsky, Steinberg, & Draper, 1991; Chisholm, 1996). In the ISDP, national levels of insecure romantic attachment were associated, as predicted, with higher fertility rates, lower human development, and lower resource levels across cultures. It appears that high levels of ecological stress lead to insecurities that activate an adaptive developmental path that involves insecure parent-child attachment, tendencies toward interpersonal distrust, and the pursuit of short-term reproductive strategies in adulthood (Schmitt, 2005a).

The fifth question was whether there were universal gender differences in attachment, particularly in the dismissing form of romantic attachment (Kirkpatrick, 1998). In the ISDP, gender differences in dismissing romantic attachment were only a “near universal” of human culture. In Western cultures, previous research had profiled men as significantly more dismissing than women (e.g., Bartholomew & Horowitz, 1991). This general trend was found among Western cultures of the ISDP, but was not always apparent in non-Western cultures. In some African and Oceanic cultures—including Ethiopia, Tanzania, Botswana, Zimbabwe, and Fiji—women were slightly more dismissing than men. Still, most cultures displayed small to moderate gender differences in dismissing romantic attachment in the predicted direction, suggesting that greater male dismissiveness is a near universal of human psychology (Brown, 1991).

The sixth question was whether cross-cultural variation in the magnitude of gender differences in romantic attachment supported or refuted various evolutionary and social role theories of human mating (Belsky et al., 1991; Eagly & Wood, 2002). Evolutionary

psychological theories of romantic attachment and human mating (Belsky et al., 1991; Chisholm, 1996; Gangestad & Simpson, 2000) suggest that in cultures where environmental and reproductive stressors are relatively high, women should tend to engage in more short-term mating, and presumably women should tend to develop more dismissing romantic attachment orientations (Kirkpatrick, 1998). In the ISDP, short-term mating is associated with high levels of dismissing attachment (Schmitt, 2005a). In combination with men's preferential tendency toward dismissing romantic attachment and short-term mating in general (Buss & Schmitt, 1993; Schmitt et al., 2003a), this led to the expectation that men's and women's dismissing attachment orientations will converge and become more similar in cultures with high-stress reproductive environments. Some support for these hypotheses was found in that cultures with low life expectancy, poor human development, and high fertility rates (an index of reproductive stress) had smaller gender differences in dismissing attachment. This was presumably because women become more similar to men in short-term mating tendencies and express concomitantly higher levels of dismissing romantic attachment.

Social role theory led to the prediction that gender differences should be minimized in cultures with more modern sex-role ideologies. Little evidence was found in support for this hypothesis. Greater political and economic equality, for example, was at times associated with larger gender differences in dismissing attachment across cultures. This perplexing finding is not unique to the ISDP dataset, however. Several cross-cultural studies (e.g., Costa et al., 2001; Williams & Best, 1990) have shown that more progressive sex-role cultures tend to have larger gender differences in self-perceptions. For instance, in a study of personality traits across 26 cultures, it was noted that "the social role model would have hypothesized that gender

differences would be attenuated in progressive countries, when in fact they were magnified” (Costa et al., 2001, p. 329).

Future research is needed to understand how a culture’s tendency to treat men and women more similarly unexpectedly leads to greater differences between men and women. One speculation is that in cultures where men and women are more highly differentiated, they fail to even compare themselves across genders when completing self-report surveys. In cultures where men and women are free to inhabit different social roles, on the other hand, people are more likely to compare themselves to both genders and sex differences are thereby more likely to surface. For example, Costa and his colleagues (2001) speculated that, “in traditional cultures, where clear sex role differences are prescribed, self-descriptions are based on comparisons of the self with others of the same gender...in modern cultures men and women may compare themselves to others of both genders, and thus reveal true gender differences” (p. 329). Future analyses in which ISDP findings are related to other sociocultural characteristics may help to disentangle the complex relationships among romantic attachment, human mating strategies, and sex-role ideologies.

References

- Ainsworth, M.D.S. (1991). Attachments and other affectional bonds across the life cycle. In C.M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 33-51). London: Routledge.
- Ainsworth, M.D.S., Blehar, M., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.
- Ainsworth, M.D.S., & Marvin, R.S. (1995). On the shaping of attachment theory and research: An interview with Mary D. S. Ainsworth (Fall 1994). *Monographs of the Society for Research in Child Development*, 60, 3-21.
- Alexander, R.D. (1990). Epigenetic rules and Darwinian algorithms: The adaptive study of learning and development. *Ethology and Sociobiology*, 11, 1-63.
- Allen, J.P., & Land, D. (1999). Attachment in adolescence. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 319-335). New York: Guilford.
- Barber, N. (2002). On the relationship between fertility and geographic latitude: A cross-national study. *Cross-Cultural Research*, 36, 3-15.
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 7, 147-178.
- Bartholomew, K. (1994). Assessment of individual differences in adult attachment. *Psychological Inquiry*, 5, 23-27.
- Bartholomew, K. & Horowitz, L. M. (1991). Attachment styles in young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 62, 226-244.

Bartholomew, K. & Shaver, P.R. (1998). Methods of assessing adult attachment: Do they converge? In J.A. Simpson & W.S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 25-45). New York: Guilford.

Belsky, J. (1997). Attachment, mating, and parenting: An evolutionary interpretation. *Human Nature*, 8, 361-381.

Belsky, J. (1999). Modern evolutionary theory and patterns of attachment. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 141-161). New York: Guilford.

Belsky, J., Steinberg, L., & Draper, P. (1991). Childhood experience, interpersonal development, and reproductive strategy: An evolutionary theory of socialization. *Child Development*, 62, 647-670.

Bem, S.L. (1993). *The lenses of gender*. New Haven, CT: Yale University Press.

Benet-Martinez, V., & John, O.P. (1998). Los Cinco Grandes across cultures and ethnic groups: Multitrait-multimethod analyses of the Big Five in Spanish and English. *Journal of Personality and Social Psychology*, 75, 729-750.

Blatt, S. (1995). Representational structures in psychopathology. In D. Cicchetti & S.L. Toth (Eds.), *Rochester symposium on developmental psychology: Vol. 6. Emotion, cognition, and representation* (pp. 1-33). Rochester, NY: University of Rochester Press.

Bogaert, A.F., & Sadava, S. (2002). Adult attachment and sexual behavior. *Personal Relationships*, 9, 191-204.

Bowlby, J. (1969/1982). *Attachment and loss: Vol. I. Attachment*. New York: Basic Books.

Bowlby, J. (1973). *Attachment and loss: Vol. II. Separation: Anxiety and anger*. New York: Basic Books.

Bowlby, J. (1980). *Attachment and loss: Vol. III. Loss*. New York: Basic Books.

Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.

Brennan, K.A., Clark, C.L., & Shaver, P.R. (1998). Self-report measurement of adult attachment: An integrative overview. In J.A. Simpson & W.S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York: Guilford.

Brennan, K.A., & Shaver, P.R. (1995). Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality and Social Psychology Bulletin*, 21, 267-283.

Bretherton, I., & Munholland, K.A. (1999). Internal working models in attachment relationships: A construct revisited. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 89-111). New York: Guilford.

Brody, L.R., & Hall, J.A. (1993). Gender and emotion. In M. Lewis & J.M. Haviland (Eds.), *Handbook of emotions* (pp. 447-460). New York: Guilford.

Brown, D.E. (1991). *Human universals*. New York: McGraw-Hill, Inc.

Burton, L.M. (1990). Teenage childbearing as an alternative life-course strategy in multigenerational black families. *Human Nature*, 1, 123-144.

Buss, D.M. (1989a). Conflict between the sexes: Strategic interference and the evocation of anger and upset. *Journal of Personality and Social Psychology*, 56, 735-747.

Buss, D.M. (1989b). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, 12, 1-49.

Buss, D.M. (1994). *The evolution of desire*. New York: Basic Books.

Buss, D.M., & Schmitt, D.P. (1993). Sexual Strategies Theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204-232.

Carver, C.S. (1997). Adult attachment and personality: Converging evidence and a new measure. *Personality and Social Psychology Bulletin*, 23, 865-883.

Cassidy, J., & Shaver, P. (1999) (Eds.). *Handbook of attachment: Theory, research, and clinical applications*. New York: Guilford Press.

Chisholm, J.S. (1996). The evolutionary ecology of attachment organization. *Human Nature*, 7, 1-38.

Chisholm, J.S. (1999). Steps to an evolutionary ecology of the mind. In A.L. Hinton (Ed.), *Biocultural approaches to the emotions* (pp. 117-149). Cambridge, United Kingdom: Cambridge University Press.

Clark, A.P. (2006). Are the correlates of sociosexuality different for men and women? *Personality and Individual Differences*, 41, 1321-1327.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Collins, N., & Read, S. (1990). Adult attachment relationships, working models and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58, 644-683.

Collins, N., & Read, S. (1994). Cognitive representations of attachment: The structure and function of internal working models. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships* (Vol. 5, pp. 53-90). London: Jessica Kingsley.

Cooper, M.L., Pioli, M., Levitt, A., et al., (2006). Attachment styles, sex motives, and sexual behavior: Evidence for gender-specific expressions of attachment dynamics. In M. Mikulincer & G.S. Goodman (Eds.), *Dynamics of romantic love: Attachment, caregiving, and sex* (pp. 243-274). New York, NY, US: Guilford Press.

Costa, P.T., Jr., Terracciano, A., & McCrae, R.R. (2001). Gender differences in personality traits across cultures: Robust and surprising findings. *Journal of Personality and Social Psychology, 81*, 322-331.

Cote, L., & Bornstein, M.H. (2003). Cultural and parenting cognitions in acculturating cultures: 1. Cultural comparisons and developmental continuity and stability. *Journal of Cross-Cultural Psychology, 34*, 323-349.

Cronk, L. (1999). *That complex whole: Culture and the evolution of human behavior*. Boulder, CO: Westview Press.

Davis, D. (2006). Attachment-related pathways to sexual coercion. In M. Mikulincer & G.S. Goodman (Eds.), *Dynamics of romantic love: Attachment, caregiving, and sex* (pp. 293-336). New York, NY, US: Guilford Press.

Davis, D., Shaver, P.R., & Vernon, M.L. (2004). Attachment style and subjective motivations for sex. *Personality and Social Psychology Bulletin, 30*, 1076-1090.

Doherty, R.W., Hatfield, E., Thompson, K., & Choo, P. (1994). Cultural and ethnic influences on love and attachment. *Personal Relationships, 1*, 391-398.

Dozier, M., Stovall, K.C., & Albus, K.E. (1999). Attachment and psychopathology in adulthood. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 497-519). New York: Guilford.

Draper, P., & Harpending, H. (1982). Father absence and reproductive strategy: An evolutionary perspective. *Journal of Anthropological Research, 38*, 255-273.

Eagly, A.H. (1987). *Sex differences in social behavior: A social-role interpretation*. Hillsdale, NJ: Lawrence Erlbaum Associates.

- Eagly, A.H., & Wood, W. (1999). The origins of sex differences in human behavior: Evolved dispositions versus social roles. *American Psychologist*, *54*, 408-423.
- Eibl-Eibesfeldt, I. (1989). *Human ethology*. New York: Aldine de Gruyter.
- Ellis, B.J., McFadyen-Ketchum, S., Dodge, K.A., Pettit, G.S., & Bates, J.E. (1999). Quality of early family relationships and individual differences in the timing of pubertal maturation in girls: A longitudinal test of an evolutionary model. *Journal of Personality and Social Psychology*, *77*, 387-401.
- Feeney, J.A. (1994). Attachment style, communication patterns, and satisfaction across the life cycle of marriage. *Personal Relationships*, *1*, 333-348.
- Feeney, J.A. (1999). Adult romantic attachment and couple relationships. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 355-377). New York: Guilford.
- Feeney, J.A., & Noller, P. (1996). *Adult attachment*. Thousand Oaks, CA: Sage Publications.
- Feeney, J.A., Noller, P., & Patty, J. (1993). Adolescents' interactions with the opposite sex: Influence of attachment style and gender. *Journal of Adolescence*, *16*, 169-186.
- Feingold, A. (1994). Gender differences in personality: A meta-analysis. *Psychological Bulletin*, *116*, 429-456.
- Fraley, R.C. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review*, *6*, 123-151.
- Gangestad, S.W. (2001). Adaptive design, selective history, and women's sexual motivations. In J.A. French, A.C. Kamil, & D.W. Leger (Eds.), *Evolutionary psychology and motivation* (pp. 37-74). Lincoln, Nebraska: University of Nebraska Press.

- Gangestad, S.W., & Buss, D.M. (1993). Pathogen prevalence and human mate preferences. *Ethology and Sociobiology*, *14*, 89-96.
- Gangestad, S.W., Haselton, M.G., & Buss, D.M. (2006). Evolutionary foundations of cultural variation: Evoked culture and mate preferences. *Psychological Inquiry*, *17*, 75-95.
- Gangestad, S.W., & Simpson, J.A. (2000). The evolution of human mating: Trade-offs and strategic pluralism. *Behavioral and Brain Sciences*, *23*, 573-587.
- Gardner, H.W., & Kosmitzki, C. (2002). *Lives across cultures: Cross-cultural human development* (2nd ed.). Boston, MA: Allyn & Bacon.
- Gaulin, S.J.C. (1997). Cross-cultural patterns and the search for evolved psychological mechanisms. In G.R. Bock & G. Cardew (Eds.), *Characterizing human psychological adaptations* (pp. 195-207). Chichester, England: Wiley.
- Geary, D.C. (1998). *Male, female: The evolution of human sex differences*. Washington, DC: American Psychological Association.
- George, C., & Solomon, J. (1999). Attachment and caregiving: The caregiving behavioral system. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 649-670). New York: Guilford.
- Glick, P. (2006). Ambivalent sexism, power distance, and gender inequality across cultures. In S. Guimond (Ed). *Social comparison and social psychology: Understanding cognition, intergroup relations, and culture* (pp. 283-302). New York, NY, US: Cambridge University Press.
- Greenberg, M.T. (1999). Attachment and psychopathology in childhood. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 469-496). New York: Guilford.

Greiling, H. & Buss, D.M. (2000). Women's sexual strategies: The hidden dimension of short-term mating. *Personality and Individual Differences*, 28, 929-963

Griffin, D., & Bartholomew, K. (1994). Models of self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology*, 67, 430-445.

Grossman, K.E., Grossman, K., & Waters, E. (2005) (Eds.). *Attachment from infancy to adulthood: The major longitudinal studies*. New York: Guilford.

Harvey, P.H., & Clutton-Brock, T.H. (1985). Life history variation in primates. *Evolution*, 39, 559-581.

Hatfield, E., & Rapson, R.L. (1996). *Love and sex: Cross-cultural perspectives*. Boston, MA: Allyn & Bacon.

Hazan, C., & Shaver, P.R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511-524.

Hazan, C., & Zeifman, D. (1999). Pair bonds as attachments: Evaluating the evidence. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 336-354). New York: Guilford.

Heaven, P.C.L., Da Silva, T., & Carey, C. (2004). Loving styles: Relationships with personality and attachment styles. *European Journal of Personality*, 18, 103-113.

Hofstede, G. (1998). *Masculinity and femininity: The taboo dimension of national cultures*. Thousand Oaks, CA: Sage.

Hofstede, G. (2001). *Culture's consequences*. Thousand Oaks, CA: Sage Publications.

Hrdy, S.B. (1981). *The woman that never evolved*. Cambridge, MA: Harvard University Press.

Kasser, T., & Sharma, Y.S. (1999). Reproductive freedom, educational equality, and females' preference for resource-acquisition characteristics in mates. *Psychological Science, 10*, 374-377.

Keller, H. (1990). Evolutionary approaches. In J.W. Berry, Y.H. Poortinga, & J. Pandey (Eds.), *Handbook of cross-cultural psychology, 2nd Edition* (Vol. 1, pp. 215-255). Boston: Allyn and Bacon.

Kenrick, D.T., Sadalla, E.K., Groth, G., & Trost, M.R. (1990). Evolution, traits, and the stages of human courtship: Qualifying the parental investment model. Special issue: Biological foundations of personality: evolution, behavioral genetics, and psychophysiology. *Journal of Personality, 58*, 97-116.

Kirkpatrick, L.A. (1998). Evolution, pair-bonding, and reproductive strategies: A reconceptualization of adult attachment. In J.A. Simpson & W.S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 353-393). New York: Guilford.

Kirkpatrick, L.A. (1999). Attachment and religious representations and behavior. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 803-822). New York: Guilford.

Kirkpatrick, L.A. (2005). *Attachment, evolution, and the psychology of religion*. New York: Guilford.

Kirkpatrick, L.A., & Davis, K.E. (1994). Attachment style, gender, and relationship stability: A longitudinal analysis. *Journal of Personality and Social Psychology, 66*, 502-512.

Kirkpatrick, L.A., & Hazan, C. (1994). Attachment styles and close relationships: A four year prospective study. *Personal Relationships, 1*, 123-142.

Kitayama, S., Markus, H.R., Matsumoto, H., Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology*, 72, 1245-1267.

Klohnen, E.C., & John, O.P. (1998). Working models of attachment: A theory-based prototype approach. In J.A. Simpson & W.S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 115-140). New York: Guilford.

Lancaster, J.B. (1989). Evolutionary and cross-cultural perspectives on single-parenthood. In R.W. Bell & N.J. Bell (Eds.), *Interfaces in psychology* (pp. 63-72). Lubbock, TX: Texas Tech University Press.

Lonner, W.J. (1980). The search for psychological universals. In H.C. Triandis & W.W. Lambert (Eds.), *Handbook of cross-cultural psychology* (Vol. 1, pp. 143-204). Boston, MA: Allyn & Bacon.

Low, B.S. (1989). Cross-cultural patterns in the training of children: An evolutionary perspective. *Journal of Comparative Psychology*, 103, 311-319.

Low, B.S. (1990). Marriage systems and pathogen stress in human societies. *American Zoologist*, 30, 325-339.

Low, B.S. (2000). *Why sex matters*. Princeton, NJ: Princeton University Press.

Main, M. (1990). Cross-cultural strategies of attachment and attachment organization: Recent studies, changing methodologies, and the concept of conditional strategies. *Human Development*, 33, 48-61.

Markus, H.R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224-253.

Marvin, R.A., & Britner, P.A. (1999). Normative development: The ontogeny of attachment. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 44-67). New York: Guilford.

Mealey, L. (2000). *Sex differences: Developmental and evolutionary strategies*. San Diego, CA: Academic Press.

Mikulincer, M., & Goodman, G.S. (2006) (Eds.). *Dynamics of romantic love: Attachment, caregiving, and sex*. New York: Guilford.

Mikulincer, M., & Shaver, P.R., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion, 27*, 77-102.

Munroe, R.L., & Munroe, R.H. (1997). A comparative anthropological perspective. In J.W. Berry, Y.H. Poortinga, & J. Pandey (Eds.), *Handbook of cross-cultural psychology*, 2nd Edition (Vol. 1, pp. 171-213). Boston: Allyn and Bacon.

Oishi, S., & Diener, E. (2001). Goals, culture, and subjective well-being. *Personality and Social Psychology Bulletin, 27*, 1674-1682.

Overall, N.C., Fletcher, G.J.O., & Friesen, M.D. (2003). Mapping the intimate relationship mind: Comparisons between three models of attachment representations. *Personality and Social Psychology Bulletin, 29*, 1479-1493.

Pasternak, B., Ember, C., & Ember, M. (1997). *Sex, gender, and kinship: A cross-cultural perspective*. Upper Saddle, NJ: Prentice Hall.

Pedersen, F.A. (1991). Secular trends in human sex ratios: Their influence on individual and family behavior. *Human Nature, 2*, 271-291.

Pietromonaco, P.R., & Barrett, L.F. (1997). Working models of attachment and daily social interactions. *Journal of Personality and Social Psychology*, 73, 1409-1423.

Rholes, W.S., Simpson, J.A., & Stevens, J.G. (1998). Attachment orientations, social support, and conflict resolution in close relationships. In J.A. Simpson & W.S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 166-188). New York: Guilford.

Roberts, N., & Noller, P. (1998). The associations between adult attachment and couple violence: The role of communication patterns and relationship satisfaction. In J.A. Simpson & W.S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 317-350). New York: Guilford.

Rohner, R.P., & Britner, P.A. (2002). Worldwide mental health correlates of parental acceptance-rejection: Review of cross-cultural and intracultural evidence. *Cross-Cultural Research*, 36, 16-47.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Rothbaum, F., Weisz, J., Pott, M., Miyake, K., & Morelli, G. (2000). Attachment and culture: Security in the United States and Japan. *American Psychologist*, 55, 1093-1104.

Schachner, D.A. & Shaver, P.R. (2004). Attachment dimensions and sexual motives. *Personal Relationships*, 11, 179-195.

Scharfe, E., & Bartholomew, K. (1994). Reliability and stability of adult attachment patterns. *Personal Relationships*, 1, 23-43.

Schmitt, D.P. (2002). Personality, attachment, and sexuality related to dating relationship outcomes: Contrasting three perspectives on personal attribute interaction. *British Journal of Social Psychology*, 41, 589-610.

Schmitt, D.P. (2005a). Is short-term mating the maladaptive result of insecure attachment? A test of competing evolutionary perspectives. *Personality and Social Psychology Bulletin*, 31, 747-768.

Schmitt, D.P. (2005b). Sociosexuality from Argentina to Zimbabwe: A 48-nation study of sex, culture, and strategies of human mating. *Behavioral and Brain Sciences*, 28, 247-275.

Schmitt, D.P., Alcalay, L., Allik, J., Ault, L., Austers, I., Bennett, K.L., et al. (2003a). Universal sex differences in the desire for sexual variety: Tests from 52 nations, 6 continents, and 13 islands. *Journal of Personality and Social Psychology*, 85, 85-104.

Schmitt, D.P., Alcalay, L., Allensworth, M., Allik, J., Ault, L., Austers, I., et al. (2003b). Are men universally more dismissing than women? Gender differences in romantic attachment across 62 cultural regions. *Personal Relationships*, 10, 307-331.

Schmitt, D.P., Alcalay, L., Allensworth, M., Allik, J., Ault, L., Austers, I., et al. (2004a). Patterns and universals of adult romantic attachment across 62 cultural regions: Are models of self and of other pancultural constructs? *Journal of Cross-Cultural Psychology*, 35, 367-402.

Schmitt, D.P., Alcalay, L., Allik, J., Angleiter, A., Ault, L., Austers, I., et al. (2004b). Patterns and universals of mate poaching across 53 nations: The effects of sex, culture, and personality on romantically attracting another person's partner. *Journal of Personality and Social Psychology*, 86, 560-584.

Schmitt, D.P., & Buss, D.M. (2001). Human mate poaching: Tactics and temptations for infiltrating existing mateships. *Journal of Personality and Social Psychology*, 80, 894-917.

Simpson, J.A. (1990). Influences of attachment styles on romantic relationships. *Journal of Personality and Social Psychology*, 59, 971-980.

Simpson, J.A. (1999). Attachment theory in modern evolutionary perspective. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 115-140). New York: Guilford.

Simpson, J.A., & Rholes, W.S. (1998) (Eds.). *Attachment theory and close relationships*. New York: Guilford Press.

Simpson, J.A., Collins, W.A., Tran, S., Haydon, K.C. (2007). Attachment and the experience and expression of emotions in romantic relationships: A developmental perspective. *Journal of Personality and Social Psychology*, 92, 355-367.

Simpson, J.A., & Gangestad, S.W. (1991). Individual differences in sociosexuality: Evidence for convergent and discriminant validity. *Journal of Personality and Social Psychology*, 60, 870-883.

Slade, A. (1999). Attachment theory and research: Implications for the theory and practice of individual psychotherapy with adults. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 575-594). New York: Guilford.

Smuts, B.B. (1985). *Sex and friendship in baboons*. New York: Aldine de Gruyter.

Soon, H., & Malley-Morrison, K. (2000). Young adult attachment styles and intimate relationships with close friends: A cross-cultural study of Koreans and Caucasian Americans. *Journal of Cross-Cultural Psychology*, 31, 528-534.

Sprecher, S., Aron, A., Hatfield, E., Cortese, A., Potapova, E., & Levitskaya, A. (1994). Love: American style, Russian style, and Japanese style. *Personal Relationships*, 1, 349-369.

Sroufe, L.A. (1983). Infant-caregiver attachment and patterns of adaptation in preschool: The roots of maladaptation and competence. In M. Perlmutter (Ed.), *The Minnesota Symposia on Child Psychology: Vol. 16. Development and policy concerning children with special needs* (pp. 41-83). Hillsdale, NJ: Erlbaum.

Stephan, C.W., Bachman, G.F. (1999). What's sex got to do with it? Attachment, love schemas, and sexuality. *Personal Relationships*, 6, 111-123.

Sümer, N., & Güngör, D. (1999). Psychometric evaluation of adult attachment measures in Turkish samples and a cross-cultural comparison. *Turkish Journal of Psychology*, 14, 71-109.

Suomi, S.J. (1995). Influence of Bowlby's attachment theory on research on nonhuman primate biobehavioral development. In S. Goldberg, R. Muir, & J. Kerr (Eds.), *Attachment theory: Social, developmental, and clinical perspectives* (pp. 185-201). Hillsdale, NJ: Analytic Press.

Symons, D. (1979). *The evolution of human sexuality*. New York: Oxford University Press.

Tamres, L.K., Janicki, D., & Helgeson, V.S. (2002). Sex differences in coping behavior: A meta-analytic review and an examination of relative coping. *Personality and Social Psychology Review*, 6, 2-30.

Taylor, S.E., Klein, L.C., Lewis, B.P., Gruenewald, T.L., Gurung, R.A.R., & Updegraff, J.A. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review*, 107, 411-429.

Tolman, D.L., Diamond, L.M. (2001). Desegregating sexuality research: Cultural and biological perspectives on gender and desire. *Annual Review of Sex Research*, 12, 33-74.

Trivers, R. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), *Sexual selection and the descent of man: 1871-1971* (pp. 136-179). Chicago: Aldine.

United Nations Development Programme (2001). *Human development report 2001*. New York: Oxford University Press.

van IJzendoorn, M.H., & Sagi, A. (1999). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of attachment* (pp. 713-734). New York: Guilford.

Waters, E., Merrick, S., Treboux, D., Crowell, J., & Alberstein, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child Development*, *71*, 684-689.

Williams, J.E., & Best, D.L. (1990). *Measuring sex stereotypes: A multination study* (revised ed.). Newbury Park, CA: Sage.

Wilson, J.S., Ermshar, A.L., & Welsh, R.K. (2006). Stalking as paranoid attachment: A typological and dynamic model. *Attachment & Human Development*, *8*, 139-157.

Wilson, M., & Daly, M. (2006). Are juvenile offenders extreme future discounters? *Psychological Science*, *17*, 989-994.

Wood, W., Christensen, P.N., Hebl, M.R., & Rothberger, H. (1997). Conformity to sex-typed norms, affect, and the self-concept. *Journal of Personality and Social Psychology*, *73*, 523-535.

Wood, W., & Eagly, A.H. (2002). A cross-cultural analysis of the behavior of women and men: Implications for the origins of sex differences. *Psychological Bulletin*, *128*, 699-727.

Figure Captions

Figure 1: Internal Working Models of Self and Other Across the 10 World Regions of the International Sexuality Description Project

Figure 2: Individualism Related to Preoccupied Romantic Attachment Across 49 Nations from the International Sexuality Description Project

Figure 3: Gross Domestic Product (US Dollars per capita in 1999) Related to Dismissing Romantic Attachment Across 56 Nations from the International Sexuality Description Project

Figure 4: Men's and Women's Levels of Dismissing Romantic Attachment Across the 10 World Regions of the International Sexuality Description Project

Figure 5: Life Expectancy from Birth (United Nations Development Report, 2001) Related to Gender Differences in Dismissing Romantic Attachment Across 56 Nations from the International Sexuality Description Project









