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Insecure attachment as a predictor of aggression in adults

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INSECURE ATTACHMENT AS A PREDICTOR OF AGGRESSION IN ADULTS

A Thesis

Presented to

the Faculty of the Department of Psychology

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Stacey M. Pederson

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Insecure Attachment as a Predictor of Aggression in Adults

Stacey M. Pederson

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Running head: ATTACHMENT AND AGGRESSION

Abstract

Using both self and partner reports of 196 Introductory Psychology students and their romantic partners, Study 1 examined the psychometric properties of obtaining partner reports with two self-report attachment measures, the new Self-Report Measure of Adult Attachment (SRMAA, Brennan, Clark, & Shaver, 1996) and the existing Close Relationships Questionnaire (CRQ, Bartholomew & Horowitz, 1991). Study 2 examined how adult attachment styles moderate interpersonal reasoning, hostility, and aggression according to the self reports. As hypothesized, corresponding self and partner reports for the SRMAA and CRQ were significantly correlated with one another, with the strongest relationships along the anxiety dimension. Study 2 revealed that insecure individuals, particularly the preoccupied type, were related to self- and partner-reported measures of hostility and aggression.

Insecure Attachment as a Predictor of Aggression in Adults

Extensive research exists on child attachment styles and their relation to parent-child relationships (Ainsworth, Blehar, Waters, & Wall, 1978; Bretherton, 1985; Lopez, 1995; Sroufe, 1988). In more recent years, researchers have studied adult attachment styles and their relation to adult interpersonal relationships, but this has been comparatively less extensive. Researchers have investigated adult attachment styles and their relation to romantic love (Collins & Read, 1990; Hazaan & Shaver, 1987; Lopez, 1995; Simpson, 1990), stress (Mikulincer, Florian, & Weller, 1993; Simpson, Rholes, & Nelligan, 1992), the Big Five personality traits (Brennan & Shaver, 1992), and intimacy-anger (Dutton, Saunders, Starzmoski, & Bartholomew, 1994). All of these studies showed that adult attachment styles can predict certain behaviors in adult interpersonal relationships.

This study will focus on the relationship between attachment style and adult aggressive behavior. Surprisingly, very little research has been conducted in this area. One exception is Dutton and his colleagues' (1994) study of intimacy-anger and insecure attachment styles. One hundred and twenty men who had previously committed acts of physical violence against their wives and a demographically matched control group of 40 non-abusive men participated in this study. In addition, 43 female partners of the assaultive group and 33 partners of the control group provided data relating to the men's psychological abusiveness. Using measures of attachment style, Borderline Personality Organization (BPO), anger, jealousy, and trauma symptoms, Dutton and colleagues (1994) found that insecure attachment was associated with a "personality constellation of abusiveness" in intimate relationships (p. 1379).

In response to Baldwin's (1977) study of child abuse, which showed a relationship between physical abuse of children and prior physical abuse toward their mothers, Bowlby (1984) postulated that it was these women's attachment histories that were associated with physical abuse. Bowlby found that these women were suffering from extreme degrees of

anxious attachment, and that experiences of long or repeated separations and/or of being repeatedly threatened with abandonment would be a common feature of their childhoods.

These two studies demonstrate a suggested relation between aggression and insecure attachment styles. However, Dutton and colleagues' broad definition of "abusiveness" and Bowlby's "hunch" fail to establish a clear link between aggression and attachment style.

Historical and Theoretical Foundations

Bowlby's early work with orphans had shown that separated or bereaved children experienced, no less than adults, feelings of mental pain and anguish: yearning, misery, angry protests, despair, apathy, and withdrawal (1944). He had shown too that the long-term effects of these separations could sometimes be disastrous, leading to neurosis or delinquency in children and adolescents, and mental illness in adults. In separating parent from child, Bowlby first proposed that a delicate mechanism had been disrupted, a fundamental bond broken linking one human being to another. The nature of that bond, and its developmental characteristics was the focus of Bowlby's research for the next four decades.

At the time, Bowlby had at his disposal two sets of theories. The first was psychoanalysis, which he had embraced and struggled with for the preceding 20 years (Lopez, 1995). Psychoanalysis offered two different accounts of the infant-mother bond: drive theory and object-relations theory. Both of these were, in Bowlby's mind, seriously flawed. For Bowlby (as cited in Holmes, 1993), Freud failed to take the leap of seeing attachment between infant and mother as a psychological bond in its own right, not just an instinct derived from feeding or infant sexuality:

The young child's hunger for his mother's love and presence is as great as his hunger for food.... Attachment Theory provides a language in which the phenomenology of attachment experiences is given full legitimacy. Attachment is a

'primary motivational system' with its own workings and interface with other motivational systems. (p. 63)

Bowlby's discovery of ethology in the 1950s provided him with a scientifically secure base from which to make his conceptual advance (Hinde, 1987). In 1953, combining ethology and psychoanalytic theory, along with the obvious behavioral and cognitive processes associated with attachment, Bowlby first introduced the world to attachment theory, which became, and continues to be, one of the most prolific topics in psychological research (Lopez, 1995).

Modern Research: An Impetus for Growth

Ainsworth (1982) first used the term "secure base" to describe the ambiance created by the attachment figure for the attached person. The essence of secure base is that it provides a springboard for curiosity and exploration. When danger threatens, we cling to our attachment figures. Once danger passes, their presence enables us to work, relax, and play, but only if we are sure that the attachment figures will be there if we need them again. For example, in his naturalistic study of mothers and their toddlers in a London park, Anderson (1972) found that each child had an invisible radius beyond which he/she would not venture to go. When a child neared the limit, he/she would begin to look anxiously toward the mother. Attachment exerted an invisible yet powerful pull on the child.

Ainsworth and her colleagues (1978) devised the Strange Situation to study the ways in which 12- and 18-month-olds can cope with brief separations from their caregivers. In this experimental paradigm, the child is left first with the experimenter (usually a woman), then alone while the mother goes out of the room for three minutes. The child's response to the separation, and more importantly the reunion, is observed and rated with videotapes. On the basis of this rating, children can be classified as: secure; insecure-detached/avoidant; insecure-anxious/ambivalent; or insecure-disorganized/disoriented.

The example of the mother who leaves her child with a baby-sitter and then worries about and misses her dreadfully suggests that attachment behavior is not confined to infancy, but also applies to care-givers. Heard and Lake (1986) were the first to extend proximity seeking, separation anxiety, as well as the secure base concept in their model of adult attachment. In this model, they postulate a fundamental need for companionable interaction based on preferred relationships. In a ground-breaking study, Hazan and Shaver (1987) first proposed that the experience of romantic love could be conceptualized as an attachment process, and that the major attachment styles identified among infants could be used to describe meaningful individual differences in adult orientations to love relationships.

Attachment Styles

Original Three-Type Model

The original attachment styles model used in Ainsworth's Strange Situation studies of infants consisted of three different types. The secure attachment was characterized as having a perception of the caregiver as accessible and responsive, and enabled the infant to form an internal working model of self-worth, and of others as responsive and dependable. The anxious-ambivalent attachment was characterized as having a perception of the caregiver as inconsistently responsive and helpful, and developing an internal working model of the self as uncertain and fearful. Lastly, the avoidant attachment style was characterized as having a perception of the caregiver as consistently rejecting, and developing an internal working model of aloneness and of others as untrustworthy (Ainsworth et al. 1978).

Across several studies, a number of infants and young children were often not classifiable within Ainsworth's original three-group model (Main, Kaplan, & Cassidy, 1985). This led investigators to hypothesize that one of the three types of attachment could be divided into two subgroups, specifically the avoidant type. Main and colleagues

proposed the existence of a fourth attachment style (disorganized/disoriented), represented by infants who exhibited erratic combinations of avoidant and anxious responses whose parents were often psychiatrically distressed (Main & Hesse, 1990; Main & Solomon, 1986, 1990).

Four-Type Model

These findings led Bartholomew and Horowitz (1991) to develop a four-type model of attachment, incorporating positive and negative views of the self and the others (see Figure 1). Describing attachment by these two factors, this new model provided the first psychometric definition of the four attachment types. Under this model, the attachment types are now labeled secure, anxious-ambivalent, detached-avoidant, and disorganized/disoriented in children; and secure, preoccupied, dismissing, and fearful in adults, respectively.

The secure type is characterized as having both a positive view of the self and a positive view of others, indicating a sense of worthiness, expecting others to be accepting and responsive, and maintaining close relationships without losing personal autonomy. The preoccupied type is associated with a negative self view, but a positive view of others, leading the person to strive for self-acceptance by gaining the acceptance of valued others. The dismissing type has a positive self view, but a negative view of others, and is characterized as protecting against disappointment by avoiding close relationships, and maintaining a sense of independence and self-reliance. Lastly, the fearful type has a negative view of the self and others, and avoids close involvement with others to protect against rejection (Bartholomew & Horowitz, 1991).

Continuity Hypothesis

Attachment theory postulates that the early attachment styles of parent-child relationships develop into internal working models of self and others. Lopez (1995) showed that these working models can be characterized as organizing internal appraisals

Figure 1. Adult attachment model, described by the dichotomous (positive vs. negative) view of the self and others. The self view is described as the anxiety dimension, and the others is described as the avoidance dimension. Adapted from "Attachment Styles Among Young Adults: A test of the Four-Category Model," by K. Bartholomew and L. Horowitz, 1991, Journal of Personality and Social Psychology, 61, p. 227.

and interpersonal behaviors adjusted in the individual's earlier development, and shaping the person's later social experiences in schema-consistent ways. Working models are thought to influence patterns of adult relationships and become traitlike over time (Bretherton, 1985; Simpson et al., 1992). Therefore, attachment theory assumes that there is continuity between child and adult attachment styles (Mikulincer et al., 1993). Under this premise, Simpson and colleagues (1992) summarized the continuity hypothesis:

As long as the patterns of attachment identified in children are similar to those that characterize adults, and as long as the consequences of these styles for behavior and emotions are similar across different developmental levels, attachment theory remains a viable model for understanding adult relationships. Given this perspective, general comparison between children and adults may be informative, regardless of whether continuity exists within individuals over time. (p. 443)

Several studies support the notion that there is stability and continuity between child and adult attachment styles. Research has indicated (Brennan, Shaver, & Tobey, 1991; Carnelley, Pietromonaco, & Jaffe, 1994; Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987) that the different patterns of attachment identified in childhood parallel the patterns that characterize adults. Moreover, intergenerational continuities in parent-child attachment patterns have been established (Dutton et al., 1994; Fonagy, Steele, & Steele, 1991; Steele & Steele, 1994). These findings strengthen the possible validity of the continuity hypothesis, and therefore support the usefulness of assessing early childhood attachment styles and their comparisons with patterns in adult attachments.

From Early Attachment to Adult Psychopathology

Bowlby's first attempts to understand the effects of separation on psychological development were retrospective studies based on the histories of children and adolescents referred to the child guidance clinics where he worked. In his study of "Forty-Four Juvenile Thieves" (1944), Bowlby noted that 40% of the offenders had prolonged

separations of 6 months or more from their mothers or foster-mothers during the first 5 years of their lives, compared with only 5% of controls. Of the “affectionless” thieves, characterized by their insensibility to guilt feelings or sympathy for their victims, 12 out of 14 had had prolonged separations, compared with only 5 of the remaining 30.

Bowlby saw two main factors as being of etiological significance in the development of antisocial behaviors. First, the separation of the mother and child, and the second factor linking delinquency and the “affectionless character” with attachment was the inhibition of love by rage and the fantasies resulting from rage. In their 1938 study of aggression and war, Bowlby and Durbin (as cited in Holmes, 1993) castigated the denial of such rage:

Take the child away from the fire, deny it a second piece of cake, but avoid being angry or hurt or disapproving if a scream of rage or a kick on the shins is the immediate consequence of thwarting a child's will to happiness. To permit children to express their feelings of aggression, whilst prevailing acts of irremediable destruction is, we suggest, one of the greatest gifts that parents can give their children. (p. 88)

Bowlby (as cited in Tavecchio & van IJzendoorn, 1987) characterized this active protest as normal, and viewed an apathetic resignation as a sign of unhealthy development. Thus, Bowlby found the importance of the caregiver in neutralizing and diffusing the destructive effects of rage in response to loss.

As attachment theory is heavily rooted in the healthy portrayal of anger, it would appear that the necessary next step in this research is to study the implications of this need when it goes unmet. Thus, it is hypothesized that the child who is denied this expression of anger is at risk for becoming the aggressive adult. However, with the exception of the two studies on domestic violence (Bowlby, 1984; Dutton et al., 1994) cited earlier, there

were no other unable studies on the relationship between attachment and aggression in adults.

Aggression

In the psychological literature, the terms anger, hostility, and aggression are often used loosely, sometimes interchangeably. But the results of Averill (1982) and others clearly indicate that overt aggression is by no means a dominant response to anger or hostility. Feshbach (1970) defined aggression as behavior with the apparent intent to injure oneself or some other person or object. Aggression can be further divided into three categories: Direct (physical violence against self and others), Indirect (verbal assaults against self and others), and Displaced (malediction, symbolic aggression, and aggression directed on objects).

With very little research from which to draw support for the hypothesis that insecure attachment plays a significant role in adult aggression, this study began by reviewing the correlates of aggression. From self-report and projective measures to naturalistic and contrived laboratory observations, researchers have found several correlates of aggression, including: Borderline Personality Organization (BPO), hostility, Antisocial Personality Disorder, narcissism, impulsivity, psychosis, jealousy, and anger (Alexander, 1992; Crittenden, 1988; Dutton et al., 1994).

Avoidant and ambivalent people were found to be more hostile than secure people (Kobak & Sceery, 1988; Mikuliner et al., 1993) and to have more negative and distrusting views of the social world and of human nature in general (Collins & Read, 1990). Dutton and colleagues (1994) found that fearful attachment was significantly and positively correlated with anger, trauma symptoms, and jealousy, each of which is an associated feature of abusiveness.

Since anxiety and anger are both strongly associated with fearful attachment, Dutton and colleagues (1994) argued that an emotional template of intimacy/anger is the central

affective feature of the fearful attachment pattern. Furthermore, the correlation of fearful attachment to BPO is so strong that it has been argued that BPO is a personality representation of this particular attachment style (Dutton et al., 1994; Mahler, 1971).

Researchers have found that people with antisocial personality disorder, marked by its strong correlation with aggression and criminality (APA, 1994), are more likely than others to have experienced childhood stress, particularly in the form of separation from parents (Farrington, 1991; Luntz & Widom, 1994). Moreover, many have also grown up with parents who were described as emotionally unavailable (Luntz & Widom, 1994).

In their study of attachment styles and posttraumatic distress, Mikulincer and colleagues (1993) described the complexity of making predictions for the insecurely attached person. For instance, the fact that they deny and minimize inner distress (e.g., Kobak & Sceery, 1988; Mikulincer, Florian, & Tolmacz, 1990) may protect them from the negative emotional effects of threatening situations. On the other hand, whereas depression and anxiety point to one's inadequacy and weakness, characteristics that avoidant persons cannot accept as part of themselves, hostility may reflect their habitual reactant and defiant position against the distressing world. Therefore, although avoidant persons may not be able to recognize themselves as depressed or anxious, their maladjustment may be manifested in heightened hostility and anger outbursts (Mikulincer et al., 1993).

Studying temperament and personality, Rothbart and Ahadi (1994) concluded that emotionally neglected children may develop a mental representation of the world that leads them to construe hostile intent in others, justifying aggression in response to that perceived intent. Whereas this study was not on attachment, attachment theory holds that insecurely attached children suffer at least some form of emotional neglect during development. This neglect, it is proposed, may create an internal working model of mistrust that develops into a hostile and aggressive ideology in adulthood.

Study 1 Hypothesis

Based on the research-supported dichotomized models of the self and others, it is hypothesized that the new SRMAA (Brennan, Clark, & Shaver, 1998) will significantly differentiate the four categories of attachment for both self- and partner-reports. To provide support for this claim, the analyses of this measure will include reliability estimates, and validity estimates, including confirmatory factor analysis and convergent analyses between the self- and partner-reported ratings on both the SRMAA and the CRQ.

Study 2 Hypotheses

Following support for the measurement validation for self- and partner-reported ratings on the SRMAA, it is hypothesized that the two attachment styles with a conceptualized negative self-image (the fearful and preoccupied types) will exhibit problems with relationship conflict tactics and hostility and aggression. Specifically, fearful persons, characterized as easily exploited and submissive, will exhibit heightened patterns of resentment and suspicion that manifest in patterns of indirect hostility and displaced aggression. Preoccupied persons, characterized as highly dependent on others to maintain positive self-regard, will attempt to achieve this aim through an overly dominating personal style and will exhibit a uniquely hostile and aggressive profile.

Method

Participants

One hundred ninety-eight introductory psychology students from San Jose State University participated in this study for course credit. Along with the obvious benefits of convenience in studying this group of participants, many of the established validity and reliability estimates for the self- and partner-report measures are based on this population.

Those participants who indicated on a demographics questionnaire that they belonged to a romantic relationship of at least six months duration were given the opportunity to earn extra course credit in exchange for recruiting their partners for the

study. Sixty-nine participants were given a sealed envelope containing questionnaires for their romantic partners to complete. Fifty-five romantic partners completed and returned the questionnaire packets in the enclosed self-addressed, stamped envelope.

Procedure

Student participants were given the questionnaire packets, which took approximately 45 minutes to complete, in 5 different group sessions according to voluntary sign-up sheets. All student participants completed demographics, aggression, well-being, relationship satisfaction, and attachment measures.

With the exception of labeling the questionnaire packets with numbers to identify relationship partners, this research was conducted anonymously. Due to the sensitive nature of some of the measures, a minimal amount of deception was required for this study. Rather than “Insecure attachment as a predictor of aggression in adults,” the title of the study on the informed consent form read, “Well-being and adjustment in young adults.”

Those students who indicated that they belong to a romantic relationship of at least six month duration were given the opportunity to recruit their partners for the study in exchange for extra course credit. To identify dyads, the student and partner questionnaire packets were labeled with matching numbers. Once labeled with the number, the partner packet was sealed in an envelope and given to the student participant.

The partner packets were identical to the standard self-report version, including informed consent forms, with the exception of the instructions and wording on the attachment and aggression measures. Partner participants were instructed to complete these questionnaires about their partners, rather than about themselves. Instead of “I tried to discuss the issue calmly,” for example, the partner’s version read, “My partner tried to discuss the issue calmly.” Along with the questionnaires, the partners were given a self-addressed, stamped envelope in which to return the completed measures and signed informed consent form.

Materials

The Demographics Questionnaire. This short questionnaire included standard demographic information (e.g., age, gender, ethnicity), as well as information regarding college status (e.g., year in school, major) and relationship information (see Appendix A).

Close Relationships Questionnaire (Bartholomew & Horowitz, 1991). This concise self-report is an adaptation of the attachment measure developed by Hazan and Shaver (1987). It consisted of four short paragraphs describing the four attachment styles. Respondents are asked to first choose from among the four styles that single alternative that best described the way they feel in close relationships, and then to rate on a 7-point scale from 1 (not at all like me) to 7 (very much like me) the extent to which they think each of the four descriptions corresponds to his/her relationship style (see Appendix B). This measure has shown convergent validity ($r = .92$) with interview ratings (Bartholomew & Horowitz, 1991) and moderately high stability over eight months (Griffin & Bartholomew, 1994).

Self-Report Measure of Adult Attachment (Brennan, Clark, & Shaver, 1998). Participants responded to this 36-item questionnaire with their general experience in romantic relationships with a 7-point rating scale, ranging from 1 (disagree strongly) to 7 (agree strongly). This measure, based on the dichotomized (positive vs. negative) images of the self and others, yielded two higher-order attachment dimension scales: Avoidance ($\alpha = .94$) and Anxiety ($\alpha = .91$), which provided the bases for the four attachment styles: secure, preoccupied, dismissing, and fearful (see Appendix C).

Buss-Durkee Hostility Inventory (Buss & Durkee, 1957). This 75-item scale was rated with a True/False format (see Appendix D). The inventory yielded seven scales: Assault (a direct physical aggression scale assessing physical violence against others), Verbal Hostility (assessing direct verbal aggression against others), Indirect Hostility (a heterogeneous scale assessing aspects of malediction, symbolic aggression, aggression

displaced onto objects, and anger held in), Irritability (e.g., grouchiness, exasperation, rudeness), Negativism (assessing active and passive oppositional behavior), Resentment (assessing anger about real or imagined mistreatment), and Suspicion (assessing mistrust and projection of hostility onto others). Estimates of internal consistency (Cronbach's alpha) for the inventory subscales have ranged from .59 for Indirect Hostility to .82 for Assault (Tangney et al., 1996).

Conflict Tactics (CT) Scales (Straus, 1979). The CT scales are designed to measure the use of Reasoning, Verbal Aggression, and Violence within the family and romantic relationships (see Appendix E). The results of factor analyses corresponded to this three-factor structure. These scales consist of a list of actions that a romantic partner might take in a conflict with his/her partner. The items begin with those low in coerciveness and aggression (such as discussing the issue with the other) and become gradually more coercive and aggressive (such as slapping and hitting). The response categories ask for the number of times each action occurred during the past six months, ranging from 0 (Never) to 6 (More than 20 times). The author has reported sufficient validity estimates and coefficient alphas that ranged from .76 for Reasoning to .88 for Violence.

Study 1

Results and Discussion

As mentioned previously, the purpose of Study 1 was to estimate the psychometric properties of the SRMAA for both self and partner reports. Principle components analyses for both self and partner reports, used to test the hypothesized factor structure of avoidance and anxiety, are presented first. Reliability estimates, as well as convergent analyses between self and partner reports and between the SRMAA and CRQ are presented next.

Demographics

For the analyses, 2 of the 198 student participants and 7 of the 55 partner participants were excluded due to incomplete data. Of the remaining 196 student

participants. 63.8% were female with an overall mean age of 20.48 (see Table 1). The 48 remaining romantic dyads consisted of a disproportionately larger percentage of male participants (75%) because their student partners were mostly female, and had a slightly higher mean age ($M = 22.17$). All romantic pairs were heterosexual.

Attachment Ratings

Studies on both infants and adults consistently reveal that approximately 50% of samples are classified as securely attached, with the remaining 50% fairly equally divided among the three types of insecure attachment. The percentages of self-reported attachment ratings in this study were similar to those established percentages for both the SRMAA and the CRQ (see Table 2). Table 3 shows a similar pattern between the self and partner ratings on both attachment measures.

Measurement Validation

Inter-item correlations for the SRMAA revealed a mean correlation coefficient of $r = .44$, with minimum and maximum values of $r = .12$ and $r = .73$, respectively. All but four of the correlations were significant, $p < .05$. Of the remaining inter-item correlation coefficients, all involved items 16 or 22, which were included on the anxiety scale. These items both used qualifiers in their wording (i.e., “very” or “often”), which may have confounded the interpretations of these questions.

Principle Components Analysis

For exploratory purposes, both a principle components (PC) analysis and factor analysis with orthogonal (varimax) and oblique rotation, using two stipulated factors, were run on all 36 items of the self-reported SRMAA. Each of these analyses converged in 2 factors; however, the factor analysis accounted for less of the item variance and resulted in uninterpretable factor loadings. Given the superiority of PC analysis (no loss of variance information) and these findings, the final factor structure is based upon this model. Additionally, varimax rotation was selected because it does not allow for correlated factors.

Table 1

Frequencies and Descriptives for Student and Partner Demographics

Variable	Student (<u>N</u> = 196)	Partner (<u>N</u> = 48)
<u>Continuous Means and SDs</u>		
Age	20.48 (6.5)	22.17 (6.7)
<u>Categorical Percents</u>		
Gender (Male)	36.2%	75.0%
Ethnicity (White)	29.1%	43.8%
Ethnicity (Black)	5.6%	4.2%
Ethnicity (Hispanic)	21.9%	22.9%
Ethnicity (Asian)	22.4%	14.6%
Ethnicity (Other)	14.3%	8.3%
Year in School (Freshman)	57.7%	
Year in School (Sophomore)	15.8%	
Year in School (Junior)	10.7%	
Year in School (Senior)	9.7%	

Note. Standard deviations are presented in parentheses.

Table 2

Student Attachment Style Percentages on the Self-Reported SRMAA and CRQ

Measure	Secure	<u>Attachment Category</u>		
		Preoccupied	Fearful	Dismissing
SRMAA	56.1%	12.8%	18.7%	12.4%
CRQ	53.7%	11.1%	24.7%	10.5%

Note. SRMAA is the Self-report Measure of Adult Attachment (Brennan, Clark, & Shaver, 1998); CRQ is the Close Relationship Questionnaire (Bartholomew & Horowitz, 1991).

Table 3

Student and Partner Attachment Style Percentages on the SRMAA and CRQ

Measure	Secure	Attachment Category		
		Preoccupied	Fearful	Dismissing
SRMAA				
Student	59.5%	15.8%	11.1%	13.7%
Partner	51.5%	13.7%	16.6%	17.2%
CRQ				
Student	57.7%	16.9%	12.5%	12.9%
Partner	52.1%	12.6%	17.9%	17.4%

Two factors were extracted which accounted for 58.8% of the total variance (see Table 4). Of the total variance, Factor 1 accounted for 45.2% and Factor 2 accounted for 13.6%. The first factor was defined by items contained on the hypothesized avoidance scale. Twelve items had factor loadings greater than .40 for this factor. The second factor consisted of the items contained on the hypothesized anxiety scale, with 9 factor loadings greater than .40.

Table 5 presents the results of the PC analysis for the partner-reported ratings on the SRMAA. Again, two factors defined by the avoidance and anxiety items were extracted. The total variance accounted for by these two factors was slightly lower (56.2%), with the first factor again the avoidance scale (42.3%) and the second the anxiety scale (13.9%).

Reliability

Due to the exploratory nature of this study, homogeneity of means, variances, and error variances of the item scores on the SRMAA was not assumed. Therefore, item-total correlations and coefficient alphas were computed to examine internal consistency of the overall measure and the hypothesized factors. Cronbach's alpha for the avoidance and anxiety scales were quite high (.91 and .90, respectively). Examination of the item-total analyses yielded correlations of .44 or higher for all items on the avoidance scale, and .50 or higher for all but items 16 and 22 on the anxiety scale. Internal consistency for all 36 items, as indicated by split-half analysis was also reliable ($\alpha = .95$).

Convergent Validity

Self and partner ratings. Convergent validity estimates yielded a 53% hit rate between the self and partner final categorical ratings on the SRMAA. Continuous self and partner ratings on the avoidance and anxiety dimensions of this measure were significantly correlated ($r_s = .49$ and $.56$, $p_s < .01$). Further analysis showed that partners' continuous ratings were significantly higher on the avoidance dimension, ($F(1, 45) = 5.62$, $p < .01$),

Table 4

Rotated Factor Matrix for the SRMAA

Item no.	Stem	Factors		
		1	2	h^2
3.	I am very comfortable being close to romantic partners. (R)	<u>.73</u>	.13	.69
1.	I prefer not to show my partner how I feel deep down.	<u>.72</u>	.15	.72
7.	I get uncomfortable when a romantic partner wants to be very close.	<u>.68</u>	-.06	.60
5.	Just when my partner starts to get close to me I find myself pulling away.	<u>.65</u>	.08	.54
13.	I am nervous when my partners get too close to me.	<u>.63</u>	.18	.68
17.	I try to avoid getting too close to my partner.	<u>.61</u>	.16	.61
19.	I find it relatively easy to get close to my partner. (R)	<u>.60</u>	.14	.55
11.	I want to get close to my partner, but I keep pulling back.	<u>.57</u>	.08	.49
15.	I feel comfortable sharing my private thoughts and feelings with my partner.	<u>.50</u>	.09	.48
23.	I prefer not to be too close to romantic partners.	<u>.48</u>	.13	.46
21.	I find it difficult to allow myself to depend on romantic partners.	<u>.46</u>	.14	.45
29.	I feel comfortable depending on romantic partners (R).	<u>.45</u>	.11	.42
4.	I worry a lot about my relationships.	.20	<u>.72</u>	.66
2.	I worry about being abandoned.	.17	<u>.72</u>	.60
14.	I worry about being alone.	.16	<u>.65</u>	.48
8.	I worry a fair amount about losing my partner.	.15	<u>.63</u>	.62
22.	I do not often worry about being abandoned (R).	.17	<u>.59</u>	.50
28.	When I am involved in a relationship, I feel somewhat anxious.	.14	<u>.55</u>	.56
36.	I resent it when my partner spends time away from me.	.22	<u>.52</u>	.48
18.	I need a lot of reassurance that I am loved by my partner.	.12	<u>.50</u>	.46
16.	My desire to be close sometimes scares people away.	.23	<u>.47</u>	.43
N = 196		Eigenvalue	8.59	2.56
Total % of Variance = 58.8		% of Variance	45.2	13.6

Table 5

Rotated Factor Matrix for the SRMAA (Partner Reports)

Item no.	Stem	<u>Factors</u>		
		1	2	h^2
1.	My partner prefers not to show me how he/she feels down.	<u>.74</u>	.08	.73
7.	My partner gets uncomfortable when a I want to be very close.	<u>.72</u>	.04	.70
5.	Just when I start to get close to my partner he/she pulls away.	<u>.65</u>	.07	.66
17.	My partner tries to avoid getting too close to me.	<u>.62</u>	.13	.65
23.	My partner prefers not to be too close to me.	<u>.55</u>	.15	.51
3.	My partner is very comfortable being close to me. (R)	<u>.54</u>	.08	.49
13.	My partner gets nervous when I get too close to him/her.	<u>.50</u>	.24	.47
15.	My partner feels comfortable sharing his/her private thoughts and feelings with me.(R)	<u>.45</u>	.09	.43
29.	My partner feels comfortable depending on me.	<u>.41</u>	.12	.41
36.	My partner resents it when I spend time away from him/her.	.17	<u>.73</u>	.68
18.	My partner needs a lot of reassurance that he/she is loved.	.15	<u>.67</u>	.47
2.	My partner worries about being abandoned.	.19	<u>.65</u>	.45
8.	My partner worries a fair amount about losing me.	.18	<u>.61</u>	.46
4.	My partner worries a lot about relationships.	.15	<u>.58</u>	.48
14.	My partner worries about being alone.	.20	<u>.58</u>	.43
22.	My partner does not often worry about being abandoned. (R).	.15	<u>.47</u>	.40
N = 48		Eigenvalue	7.63	2.61
Total % of Variance = 56.2		% of Variance	42.3	13.9

such that 65% of the misses were within the same conceptualized view of the self. That is, student participant ratings of secure tended to be rated as dismissing by their partners, and student participant ratings of preoccupied tended to be rated as fearful by their partners (see Table 3).

SRMAA and CRQ. A discriminant analysis was performed to assess the degree to which the 36 continuous ratings on the SRMAA accounted for the overall discrimination between the four attachment groups based on the single-choice item on the CRQ. Table 6 displays the product-moment correlations among the four ratings of the CRQ, as well as the avoidance and anxiety dimensions on the SRMAA for both self and partner reports. Because the sample contained more females than males, gender was dummy coded (0 = male, 1 = female) and included in the analyses.

Examination of these correlations indicated that relationships among the CRQ ratings and the dimensions on the SMRAA were as expected according to magnitude and direction for both self and partner reports. For example, the avoidance dimension of the SRMAA is positively correlated with the dismissing and fearful ratings on the CRQ, and the anxiety dimension is positively correlated with the preoccupied and fearful ratings. Conversely, the avoidance dimension was negatively correlated with the secure and preoccupied ratings, and the anxiety dimension was negatively correlated with the secure and dismissing ratings.

Gender tended to be most strongly related to the avoidance dimension, with females associated with higher scores according to both self and their male partner reports. As mentioned previously, partner reports were significantly higher on the avoidance dimension than the self reports, a relationship that is at least in part related to this gender difference (i.e., there were substantially more female student participants included in the partner ratings).

Table 6

Inter-item Correlations Between Predictors

Variable	Gender	Secure	Preoc	Fear	Dism	Avoid	Anxi
1. Gender		-.23**	-.25†	.29†	.31†	.34†	.07
2. Secure (CRQ)			-.20**	-.58†	-.17*	-.35†	-.26†
3. Preoccupied (CRQ)				.16*	-.09	.07	.45†
4. Fearful (CRQ)					.06	.26†	.36†
5. Dismissing (CRQ)						.21†	.06
6. Avoidance (SRMAA)							.07
7. Anxiety (SRMAA)							

* $p < .05$. ** $p < .01$. † $p < .001$.

Univariate analyses (one-way analyses of variance) for the avoidance and anxiety dimensions on the SRMAA in relation to the four attachment style ratings on the CRQ showed that the relationship between each dimension and each item on the CRQ was statistically significant for both self and partner reports. For both self and partner reports, the avoidance dimension was the strongest predictor of attachment ratings on the CRQ.

For the discriminant analysis, participants were distributed in the four categories of self-reported attachment, based on the CRQ as follows: 53.7% secure, 11.1% preoccupied, 10.5% dismissing, and 24.7% fearful. The 36 continuous ratings on the self-reported SRMAA were entered using a stepwise procedure with minimization of Wilks's lambda as the criterion for entry. With four groups, three discriminant functions can be generated. The three functions together yielded a Wilks's lambda of .52 ($p < .001$). The first function accounted for approximately 36% of the variance in SRMAA attachment between groups (canonical $r = .60$, $p < .001$), whereas the second accounted for an additional 8% (canonical $r = .29$, $p < .001$), and the third function accounted for 6% of the variance between groups (canonical $r = .24$, $p < .05$).

Table 7 displays structure coefficients for the three functions. The structure matrix was rotated to facilitate interpretation of the structure coefficients. These structure coefficients represent the correlation between each variable and the composite score generated by the discriminant function, and are interpreted in the same manner as factor loadings in factor analysis. The square of the structure coefficient yields the proportion of variance of the variable that is accounted for by the function. Pedhazur (1982) has suggested that coefficients greater than or equal to .30 be treated as meaningful.

Based on these loadings, it appears that the SRMAA items with the strongest correlation with the categorical attachment ratings on the CRQ were those associated with self-centered anxiety. For example, the item with the strongest loading on the first function (item 14) was, "I worry about being alone." The second function primarily reflected those

Table 7

Structure Coefficients for SRMAA Ratings Predicting
Attachment Category on the CRQ

SRMAA item no (Scale)	Structure Coefficients		
	Function 1	Function 2	Function 3
14. (Anxiety)	<u>.74</u>	.40	-.54
28. (Anxiety)	<u>.46</u>	.16	-.18
2. (Anxiety)	<u>.42</u>	.31	-.09
8. (Anxiety)	<u>.35</u>	.21	-.17
18. (Anxiety)	<u>.32</u>	.06	-.07
16. (Anxiety)	.17	<u>.86</u>	.49
10. (Anxiety)	.26	<u>.42</u>	.08
20. (Anxiety)	.17	<u>.39</u>	-.05
36. (Anxiety)	.22	<u>.31</u>	-.11
21. (Avoidance)	.61	-.36	<u>.70</u>
29. (Avoidance)	.16	-.05	<u>.42</u>
23. (Avoidance)	.21	-.01	<u>.32</u>
17. (Avoidance)	.19	.09	<u>.30</u>
Canonical Correlation	.45	.31	.18
Wilks's Lambda	.78	.90	.97
Chi-Square	76.53	26.71	6.19
df	9	4	1
Significance	< .001	< .001	< .05

items that dealt with other-centered anxiety. For example, the item with the strongest loading on the second function was item 16: "My desire to be very close sometimes scares people away." The third function reflected items on the avoidance scale, particularly those that dealt with dependence, rather than openness. The item with the strongest loading on this function (item 21) was, "I find it difficult to allow myself to depend on romantic partners."

Table 8 displays the classification results for the discriminant function, with prior probabilities set at actual levels. The functions were able to classify correctly 68% of the sample. The function was best able to classify secure and fearful persons, but tended to misclassify preoccupied and dismissing persons as secure. At least part of the reason for this finding is that discriminant analysis tends to overpredict the modal category, and because secure persons comprise the largest group, most misclassifications were in that direction. Furthermore, as the two significant functions seemed to be defined by the anxiety and avoidance dimensions correct classification of the two extreme attachment patterns (positive self and other vs. negative self and other) based on these dimensions makes intuitive sense.

It is possible to compute a standardized statistic to determine if the number of hits exceeded what would be expected merely by chance (Huberty, 1984). Using a maximum chance criterion (in which one could be correct 54% of the time by simply predicting that all cases would fall into the modal group), this statistic yielded a z score of 4.9 ($p < .001$). Although this suggests that the functions yielded better than chance classification, this was achieved through correct classification of secure and fearful persons but inaccurate classification of preoccupied and dismissing persons.

Table 8

Classification Results for the Discriminant Analysis Predicting Attachment Category on the CRQ with Ratings on the SRMAA

Actual group membership	Predicted group membership			Total	
	Secure	Fearful	Preoccupied		Dismissing
Secure	92 (81.4%)	10 (8.8%)	2 (1.8%)	9 (8%)	113
Fearful	5 (15.2%)	25 (75.8%)	2 (6.1%)	1 (3%)	33
Preoccupied	11 (44%)	2 (8%)	12 (48%)	0 (0%)	25
Dismissing	9 (34.6%)	3 (11.5%)	1 (3.8%)	13 (50%)	26
Percent correctly classified:					64%

Study 2

Results and Discussion

Results from Study 1 seem to confirm the underlying structure conceptualized by the dichotomized views of the self and others for both self and partner reports on the SRMAA, resulting in the four distinct categories of attachment. These results, along with the sufficient reliability estimates and convergent validity established between the SRMAA and the CRQ, provide support for the hypothesis that the SRMAA provides a sufficient tool with which to test the hypotheses in Study 2.

Using the the Conflict Tactics Scales (CTS) and the Buss-Durkee Hostility Inventory (BDHI), Study 2 examined whether persons categorized as possessing a negative self-image (fearful and preoccupied) can be differentiated from persons with a positive self-image (secure and dismissing) on measures of interpersonal reasoning, hostility, and aggression. The four attachment groups were first dummy coded into three variables for linear regression analysis (i.e., secure vs. others, preoccupied vs. others, and fearful vs. others) to test the overall relationship between each group compared to the other groups on the CTS and BDHI. Significant correlations were followed by a one-way ANOVA and the conservative Bonferroni procedure to test individual group differences.

Conflict Tactics Scales

The first measure, the CTS, describes a list of actions that a relationship partner might take in a conflict with his/her partner, and starts with items low in coerciveness (such as discussing the issue) and become gradually more coercive and aggressive (such as slapping and hitting). The response categories ask for the number of times each action occurred during the past 6 months, ranging from 0 (never) to 6 (more than 20 times). Factor analysis of this measure resulted in three scales: Reasoning, Verbal Aggression, and Violence (see Table 9).

Table 9

Attachment Group Correlations and Group Differences for the
Conflict Tactics Scales

	<i>r</i>	<i>F</i>	<i>p</i>
<u>Reasoning</u>			
Fearful vs. Others	-.63†		
Fearful vs. Secure		16.5	<.01
<u>Verbal Aggression</u>			
Preoccupied vs. Others	.45**		
Preoccupied vs. Secure		7.62	<.01
<u>Violence</u>			
Preoccupied vs. Others	.39**		
Preoccupied vs. Secure		5.31	<.01

p* < .05, *p* < .01, †*p* < .001

A significant effect of type was found between the fearful and other groups on the Reasoning dimension ($r = .63$, $p < .001$). Fearful persons reported significantly lower scores on this scale compared to the other types of attachment. This finding was moderated by a significant group difference between the fearful and secure groups, $F(3, 192) = 16.15$, $p < .01$.

Preoccupied persons reported significantly higher scores on both the Verbal Aggression and Violence dimensions of the CTS ($r_s = .45$ and $.39$, $p_s < .01$). These relationships were attributable to a significant difference between the preoccupied and secure groups on both measures, ($F(3, 192) = 7.62$, $p < .01$; $F(3, 192) = 5.31$, $p < .01$).

Buss-Durkee Hostility Inventory

The BDHI contains a series of 75 attitudinal statements and behavioral actions to which participants respond either true or false, and is divided into eight theoretical scales: Resentment, Suspicion, Guilt, Negativity, Irritability, Indirect Hostility, Verbal Hostility, and Assault. Because the factor structure for this measure was a bit noisy between gender, the results for this measure are based on two different, but similar factor structures for males and females (see Tables 10 and 11).

For both males and females, preoccupied and fearful persons reported significantly higher ratings than the other groups on the first dimension, characterized by resentment and suspicion in males ($r_s = .36$ and $.42$, $p_s < .01$), and resentment, suspicion, and guilt in females ($r_s = .45$ and $.42$, $p_s < .01$). For males, these relationships were moderated by significant group differences between the fearful and secure, ($F(3, 67) = 6.43$, $p < .01$) and preoccupied and secure groups, ($F(3, 67) = 8.57$, $p < .01$). For females, these relationships were attributed to significant group differences between the fearful and secure ($F(3, 120) = 7.42$, $p < .01$), fearful and dismissing ($F(3, 120) = 5.11$, $p < .01$), and preoccupied and secure ($F(3, 120) = 8.69$, $p < .01$) and preoccupied and dismissing

Table 10

Attachment Group (Males) Correlations and Group Differences for the
Buss-Durkee Hostility Inventory

	<u>r</u>	<u>F</u>	<u>p</u>
Factor I (Resentment, Suspicion)			
Fearful vs. Others	.36**		
Fearful vs. Secure		6.43	<.01
Preoccupied vs. Others	.42**		
Preoccupied vs. Secure		8.57	<.01
Factor II (Assault, Indirect Hostility, Verbal Hostility, Irritability)			
Preoccupied vs. Others	.34**		
Preoccupied vs. Secure		6.33	<.01

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

Table 11

Attachment Group (Females) Correlations and Group Differences for the
Buss-Durkee Hostility Inventory

	<u>r</u>	<u>F</u>	<u>p</u>
Factor I (Resentment, Suspicion, Guilt)			
Fearful vs. Others	.45**		
Fearful vs. Secure		7.42	<.01
Fearful vs. Dismissing		5.11	<.01
Preoccupied vs. Others	.42**		
Preoccupied vs. Secure		8.69	<.01
Preoccupied vs. Dismissing		7.86	<.01
Factor II (Assault, Indirect Hostility, Verbal Hostility, Negativity)			
Preoccupied vs. Others	.39**		
Preoccupied vs. Secure		4.17	<.01
Preoccupied vs. Dismissing		2.89	<.05

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

groups ($F(3, 120) = 7.86, p < .01$). Group means by gender for the simple ANOVAs on this dimension are presented in Table 11.

Finally, for both males and females, preoccupied persons reported significantly higher ratings than the other groups on the second dimension of the BDHI, characterized by assault, indirect hostility, verbal hostility, and irritability in men, and assault, indirect hostility, verbal hostility, and negativity in women ($r_s = .34$ and $.39, p_s < .01$). For males, this relationship was moderated by a significant group difference between preoccupied and secure groups ($F(3, 66) = 6.33, p < .01$). For females, this relationship was attributable to significant group differences between the preoccupied and secure groups ($F(3, 120) = 4.17, p < .01$), and the preoccupied and dismissing groups ($F(3, 120) = 2.89, p < .05$).

These results support the hypothesis that the two groups theoretically described as having a negative self-concept (fearful and preoccupied) would differ on measures of reasoning, hostility, and aggression from the two groups described as having a positive self-concept. These results indicated that the underlying attachment dimension of anxiety is more predictive of hostility and aggression than the dimension of avoidance. Past research has found that jealousy, and its emotional correlates differ across attachment styles (Gonzaga & John, 1996; Sharpsteen & Kirkpatrick, 1997). It makes intuitive sense that individuals feeling anxious about their relationship--theoretically preoccupied and fearful persons--are more prone to jealous feelings and threats. This makes sense conceptually since hostility and aggression are often behavioral reactions to threats (either real or perceived) to important relationships.

General Discussion

Three features of the present findings should be highlighted. First, the convergent validity between the self and partner reports on the SRMAA, as well as the discriminant validation between the SRMAA and the CRQ suggest that the SRMAA can be used to

assess not only the degree to which participants approximate each of the four conceptualized attachment styles, but also to demonstrate the distinctiveness of each of the four styles.

Second, the present findings also supported the hypothesis that the two groups having a negative self-concept (fearful and preoccupied) would differ on measures of reasoning, hostility, and aggression from the secure and dismissing groups. As a whole, the results supported the notion that Bowlby's earliest etiological theory of the model of the self and others can be used to categorize persons into distinct patterns of attachment, which in turn, can be used to describe schema-consistent (or characteristic) patterns of behavior, such as hostility and aggression.

Finally, although adults and children appear to exhibit similar patterns of behaviors and attitudes as a function of their attachment styles, a relationship that is extended by the present studies, this investigation does not and cannot address whether these patterns reflect the operation of attachment styles that were first formed in early childhood. If we are ever to extend these findings to clinical application, particularly to early intervention and prevention programs, future research should focus on prospective methods of studying the influence of early attachment relationships and their relationship to adult emotional and social adjustment.

Objections and Limitations to Attachment Theory

Measurements

Although many of the recent studies on adult attachment have yielded findings that support attachment theory, there are still some important issues with respect to the measurement and conceptual foundations of the theory that have not been resolved. These issues limit the conclusions that can be drawn about past studies, and indicate which directions future studies should move.

Self-report. One of the first issues with the methodology of this study is its reliance upon self-report measures. These measures are subject to a number of confounds, and one in particular is response bias. Therefore, these reports may not necessarily reflect the individual's actual social relationships and resources (Mikulincer et al., 1993). In addition, because self-report measures are generally based on the participants' perceived styles of attachment at a particular time, which may not be an accurate lifespan appraisal, Collins and Read (1990) concluded that continuously scaled self-report measures demonstrate improved, but at best only modest test-retest stability over the forced-choice measures.

Similar to the issues with attachment theory, the reliability and validity of measurements of aggression may also be compromised by the problems of self-reports. Specifically, it is questionable if these measures have construct validity. Whereas the instruments may measure certain aspects of aggression, they may not be measuring aggression itself. So what may be lacking is a consistent operational definition of aggression across measurements (Tangney et al., 1996).

Retrospective measures. Many argue that the research methodology in attachment has been stifled by its lack of longitudinal studies and reliance upon retrospective self-report measures. The absence of longitudinal studies generates difficulty in testing the validity of the continuity hypothesis (Hendrick & Hendrick, 1994; Lopez, 1995), and thus any conclusions about continuity over the lifespan remain tentative (Simpson et al., 1992). In addition to the self-report nature of retrospective measures as a possible confound, memory recall may be deficient and/or may be altered by current life situations. For example, participants' reports of childhood relationships may have been biased by subsequent adult history and current life satisfaction (Parker, Barrett, & Hickie, 1992).

Furthermore, the measures themselves have been criticized. Gerlsma, Emmelkamp, and Arrindell (as cited in Parker et al., 1992) reviewed 14 factor-analytically derived measures of parental style and concluded that only three met basic psychometric

criteria--the Children's Reports of Parental Behavior Inventory, which is completed by children, the Parental Bonding Instrument, and an inventory for assessing memories of parental rearing behavior. The latter two are completed retrospectively by adults.

It is true that research on attachment is lacking with regard to longitudinal studies. However, the one study in which children with known early attachment histories have been followed as far as preadolescence, the pattern of findings is consistent with the continuity hypothesis (Sroufe, Carlson, & Schulman, 1993). Sroufe and his colleagues have now followed 47 of the several hundred children in their larger sample up to ages 10 and 11. The findings are clear: those children with histories of secure attachment were rated as more self-confident and as having more social competence by camp counselors blind to the research study. Secure children complied more readily with counselor requests and expressed more positive emotions than insecurely-attached children. The majority of those with histories of insecure attachment showed some type of deviant behavior pattern at age 11, such as isolation from peers, bizarre behavior, hyperactivity, or aggressiveness. It should be emphasized that these 47 children are the only ones yet studied over this length of time, and it is risky to build too tall a theoretical foundation on such a small empirical base.

Generalizability

Most of the studies on attachment have dealt with specific populations, such as college students, parent-child dyads, and romantic partners. Research should be conducted on a broader range of samples, including younger adolescents, nonstudent adolescents and young adults, the middle-aged, and the elderly (Bartholomew & Thompson, 1995). Also, there is little research on sex and cultural differences in attachment behavior and styles. The fact that we know relatively little about how such differences may impact adolescent and adult attachment is another reason to be cautious about applying attachment theory to practice. Lopez (1995) warned that sex and cultural differences may thus play important

moderating roles in how adult attachment behavior is expressed and cooperatively managed in close relationships, and future research should carefully examine these possible influences.

While it is true that much of the research on attachment theory has been conducted on college students, research is catching up with the times, as can be seen with the increasing numbers of cross-cultural and gender-related studies. The most thorough cross-cultural analyses have come from Dutch psychologists, van IJzendoorn and Kroonenberg (1988), who examined the results of 32 separate studies in 8 different countries. Although they found some significant differences between some countries studied, the most striking finding from these data is actually their consistency. In each of the eight different countries, a secure attachment style was the most common pattern, found in more than half of the infants studied; in six of the eight, an avoidant pattern was the most common form of insecure attachment. Only in Israel and Japan was this pattern significantly different. There is presently a push to modify the measurements of attachment, particularly the Strange Situation, to reflect these cultural differences (Tavecchio & van IJzendoorn, 1987).

Furthermore, Bartholomew and Horowitz (1991) found that female participants received significantly higher ratings than males on the interview-based preoccupied rating, while male participants received significantly higher rating than females on the dismissing rating. This finding has yet to be replicated using self-report measures, but Horowitz advised to control for these sex differences by including sex as a covariate in correlational and group analyses.

Attachment Theory

Besides the difficulties with measuring attachment styles, there are objections to some of the conceptual foundations of attachment theory. The “bad mother” image, so often hastily extracted from attachment theory, has created one of the theory’s strongest objections. Moreover, Holmes (1993) stated that opponents criticize Bowlby for

overstating his case. Most early studies of attachment were based on severe maternal deprivation cases, and critics assert that Bowlby overgeneralizes this to the general population.

Monotropy. The fact that attachment is, in Bowlby's words, "monotropic"--that is, occurs with a single figure, most usually the mother--has profound implications for psychological development and psychopathology throughout the lifespan (Holmes, 1993). The problem, according to critics, is the attachment theory does not seem to address a hierarchy of attachment figures, such as father, grandparents, siblings, etc. Anthropology has shown that it is normal for child care to be shared by a stable group, usually but not always related, and usually but not always female. Leupnitz (as cited in Holmes, 1993) claimed that Bowlby used biology to justify what is essentially a cultural product of our own "patriarchal but father-absent society" (p. 47).

However, with current attachment research, monotropy is by no means absolute. Researchers have been surprisingly quick to move with the times. Fathers and the extended family are now given their fair share of the attention. Current attachment theory views a child's attachments as best thought of as a hierarchy usually, but not necessarily, with the mother at the top, closely followed by the father (or, rarely, the father followed by the mother), grandparents, siblings, godparents and so on. Inanimate objects, such as toys and "security" blankets are also important to current research (Kreppner, 1987).

Degrees of attachment. Bartholomew and Horowitz (1991) found that none of their participants uniquely fit any one attachment prototype. Instead, most participants reported a mix of tendencies across time and within and across relationships. Many participants were rated as showing elements of two, three, and occasionally all four of the attachment styles. Because most measures of attachment require the participants to classify themselves as belonging to one of the mutually exclusive categories, often without even specifying the extent to which the chosen category characterizes them, meaningful individual differences

that exist between and within a category have not been measured (Hazan & Shaver, 1987; Hendrick & Hendrick, 1989; Simpson et al., 1992).

Although opponents charge that attachment theory is too broad to take into account considerable differences between individuals, the research seems to support the four-style models' discriminant validity. The pattern of correlations among the four attachment styles are found to be consistent with the four-category taxonomy based on the dichotomous views of positive/negative self and others. Bartholomew and Horowitz (1991) found the secure and fearful ratings, as well as the preoccupied and dismissing rating were negatively correlated beyond the .001 level of significance. For both self and partner reports, as well as interview ratings, the styles in adjacent positions showed nonsignificant or negative correlations with one another with one exception: friend ratings of the fearful and dismissing styles were moderately positively correlated.

And whereas Brennan and Shaver (1992) found that attachment styles were meaningfully related to the Big Five personality traits and to some of their facets, they were not simply redundant with them. The reason most likely being that the Big Five constructs are intentionally very general, whereas the attachment-style constructs are relationship specific.

Bartholomew and Horowitz (1991) performed a discriminant analysis to assess the degree to which a variety of interview ratings accounted for the overall discrimination between the four attachment groups based on the self-report measure. The analysis (using a stepwise method with minimization of Wilks' lambda as the selection criteria) resulted in three significant discriminant functions, which correctly classified 92% of the sample, including 86% of the secure group, 94% of the fearful group, and 100% of both the preoccupied and dismissing groups. Twelve of the 15 interview rating scales used in this study independently contributed significant variance to the final functions, confirming that group distinctions are multiply determined. Thus, it would appear that the psychological

community may best be served by future research that uses a variety of measures to account for a greater proportion of the variance within and between the attachment styles.

Determinism. Finally, the theory itself does not seem to allow much capacity for modification. Research suggests that major life transitions involving the adoption of new social roles (such as leaving for college, getting married, having children, and retiring) may be opportune times for evaluating and potentially reorganizing attachment representations (Caspi & Elder, 1988; Ricks, 1985).

Researchers have shown (e.g., Main et al., 1985) that some parents whose childhood attachments were insecure demonstrated the ability to cognitively work through negative issues, allowing them to become sufficiently secure in their own parenting skills and resulting in an improved capacity to produce secure offspring (Parker et al., 1992); and that close affectional ties may be instrumental in modifying the effects of earlier parental deprivation (Brown & Harris, 1978; Parker et al., 1992; Parker & Hadzi-Pavlovic, 1984). Furthermore, research has shown that some participants who had no developmental vulnerabilities who cohabitate with a dysfunctional partner may develop the same psychiatric disorder as a participant who reports both past and current relationships as deficient. In other words, insecure attachment is not always a precursor to adult insecure attachment (Hickie et al., 1990; Hickie, Parker, Wilhelm, & Tennant, 1991; Parker et al., 1992).

In their longitudinal study of child rearing, Shaefer and Bayley (as cited in Bartholomew & Horowitz, 1991) found significant consistency over time for the warmth dimension of maternal behavior. They suggested that the degree of warmth experienced and expressed within the family of origin may therefore be particularly salient in family attachment representations, which may in turn mediate the affiliation of dimensions of peer and romantic relations, at least up to late adolescence.

Although attachment theory assumes the continuity across child and adult attachment styles, it does allow capacity for modification if a secure base can be formed and internal working models are restructured. Post-Bowlbian research has begun to provide a picture of the kinds of caregiver/careseeker interactions that are likely to give rise to a secure base experience for the growing child. The children of parents who are responsive and attuned and see their infants as separate are likely to be better adjusted socially, more able to reflect on their feelings, and to weave their experience into a coherent narrative (Holmes, 1993). These findings can be compared with the Rogerian view that effective therapists show empathy, honesty, and nonpossessive warmth (Truax & Carkhuff, 1967). The good therapist acts, mainly at an unconscious and non-verbal level, like a good parent with his/her patients.

Attachment theory predicts that when someone is faced with illness, distress, or threat they seek out an attachment figure from whom they obtain relief. Once a secure base is established attachment behavior is assuaged, and they can begin to explore. In the case of therapy, the exploration should be of the situation that has caused distress and the feelings it has aroused

The results of the present studies suggest that attachment patterns can indeed be reliably measured, and that those patterns can be used to reliably predict schema-consistent behaviors and pathologies. The success of current attachment-related interventions (Liotti, 1993), which focus on cognitive restructuring of the internal working models formed from infancy, further supports the continuity of attachment patterns throughout the lifespan.

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Appendix A

Demographics Questionnaire

Age _____ Male _____ Female _____

Ethnicity _____

Year in School 1 _____ 2 _____ 3 _____ 4 _____ other _____

Major _____ Minor _____

Are you currently in a relationship of at least 6 months duration? Yes _____ No _____

Appendix B

Close Relationships Questionnaire

1.) Read each of the four self-descriptions below (A, B, C, and D) and then place a check mark next to the single alternative that best describes how **your partner** feels (or is nearest the way **your partner** is) in close relationships.

(Note: The terms "close" and "intimate" refer to psychological and emotional intimacy, not necessarily to sexual intimacy.)

- A. It is easy for him/her to become emotionally close to others. He/She is comfortable depending on others and having others depend on him/her. He/She doesn't worry about being alone or having others not accept him/her.
- B. He/She is uncomfortable getting close to others. He/She wants emotionally close relationships, but he/she finds it difficult to trust others completely, or to depend on them. He/She worries that he/she will be hurt if he/she allows him/herself to become too close to others.
- C. He/She wants to be completely emotionally intimate with others, but he/she often finds that others are reluctant to get as close as he/she would like. He/She is uncomfortable being without close relationships, but he/she sometimes worries that others don't value him/her as much as he/she values them.
- D. He/She is comfortable without close emotional relationships. It is very important to him/her to feel independent and self-sufficient, and he/she prefers not to depend on others or have others depend on him/her.

2.) Now rate all of the preceding relationship styles (A, B, C, and D) according to the extent to which you think each description corresponds to your partner's general relationship style.

	Not at all like him/her			Somewhat like him/her		Very much like him/her	
Style A	1	2	3	4	5	6	7
Style B	1	2	3	4	5	6	7
Style C	1	2	3	4	5	6	7
Style D	1	2	3	4	5	6	7

Appendix C

Self-Report Measure of Adult Attachment

Instructions: 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 scale:

Disagree Strongly		Neutral/Mixed			Agree Strongly	
1	2	3	4	5	6	7
1. I prefer not to show my partner how I feel deep down.
 2. I worry about being abandoned.
 3. I am very comfortable being close to romantic partners.
 4. I worry a lot about my relationships.
 5. Just when my partner starts to get close to me I find myself pulling away.
 6. I worry that romantic partners won't care about me as much as I care about them.
 7. I get uncomfortable when a romantic partner wants to be very close.
 8. I worry a fair amount about losing my partner.
 9. I don't feel comfortable opening up to romantic partners.
 10. I often wish that my partners' feelings for me are as strong as my feelings for them.
 11. I want to get close to my partners, but I keep pulling back.
 12. I often want to merge completely with romantic partners, and this sometimes scares me.
 13. I am nervous when my partner gets too close to me.
 14. I worry about being alone.
 15. I feel comfortable sharing my private thoughts and feelings with partners.
 16. My desire to be close sometimes scares people away.
 17. I try to avoid getting too close to my partner.

Use the following rating scale on every item:

Disagree Strongly		Neutral/Mixed			Agree Strongly	
1	2	3	4	5	6	7
18. I need a lot of reassurance that I am loved by my partner.
 19. I find it relatively easy to get close to my partner.
 20. Sometimes I feel that I force partners to show more feeling, more commitment.
 21. I find it difficult to allow myself to depend on romantic partners.
 22. I do not often worry about being abandoned.
 23. I prefer not to be too close to romantic partners.
 24. If I can't get my partner to show interest in me I get upset or angry.
 25. I tell my partner just about everything.
 26. I find that my partners don't want to get as close as I would like.
 27. I usually discuss my problems and concerns with my partner.
 28. When I am not involved in a relationship, I feel somewhat anxious and insecure.
 29. I feel comfortable depending on romantic partners.
 30. I get frustrated when my partner is not around as much as I would like.
 31. I don't mind asking romantic partners for comfort, advice, or help.
 32. I get frustrated if romantic partners are not available when I need them.
 33. It helps me to turn to my romantic partner in times of need.
 34. When romantic partners disapprove of me, I feel really bad about myself.
 35. I turn to my partner for many things, including comfort and reassurance.
 36. I resent it when my partner spends time away from me.

Appendix D

Buss-Durkee Hostility Inventory

Instructions: Please answer the following questions either true (1) or false (2).

1. I seldom strike back, even if someone hits me first.
2. I sometimes spread gossip about people I don't like.
3. Unless somebody asks me in a nice way, I won't do what they want.
4. I lose my temper easily, but get over it quickly.
5. I don't seem to get what is coming to me.
6. I know that people tend to talk about me behind my back.
7. When I disapprove of a friend's behavior I let them know it.
8. The few times I have cheated, I have suffered unbearable feelings of remorse.
9. Once in a while I cannot control my urge to harm others.
10. I never get mad and throw things.
11. When someone makes a rule I don't like, I am tempted to break it.
12. Sometimes people bother me just by being around.
13. I feel that other people always seem to get the breaks.
14. I tend to be on guard with people who are somewhat more friendly than expected.
15. I often find myself disagreeing with people.
16. I sometimes have bad thoughts that make me feel ashamed.
17. I can think of no good reason for ever hitting someone.
18. When I am angry I sometimes sulk.
19. When someone is bossy, I do the opposite of what he/she asks.
20. I am irritated a great deal more than people are aware of.
21. I don't know any people that I downright hate.
22. There are a number of people who seem to dislike me very much.
23. I can't help getting into arguments when people disagree with me.
24. I feel that people who are lazy on the job must feel very guilty.
25. If somebody hits me first, I let them have it.
26. When I am mad, I sometimes slam doors.
27. I am always patient with others.
28. Occasionally when I am mad at someone I will give them the silent treatment.

29. When I look back on what's happened to me, I can't help feeling mildly resentful.
30. There are a number of people who seem to be jealous of me.
31. I demand that people respect my rights.
32. It depresses me to think that I did not do more for my parents.
33. Whoever insults me or my family is asking for a fight.
34. I never play practical jokes.
35. It makes my blood boil to have somebody make fun of me.
36. When people are bossy, I take my time just to show them.
37. Almost every week I see someone I dislike.
38. I sometimes have the feeling that others are laughing at me.
39. Even when my anger is aroused, I don't use strong language.
40. I am concerned about being forgiven for my sins.
41. People who continually pester me are asking for a punch in the nose.
42. I sometimes pout when I don't get my way.
43. If somebody annoys me, I am apt to tell them what I think of them.
44. I often feel like a powder keg ready to explode.
45. Although I don't show it, I am sometimes eaten up with jealousy.
46. My motto is, "Never trust strangers."
47. When people yell at me, I yell back.
48. I do many things that make me feel remorseful afterwards.
49. When I really lose my temper, I am capable of slapping someone.
50. Since the age of ten, I have never had a temper tantrum.
51. When I get mad, I say nasty things.
52. I sometimes carry a chip on my shoulder.
53. If I let people see the way I feel, I would be considered a hard person to get along with.
54. I commonly wonder what hidden reason another person may have for doing something nice for me.
55. I could not put someone in their place, even if they deserved it.
56. Failure gives me a feeling of remorse.
57. I get into fights about as often as the next person.
58. I can remember being so angry that I picked up the nearest thing and broke it.

59. I often make threats that I don't really mean to carry out.
60. I can't help being a little rude to people I don't like.
61. At times, I feel I got a raw deal out of life.
62. I used to think that most people told the truth, but now I know otherwise.
63. I generally cover up my opinion of others.
64. When I do wrong, my conscience punishes me severely.
65. If I have to resort to physical violence to defend my rights I will.
66. If someone doesn't treat me right, I don't let it annoy me.
67. I have no enemies who really wish to harm me.
68. When arguing, I tend to raise my voice.
69. I often feel that I have not lived the right kind of life.
70. I have known some people who pushed me so far that it came to blows.
71. I don't let a lot of unimportant things irritate me.
72. I seldom feel that people are trying to anger or insult me.
73. Lately, I have been kind of grouchy.
74. I would rather concede a point than get into an argument about it.
75. I sometimes show my anger by banging on the table.

Appendix E

Conflict Tactics Scale

No matter how well a couple gets along, there are times when they disagree on major decisions, get annoyed about something the other person does, or just have spats or fights because they're in a bad mood or tired or for some other reason. They also use many different ways of trying to settle their differences. Following is a list of some things that you and your partner might have done when you had a dispute. First, please indicate if you have ever done it, and if so, how often you have done it in the past six months, using the following scale:

<u>Never</u>	<u>Once</u>	<u>Twice</u>	<u>3-5 times</u>	<u>6-10 times</u>	<u>11-20 times</u>	<u>>20 times</u>							
0	1	2	3	4	5	6							
							<u>Ever happened</u>		<u>How often, past 6 months</u>				
a. Discussed the issue calmly	yes	no	?	0	1	2	3	4	5	6			
b. Got information to back up my side	yes	no	?	0	1	2	3	4	5	6			
c. Brought in or tried to bring in someone to help settle things	yes	no	?	0	1	2	3	4	5	6			
d. Insulted or swore	yes	no	?	0	1	2	3	4	5	6			
e. Sulked and/or refused to talk	yes	no	?	0	1	2	3	4	5	6			
f. Stomped out of the room	yes	no	?	0	1	2	3	4	5	6			
g. Cried	yes	no	?	0	1	2	3	4	5	6			
h. Did or said something for spite	yes	no	?	0	1	2	3	4	5	6			
i. Threatened to hit or throw something	yes	no	?	0	1	2	3	4	5	6			
j. Threw or smashed or hit or kicked something	yes	no	?	0	1	2	3	4	5	6			
k. Threw something at my partner	yes	no	?	0	1	2	3	4	5	6			
l. Pushed, grabbed, or shoved	yes	no	?	0	1	2	3	4	5	6			
m. Slapped my partner	yes	no	?	0	1	2	3	4	5	6			
n. Kicked, bit, or hit with a fist	yes	no	?	0	1	2	3	4	5	6			
o. Hit or tried to hit with something	yes	no	?	0	1	2	3	4	5	6			
p. Beat up my partner	yes	no	?	0	1	2	3	4	5	6			

Appendix F

INSECURE ATTACHMENT AS A PREDICTOR OF AGGRESSION IN ADULTS

A Thesis Proposal

Presented to

the Faculty of the Department of Psychology

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Stacey M. Pederson

April 7, 1997

APPROVED BY THE MASTER'S THESIS COMMITTEE

A handwritten signature in cursive script, appearing to read "Robert Cooper", written over a horizontal line.

Robert Cooper, Professor and Chair

A handwritten signature in cursive script, appearing to read "Alicia J. Knoedler", written over a horizontal line.

Alicia J. Knoedler, Lecturer

A handwritten signature in cursive script, appearing to read "Robert Pellegrini", written over a horizontal line.

Robert Pellegrini, Professor

San José State
UNIVERSITY

Office of the Academic
Vice President

Associate Vice President
Graduate Studies and Research

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TO: Stacey M. Pederson
904 Desert Isle Dr.
San Jose, CA 95117

FROM: Serena W. Stanford *Serena W. Stanford*
AAVP, Graduate Studies & Research

DATE: March 28, 1997

The Human Subjects-Institutional Review Board has approved your request to use human subjects in the study entitled:

"Insecure Attachment as a Precursor to
Aggression in Adults"

This approval is contingent upon the subjects participating in your research project being appropriately protected from risk. This includes the protection of the anonymity of the subjects' identity when they participate in your research project, and with regard to any and all data that may be collected from the subjects. The Board's approval includes continued monitoring of your research by the Board to assure that the subjects are being adequately and properly protected from such risks. If at any time a subject becomes injured or complains of injury, you must notify Serena Stanford, Ph.D., immediately. Injury includes but is not limited to bodily harm, psychological trauma and release of potentially damaging personal information.

Please also be advised that all subjects need to be fully informed and aware that their participation in your research project is voluntary, and that he or she may withdraw from the project at any time. Further, a subject's participation, refusal to participate, or withdrawal will not affect any services the subject is receiving or will receive at the institution in which the research is being conducted.

If you have any questions, please contact me at (408) 924-2480.

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