# When "New" Meets "Old": Configurations of Adult Attachment Representations and Their Implications for Marital Functioning

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Two studies addressed the implications of concordance versus discrepancy of attachment representations in individuals at 2 stages in their marital relationships. Engaged (n = 157) and dating (n = 101) couples participated in a multimethod 6-year longitudinal study of adult attachment. Individuals completed the Adult Attachment Interview (AAI), the Current Relationship Interview (CRI), and various questionnaires and were observed in interactions with partners. On the basis of AAI and CRI classifications, participants were placed in one of four groups: Secure<sub>AAI</sub>/Secure<sub>CRI</sub>, Secure<sub>AAI</sub>/Insecure<sub>CRI</sub>, Insecure<sub>AAI</sub>/Secure<sub>CRI</sub>, or Insecure<sub>AAI</sub>/Insecure<sub>CRI</sub>. Each of the configurations showed a particular pattern of behavior, feelings about relationships and the self, and likelihood of relationship breakup. The findings of the studies address important points about the protective effects of attachment security and have interesting implications for the extension of attachment theory into adulthood.

The value of attachment theory in understanding marriage rests in large part on the theory's emphasis on links between childhood relationships and later marital success, "links ... that are underemphasized in or absent from exchange or behavioral theories" (Karney & Bradbury, 1995, p. 6). However, attachment theory has been criticized for its failure to describe how personal history and individual differences "affect the development of a marriage once two people with different relationship needs come together" (Karney & Bradbury, 1995, p. 6).

The goal of the attachment behavioral system is to promote safety (and felt security) through a secure base relationship with an attachment figure. The theory focuses on how relationships with attachment figures have an impact on development, adaptive functioning, stress management, safety, and well-being. The attachment system provides an organizational framework for requesting help when needed and for recognizing requests for help and providing support (Crowell, Treboux, Gao, et al., 2002). Given this function, individual differences in attachment organization can be expected to play a role in the development of marriage and the challenges faced by couples (Paley, Cox, Harter, & Margand, 2002).

In adult relationships, individual differences in the cognitive organization of the attachment system have at least two compo-

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nents. The first organizing element is the generalized representation of attachment that has its origins or foundation in childhood attachment experiences with caregivers and that generalizes to other attachment experiences and relationships (Bowlby, 1969/ 1982). The second is the specific representation of attachment that emerges out of attachment experiences within the adult partnership. In the two studies presented here, we investigated the implications of individual differences in configurations (consistency vs. discrepancy) of adults' generalized and specific attachment representations for their relationships with partners and experiences of stressful life events.

## Attachment Representations

Individual differences in early secure base behavior reflect a child's knowledge and expectations of his or her own behavior and the parent's likely behavior (Ainsworth, Blehar, Waters, & Wall, 1978; Bretherton, 1985). With repeated experiences with the caregiver, secure base behaviors become commonplace and automatic, not requiring active or conscious reappraisal for each occasion. With the emergence of representational skills, individuals abstract and construct representations of their own secure base experiences. Over time, these early specific representations generalize. Generalized attachment representations are felt to be scriptlike cognitions and beliefs, grounded in experience over time, about the function and use of attachment relationships, how such relationships operate, and what one gains from them (Bretherton, 1985; Main, Kaplan, & Cassidy, 1985; H. Waters, Waters, & Crowell, 2000). They serve as a filter for understanding experience and guide action in attachment-related situations. The more coherent, informed, and organized the representation, the more effective a guide it is likely to be, both in the current relationship and in subsequent attachment relationships. Thus, the generalized representation is a construct developed over many years through experiences with attachment figures, and as such, it can be considered a resource or knowledge base about attachment relationships and their function.

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In adulthood, parents are often joined and/or replaced as attachment figures by adult partners (Ainsworth, 1985, 1989, 1991; Weiss, 1982). However, the quality of a partner's attachment history or representation is not a major selection criterion for young adults choosing partners. Correspondence between partners' representations, using the Adult Attachment Interview (AAI) as the measure of the generalized representation (George, Kaplan, & Main, 1985; Main & Goldwyn, 1994), has been found to be approximately 55%–60% (Crowell, Treboux, & Waters, 2002; van IJzendoorn & Bakermans-Kranenburg, 1996). Although this correspondence is statistically significant, it is clear that many individuals have partners with generalized attachment representations qualitatively different from their own.

Nevertheless, the generalized representations developed over the course of childhood and adolescence are expected to influence or condition an individual's beliefs and expectations about attachment in particular adult relationships. Specific representations about adult attachment relationships emerge in the context of the developing adult attachment relationship<sup>1</sup> (Crowell & Owens, 1996; Crowell, Treboux, & Waters, 2002; Furman, Simon, Shaffer, & Bouchey, 2002; Owens et al., 1995). This representation, at least early in the relationship, is more of a work in progress than is the generalized representation, because it reflects the current state of mind or status of understanding of attachment in the current adult relationship (Crowell, Treboux, & Waters, 2003). The majority of late adolescents and young adults show a correspondence between the coherence of the generalized representation and the coherence of the specific representation (Crowell et al., 2003; Furman et al., 2002; Owens et al., 1995). A significant minority show a discrepancy between the generalized and the specific representations. Hence, in addition to the generalized representation, the qualities and perceptions of the adult attachment relationship appear to play a role in the development of a relationship-specific representation.

# Assessing the Generalized Representation: The Adult Attachment Interview

The AAI (George et al., 1985; Main & Goldwyn, 1994) is a well-known measure developed to assess the generalized representation of attachment (Crowell, Fraley, & Shaver, 1999; Hesse, 1999), "the security of attachment in its generality rather than in relation to any particular present or past relationship" (Main et al., 1985, p. 78). Adults who have a secure state of mind present a coherent and objective view of positive or negative attachment relationships with parents and other attachment figures. They present their experiences in a believable, organized manner, and they view attachment relationships as important influences on their development. In their discourse, regardless of whether their attachment experiences were positive or negative, they value attachment and convey knowledge of the secure base concept or script, that is, that when a problem arises, seeking an attachment figure is desirable and productive and the attachment figure should be responsive and helpful in getting the individual back on track. Although the interview can be analyzed in a variety of ways, coherence, or the way the adult presents his or her story and its meaning at the present time (not the events described), is considered the key element of attachment security (Main & Goldwyn, 1994; E. Waters, Treboux, Fyffe, & Crowell, 2001).

In contrast, adults who are insecure with respect to attachment representations violate Grice's maxims of coherent discourse (Grice, 1975; Main & Goldwyn, 1994). In their descriptions of attachment relationships and experiences, they are contradictory, give too much or too little information to be credible, present irrelevant information, and/or have a poor manner (e.g., excessive use of jargon, meaningless phrases, actively angry speech; Main & Goldwyn, 1994). Again, it is the quality of the adult state of mind and discourse, that is, the lack of correspondence between reported experience and the assessment of its meaning, rather than the nature of the reported experiences with parents, that reflects a weak or distorted generalized knowledge base with respect to attachment.

# Assessing the Specific Representation: The Current Relationship Interview

The Current Relationship Interview (CRI; Crowell & Owens, 1996) was developed to assess the specific representation of adult attachment relationships that develops in the course of relationship experiences with a particular adult partner. The interview and scoring system parallel those of the AAI, and coherent discourse with respect to adult attachment relationships reflects the *current* level of knowledge of the secure base concept within the particular relationship. Adults classified as secure view partnerships as secure base relationships and speak to the idea of mutual support and development. That is, they convey that a core function of the relationship is to help the partners develop as individuals and as a couple in both ordinary circumstances and in times of difficulty (Ainsworth, 1985, 1991; Crowell & Owens, 1996; Crowell, Treboux, & Waters, 2002; Weiss, 1982).

In contrast, individuals classified as insecure are incoherent in their discourse about the current relationship. With respect to the value of the relationship, they may place strong emphasis on material goals (buying a house), leisure activities (vacations together), or closeness at the expense of individual development. At the same time, they may minimize discord or the need for support or the value of shared experience and growth. Insecurity or incoherence may be related to one of two general issues. (a) There may be a weak understanding of attachment overall, in which case the individual has limited capacity to comprehend, appreciate, and integrate attachment experiences within the relationship regardless of the partner's behavior. (b) Alternatively, there may be a good understanding of attachment overall, but the individual is not able to or has not yet integrated attachment experiences within this particular relationship because of either confusion regarding his or her partner's behavior or the developmental stage of the relationship (Crowell et al., 2003). In either case, regardless of how satisfied or dissatisfied with the relationship the individual seems to be, the individual does not convey a clear knowledge or understanding of the secure base concept within the relationship.

<sup>&</sup>lt;sup>1</sup> We use the term *specific* to indicate a representation of adult–adult attachment relationships. The representation is informed by romantic relationships, both observed and directly experienced. Because the current relationship with the partner is the most dominant and informative, we use the term *specific* to distinguish this construct from the more general, or "foundation," model that develops out of childhood and adolescence.

# Three "Models" of Attachment Security and Couples' Relationships

As adult attachment researchers have considered the relations between attachment representations and couples' behavior and functioning, they have approached the question from several perspectives.

## Attachment Security as a "Trait"

Although attachment security is defined as expectations of a relationship or as a type of relationship, most commonly it has been treated as a traitlike construct. From this perspective, it is assumed that a secure representation (whether generalized or specific) is a good thing and that it will be associated with other positive aspects of the individual or the relationship regardless of other influences.

Indeed, recent work shows that generalized and specific representations of attachment are related to couples' interactions and to reports about the relationship (Abbott, 2002; Bouthillier, Julien, Dube, Belanger, & Hemelin, 2002; Brennan & Shaver, 1995; Cohn, Silver, Cowan, Cowan, & Pearson, 1992; Creasey, 2002; Crowell & Treboux, 2000; Crowell, Treboux, Gao, et al., 2002; Feeney, 1999; Kobak, 1991; Otter-Henderson & Creasey, 2001; Owens et al., 1995; Paley, Cox, & Burchinal, 1999; Paley et al., 2002; Riggs & Wampler, 1999; Roisman, Padron, Sroufe, & Egeland, 2002; Simpson, Rholes, & Nelligan, 1992; Simpson, Rholes, Orina, & Grich, 2002). Broadly speaking, individuals who are secure with respect to attachment report more positive feelings about their partners and engage in more positive interactions with them than do those who are insecure.

Nevertheless, many of these studies have not addressed developmental issues in adult attachment because they have been conducted very early in relationships or have considered a dating relationship to be comparable to a marital relationship and/or early marriage to be comparable to a long-standing marriage (e.g., Abbott, 2002; Bouthillier et al., 2002; Brennan & Shaver, 1995; Cohn, Silver, et al., 1992; Creasey, 2002; Crowell & Treboux, 2000; Crowell, Treboux, Gao, et al., 2002; Feeney, 1999; Kobak, 1991; Otter-Henderson & Creasey, 2001; Owens et al., 1995; Paley et al., 1999, 2002; Riggs & Wampler, 1999; Roisman et al., 2002; Simpson et al., 1992, 2002). The evidence that a secure generalized representation is associated with better marital behavior and functioning is not as clear as one would hope (e.g., Crowell & Treboux, 2000; Crowell, Treboux, Gao, et al., 2002; Kobak, 1991; Paley et al., 1999). The findings do not speak well to the criticism raised by Karney and Bradbury (1995) about the course of relationships; for example, security of generalized attachment representations does not predict divorce and separation very well, a key issue in the marital field.

# Dyadic Compatibility

Another more complex approach to the question of attachment representations and couples' relationships has been to consider the correspondence between the two partners' generalized attachment representations. This approach also has a trait aspect (that it is inherently good to be secure) but tries to take into account the problem of assortative mating. In this formulation, security in both partners' representations would lead to compatibility within a relationship. Furthermore, there is a possibility that the security of one partner may be beneficial to an insecure partner, through modeling of behavior and/or corrective experience (Das Eiden, Teti, & Corns, 1995).

Overall, there has been limited investigation of this idea. There is evidence that women classified as insecure seem to benefit from secure partners with respect to parenting (Cohn, Silver, et al., 1992; Das Eiden et al., 1995; Paley et al., 2002). Creasey (2002) reported that positive behaviors are more likely in couples with an AAI secure woman and that negative conflict behaviors are more likely in those with an AAI insecure man. However, correspondence or lack thereof between partners' AAI classifications appears to have few implications for the development of representational security or relationship outcome, although couples in which both partners have insecure specific representations are at higher risk for divorce than are other pairings (Crowell & Treboux, 2000; Paley et al., 2002).

# Configurations of Generalized and Specific Representations: Coherence Within Individuals

Rather than take the approach that generalized and relationshipspecific representations are independent guides or contributors to relationship functioning and outcome or that the fit between partners is the key, we consider the implications or meaning of the coherence of the two types of representations within individuals. How do the "new" relationship and the specific representation of that relationship confirm or challenge the "older," predisposing, and more generalized concept of the secure base phenomenon at any given time in the relationship? Whereas the specific representation is likely to be influenced by ongoing attachment-relevant events in the relationship and therefore may fluctuate (Crowell et al., 2003), we hypothesize that it is always referenced against the generalized representation. The correspondence or lack thereof is part of the feedback loop of the attachment control system and shapes feelings and behaviors within the relationship at any stage in the relationship. Furthermore, confirmation of or challenge to the generalized representation is likely to have implications for representational stability and change (Crowell, Treboux, & Waters, 2002; Crowell et al., 2003).

On the basis of our work with the AAI and the CRI, we define consistency and discrepancy of generalized and specific representations as follows. Adults who have a secure state of mind with respect to both attachment representations present coherent and often positive views of both childhood and adult attachment relationships (Secure<sub>AAI</sub>/Secure<sub>CRI</sub>). Adults who are insecure with respect to their attachment representations are incoherent in their discourse about both childhood and adult attachment relationships (Insecure<sub>AAI</sub>/Insecure<sub>CRI</sub>). In each case, generalized expectations and beliefs that developed throughout childhood and adolescence are confirmed and upheld within the adult partnership.

The mismatches with respect to attachment representations are particularly interesting. One type of inconsistency occurs when the individual is coherent (secure) with respect to his or her generalized representation but is incoherent regarding the relationship with the partner; that is, generalized expectations are challenged within the adult partnership (Secure<sub>AAI</sub>/Insecure<sub>CRI</sub>). The alternative type of inconsistency of representations occurs when dis-

course regarding early attachment experiences is incoherent. Despite this lack of knowledge, the individual seems to grasp that the adult partnership should be a secure base relationship, and the current relationship is felt to offer something new and valuable to the individual (Insecure<sub>AAI</sub>/Secure<sub>CRI</sub>).

# Research Questions and Hypotheses

We hypothesized that these attachment configurations denoting the interaction of the predisposing or generalized representation and the current specific representation would have implications for the developmental course of the relationship and marital outcome. In our analyses, we distinguished between reports of relationship behaviors and feelings about the relationship, given that in contrast to a secure attachment representation, an insecure state of mind reflects a disconnect between reported experience and perceptions or assessments of that experience (Bowlby, 1969/1982; Crowell et al., 2003; Main & Goldwyn, 1994; Main et al., 1985). We anticipated that concordant representations (Secure<sub>AAI</sub>/Secure<sub>CRI</sub> and Insecure<sub>AAI</sub>/Insecure<sub>CBI</sub>) would be associated with low relationship distress because, as described above, current thinking is compatible or in accord with generalized expectations. In other words, the current relationship representation does not challenge or violate the generalized construct. We further anticipated that individuals with secure generalized and specific representations (Secure<sub>AAI</sub>/Secure<sub>CRI</sub>) would "behave well" and that their security status would be a protective factor in times of stress. In contrast, we anticipated a divergence between relationship feelings and behaviors in Insecure<sub>AAI</sub>/Insecure<sub>CRI</sub> individuals as evidenced in their discourse about attachment; in other words, we anticipated there would be evidence of their impaired ability to assess the meaning of attachment experiences in the relationship.

Discrepant representations were hypothesized to lead to relationship distress when a secure generalized representation was challenged or violated by the current relationship conceptualization (Secure<sub>AAI</sub>/Insecure<sub>CRI</sub>). Such individuals understand the attachment behavioral script, and we anticipated that distress would arise from their inability to match current experience with expectations of attachment relationships in general. Their distress is that of the individual who cannot use his or her attachment figure effectively (Bowlby, 1973). We were also interested in whether the opposite configuration (Insecure<sub>AAI</sub>/Secure<sub>CRI</sub>), in which the fundamental postulate (generalized representation) is weak but the secure base concept seems to hold within the current relationship, would have positive implications for relationship functioning. Further, we investigated whether such a configuration would be good enough in conditions of stress or would prove "shaky," that is, would be associated with relationship distress and dysfunction. We present the results of two studies that examined configurations of attachment representations with respect to couples' interactions, relationship course, reports of relationship feelings and behaviors, and experiences of stressful events.

Study 1 examined marital outcome and relationship quality over 6 years as a function of attachment configuration. It investigated three relations: (a) the relations between the configurations just prior to marriage and concurrent associations with relationship variables, (b) the relations between premarital configurations and marital outcome (e.g., divorce), and (c) the association between premarital attachment configurations and the course of marriage from just prior to the wedding to 6 years of marriage in those individuals who stayed married. This last aspect of Study 1 provided information about attachment configurations and the development of the marriage while omitting the most distressed individuals (those who separated or divorced). We anticipated that the couples' attachment relationships at 6 years would be more established than during their engagement and that this might have implications for the meaning of the attachment configurations.

Study 2 addressed the implications of the representational configurations with respect to negative life events. Given that the attachment system is a mechanism of coping, the patterns of attachment are typically most evident under stressful conditions (Ainsworth et al., 1978; Main & Goldwyn, 1994). We therefore anticipated that the experience of stressful life events would highlight differences among the attachment configurations with respect to relationship feelings and behavior. We investigated the relations among attachment security, both generalized and specific, stressful life events, and relationship variables in a sample of generally well-functioning young married couples.

#### Study 1

#### Method

## Participants

One hundred fifty-seven couples (N = 314) were assessed within 2 weeks to 3 months of their wedding dates. The sample was predominantly White (95%) and at the time of recruitment was representative of the population of young adults obtaining marriage licenses in Suffolk County, NY. The mean age of the women was 23.5 years (SD = 1.5), and that of the men was 24.9 years (SD = 2.3). None of the participants had been married before, and they had no children (or known pregnancies) at the time of recruitment and assessment. The mean number of years of education was 14.8. On average, couples had been together for 51 months (SD =25.66). Forty-eight percent of the participants reported no serious relationship prior to that with their current partner, 36% reported they went steady with at least one other person but never considered marriage, and 16% had considered marrying someone else before their current partner. Duration of relationship prior to marriage was not significantly related to any variable assessed, including AAI and CRI coherence, secure base behavior, raw IQ score, positive feelings about the relationship, or reports of discord and aggression (mean r = -.01; range = -.002 for IQ score to -.10 for passion).

Upon being contacted approximately 6 years after the initial assessment, all but 1 of the original couples (n = 156 couples, 312 individuals) provided information about their marital status: 78% of the couples (n = 122) were married (M = 69.7 months of marriage, SD = 15.3), 19% (n = 30) had separated or divorced, and 3% (n = 5) of the couples had never marriage (Gottman, Coan, Carrere, & Swanson, 1998; Houston, Caughlin, Houts, Smith, & George, 2000; Lindahl, Clements, & Markman, 1998).

The assessment battery was repeated 6 years after initial participation. Seventy-two percent of the original participants (n = 225 individuals) completed all assessments at 6 years. Retention of married individuals was 79%, and retention of individuals who did not marry or were no longer married to their original partners was 47%. The overall retention rate is consistent with that in other studies of marriage (Karney & Bradbury, 1995). Data analyses for Study 1 were conducted on returning individuals who were still married to their original partners: (a) 92 original couples (n = 184 individuals) and (b) 8 individuals who returned without their spouses. Overall, participation at the 6-year assessment for the total sample (including married, separated, and divorced couples) was correlated with

the premarital variables of IQ, r(309) = .15,  $p \le .01$ ; educational level, r(309) = .10,  $p \le .05$ ; and CRI coherence, r(296) = .13,  $p \le .05$ . Participation was unrelated to AAI coherence. When we examined the sample who remained married, the only variable that differentiated those who participated at 6 years and those who did not was IQ score, r(244) =.13,  $p \le .05$ .

## Procedure

At both the premarital and 6-year assessments, participants attended two 2-hr laboratory sessions. In the first session, participants were interviewed with the AAI and completed questionnaires describing their relationships. Couples were videotaped in the problem-solving task. In the second session, they were interviewed with the CRI and completed additional questionnaires. The measures were administered to the husband and wife separately by two researchers. A fixed order of assessments was designed to minimize carryover and fatigue. Participants were reimbursed for their efforts (\$150 per couple or \$75 per individual).

At the time of the 6-year assessment, approximately one third of the couples were unable to come to the laboratory (e.g., they lived out of state). For these individuals, the AAI and the CRI were conducted on the telephone on separate occasions, and questionnaires were mailed. Participants were asked to complete the questionnaires and interviews when the partner was not present in the household. Videotaped interactions were not obtained for these individuals or for participants who came without partners. Videotape data for both the premarital and 6-year assessments were available for 46 couples (92 individuals).

## Attachment-Related Measures

The Adult Attachment Interview (AAI; George et al., 1985). This instrument was used to assess the generalized representation or state of mind regarding attachment. The interview asks about childhood attachment experiences with parents and the influence of those experiences on personality and development. The interview is scored from a transcript using scales that, in the coder's opinion, characterize the adult's experience with each parent: mother and father as loving, rejecting, neglecting, involving, and/or pressuring (Main & Goldwyn, 1994). A second set of scales is used to assess state of mind and discourse style, for example, coherence, idealization, active anger, derogation, and passivity of speech. Although childhood experiences are discussed and rated, it is the meaning conveyed by the adult's discourse that reflects the state of mind regarding attachment *in general.* 

The validity and reliability of the interview are well demonstrated (Crowell, Fraley, & Shaver, 1999; Crowell et al., 1996; Hesse, 1999; Sagi, van IJzendoorn, Scharf, Korne-Karje, Joels, & Mayseless, 1994; van IJzendoorn & Bakermans-Kranenburg, 1996). AAI coherence is associated with both parenting behavior and behavior with adult partners, and with scripts regarding parent–infant attachment and adult–adult attachment, suggesting that the measure both conceptually and empirically reflects a generalized representation of attachment (Bouthillier et al., 2002; Cohn, Cowan, Cowan, & Pearson, 1992; Creasey, 2002; Crowell, Fraley, & Shaver, 1999; Crowell, Treboux, Gao, et al., 2002; Hesse, 1999; Kobak, 1991; Main et al., 1985; Paley et al., 2002; E. Waters, Crowell, Elliott, Corcoran, & Treboux, 2002; H. Waters, Rodrigues, & Ridgeway, 1998; H. Waters et al., 2000).

childhood experience with assessments of the meaning of experience. Individuals who show a mixed picture of insecure strategies are assigned to an Insecure–Can't Classify group. Individuals may also be classified as Unresolved regarding attachment-related traumas (loss or abuse) in combination with a major classification. The traumatic experience has not been reconciled, as evidenced by disorganized or disoriented language used to describe the experience. Discriminant function analysis has shown that the coherence of the transcript score can be used as a continuous security score (r = .96; E. Waters et al., 2001). We used the Coherence scale, the dichotomous Secure versus Insecure classifications, and the three major classifications in the analyses presented below.<sup>2</sup>

The premarital interviews were audiotaped, transcribed, and scored from the transcriptions by experienced coders who were trained by and have established reliability with Mary Main and Eric Hesse on several samples. Coders were blind to all other information regarding the participant. The coders achieved 85% agreement for two classifications (Secure, Insecure) on 28% of the sample (n = 84,  $\kappa = .69$ ,  $p \le .01$ ). Coders achieved 74% agreement for four classifications (Secure, Dismissing, Preoccupied, and Can't Classify) on those cases ( $\kappa = .61$ ,  $p \le .01$ ). Agreement for the Unresolved classification was 84% ( $\kappa = .60$ ,  $p \le .01$ ). Disagreements between the coders were settled by conference. Interrater agreement for coherence was good, r(84) = .66,  $p \le .01$ .

The distribution of premarital AAI classifications was as follows: 43% Secure (n = 125, 16 also Unresolved), 32% Insecure–Dismissing (n = 89, 16 also Unresolved), and 26% Insecure–Preoccupied (n = 76, 34 also Unresolved). The distribution of this sample is marginally different,  $\chi^2(3, n = 290) = 7.09, p \le .10$ , from distributions of samples of late adolescents or young adults reported elsewhere (Creasey, 2002; van IJzendoorn & Bakermans-Kranenburg, 1996). The proportion of Secure/Not Unresolved individuals in this study (38%) does not differ significantly from the proportion classified as Secure in those studies combined (43%). Distributions of Dismissing and Unresolved individuals are the same in this study as in the others combined (25% and 23%, respectively). The proportion of individuals in this study classified as Preoccupied is higher than in the other samples (14% vs. 9%).

The Current Relationship Interview (CRI; Crowell & Owens, 1996). The CRI was developed during this longitudinal study to assess the specific representation of adult attachment. The interview asks the participant for adjectives describing the relationship with the partner and illustrative incidents supporting those adjectives: experiences of separations and of being upset, ill, and hurt. The participant is asked about factors that have influenced the relationship and the effects of the relationship on his or her development.

The scoring system parallels the AAI scoring system in that experience with the partner, discourse style, and believability or coherence are scored using a number of scales (Crowell & Owens, 1996; Crowell, Treboux, & Waters, 2002; Owens et al., 1995). Rating scales are used to characterize the individual's behavior, the partner's behavior, and the individual's

Scale scores can be used to assign the adult to one of three major classifications: Secure/Autonomous, Insecure–Dismissing and Insecure–Preoccupied (Main & Goldwyn, 1994). Individuals classified as Secure believably and coherently describe diverse childhood experiences, value attachment relationships, and view attachment-related experiences as influential to development. Adults are classified as Insecure on the basis of incoherence in the interview; that is, although the manner in which they manifest their state of mind differs, they fail to integrate memories of

<sup>&</sup>lt;sup>2</sup> We elected to use major classification (Secure, Insecure–Dismissing, Insecure–Preoccupied) as the means to classify individuals as Secure or Insecure because the Unresolved classification, although considered to be Insecure (Main & Goldwyn, 1994), appears to have a different meaning than the major classifications and also a different meaning when it is paired with a Secure versus an Insecure major classification: (a) It is not a stable classification comparatively speaking, and the correlates of its stability are different than those of the major classifications (Crowell, Treboux, & Waters, 2002). (b) Equivalence of the coding based upon the traumatic experiences of loss versus abuse is unclear (Colon-Downs, 1997; Crowell, Treboux, & Waters, 2002). (c) Individuals classified as Unresolved–Secure have been found to be significantly different in couples' interactions (less domineering and defensive) than those classified as Unresolved–Insecure (Creasey, 2002).

discourse style. The measure yields classifications similar to those of the AAI that reflect state of mind with respect to attachment in the adult relationship: Secure<sub>CRI</sub>, Insecure–Dismissing<sub>CRI</sub>, and Insecure–Preoccupied<sub>CRI</sub>. The classifications reflect the reported behavior and thoughts of the participant with respect to adult–adult attachment rather than the behavior of the partner or reports of feeling secure or satisfied within the relationship. Coherence reflects the participant's ability to present an integrated, believable account of his or her own and partner's attachment-related behaviors and their meaning. The Coherence scale is highly correlated with a continuous security score derived from discriminant function analysis (r = .92; Crowell, Gao, Treboux, & Owens, 1997). We use the Coherence scale and the dichotomous Secure versus Insecure classifications in the analyses presented below.

Discriminant and convergent validity of the CRI have been demonstrated (Crowell, Treboux, & Waters, 2002; Crowell et al., 2003; Owens et al., 1995). Correspondence between premarital AAI and CRI coherence suggests that generalized and specific representations are significantly related but not equivalent. High CRI coherence and positive perceptions of the relationship before marriage were associated with a change from generalized insecurity (AAI) to security (Crowell, Treboux, & Waters, 2002). The distribution of classifications before marriage was as follows: Secure<sub>CRI</sub>, 46% (n = 144), Insecure–Dismissing<sub>CRI</sub>, 37% (n = 116), and Insecure–Preoccupied<sub>CRI</sub>, 17% (n = 54). Coders achieved 83% agreement for two classifications on 63 of 314 cases (20%;  $\kappa = .64, p \le .01$ ) and 75% agreement for three classifications on those cases ( $\kappa = .61, p \le .01$ ). Judith A. Crowell was the primary coder for the CRI and was blind to other variables including AAI classifications. She trained three other CRI coders who were all unfamiliar with AAI coding. Agreement among the four coders on the CRI Coherence scale assessed before marriage was similar to that for the AAI, r(63) = .65,  $p \le .01$ . In the case of disagreements, the classifications were determined by conference.

Secure Base Scoring System (SBSS) for Adults (Crowell et al., 1998). The couples were assessed with a standard couple observation paradigm (Gottman, 1979; Gottman, Markman, & Notarius, 1977). The Discord scale of the Family Behavior Survey (FBS; Posada & Waters, 1988) was used to select the topic of discussion. The researchers examined each partner's independently generated scale and selected the topic with the highest frequency of conflict reported by both partners. The partners were asked to discuss this problem for 15 min and to try to reach a resolution. The couples' interaction was videotaped and scored with the SBSS (Crowell et al., 1998; Crowell, Treboux, Gao, et al., 2002). Topics were classified into one of three broad categories: attachment-related (e.g., warmth in the relationship, time spent together), social (e.g., in-laws, friends), and business (e.g., finances, housework; Crowell, Treboux, Gao, et al., 2002). Topic was unrelated to couples' AAI status (e.g., Both Secure, Secure<sub>AAI</sub> woman / Insecure<sub>AAI</sub> man),  $\chi^2(3, n = 133 \text{ couples}) = 4.99$ , ns. Eighteen percent of the couples discussed attachment-related topics, 28% discussed social topics, and 52% discussed business topics.

The SBSS assesses secure base use and support for each individual in the dyad. Behaviors are rated on 7-point scales ranging from *high* to *low*. Secure base use behaviors are scored on four subscales and one overall summary scale:(a) The Initial Signal subscale reflects the clarity of the concern first expressed by a participant. (b) The Maintenance of the Signal subscale assesses how actively the individual maintains a clear distress signal and/or becomes increasingly clear and direct in expressing what he or she needs, if necessary. (c) The Approach subscale reflects the direct expression in behavior, words, and affect of the desire and need for the response *of the partner*, as opposed to general expressions of distress or need. (d) The Ability to Be Comforted subscale assesses whether the individual responds with diminished distress and relief at the partner's responsiveness and the resolution of the situation or attempts to self-soothe if the partner is unresponsive. In addition, the coder assigned a score for the Summary of Secure Base Use scale.

Secure base support was also scored on four subscales and one summary scale: (a) The Interest in the Partner subscale reflects the ability to be a good listener and a catalyst in encouraging the partner to express his or her feelings and thoughts. (b) The Recognition of Distress or Concern subscale assesses awareness of the partner's distress, needs, and/or concern; that is, it assesses sensitivity. (c) The Interpretation of Distress subscale assesses the individual's "correctness" in understanding the partner's concern or signal and the ability to focus on the key elements rather than superficial or tangential aspects. (d) The Responsiveness to Distress subscale reflects a willingness or desire to help the partner, effort and effectiveness in the response as indicated by behavior, words, and affective tone, and willingness to use cooperative means instead of a controlling, demanding, or advising manner to solve the conflict. The Summary of Secure Base Support scale captures the overall secure base support of the individual.

Interrater agreement between two coders was calculated for 89 individuals (31% of the sample). Agreement for the Secure Base Use Summary scale was .73 ( $p \le .01$ ), and agreement for the Secure Base Support Summary scale was .80 ( $p \le .01$ ). Disagreements between coders were settled by conferences with a third coder. As the summary scales are highly correlated within individuals, r(242) = .86, the average of the scales was used to represent the overall quality of secure base behavior.

# Individual Assessments

The Henmon–Nelson Test of Mental Ability (Lamke & Nelson, 1973) was administered before marriage. It is a timed, paper-and-pencil measure of general intellectual ability yielding a single score (Buros, 1965; Thorndike, Cunningham, Thorndike, & Hagen, 1991). The 90-item multiple-choice test includes vocabulary, patterns of number sequences, and analogies and can be administered in less than 20 min. Alpha reliabilities range between .85 and .95 (Thorndike et al., 1991). The score can be used as a basis for estimating Wechsler Adult Intelligence Scale Full Scale IQ scores (Kling, Davis, & Knost, 1978; Thorndike et al., 1991). Participants had 15 min to respond to the items, and raw scores were used in the analyses. The range of items completed was 30–90, and the range of correctly answered items (raw scores) was 10–88, with a median of 49 items correct.

# Relationship Measures: Conflict Behavior

The FBS (Posada & Waters, 1988) assesses frequency of discord and aggressive conflict tactics. The Frequency of Discord scale asks respondents to record on a 5-point scale how often in the past 6 months they disagreed with their partners on each of 18 topics (e.g., handling finances, affection and love, dealing with in-laws). Alpha reliability was .88 before marriage and .82 at 6 years after marriage.

The Aggression scale consists of 66 aggressive behaviors that couples may employ during an argument or disagreement. The items specify the context in which the behavior occurs (e.g., "hit you during an argument"). The Aggression scale has 3 subscales: Verbal Aggression, Physical Aggression, and Threats of Abandonment. The Verbal Aggression subscale consists of 46 items reflecting hostile, but not physical, behaviors (premarital  $\alpha = .93$ , 6-year  $\alpha = .92$ ). The Physical Aggression subscale consists of 12 items assessing mild to moderate physical aggression (Straus, 1979; premarital  $\alpha = .79$ , 6-year  $\alpha = .69$ ). The Threats of Abandonment subscale consists of 9 items describing threats to leave the relationship (premarital  $\alpha = .84$ , 6-year  $\alpha = .82$ ). Respondents were asked to indicate how often in the past 6 months their partners had engaged in the behaviors, ranging from 0 (*never*) to 5 (*every week or more*).

#### Relationship Measures: Feelings

The FBS Happiness scale (Posada & Waters, 1988). The Happiness scale consists of 1 item on the FBS that asks respondents to rate their

happiness in the relationship. Responses can range from *extremely unhappy* (score of 0) to *perfectly happy* (score of 6). The item is identical to the general satisfaction item in the Dyadic Adjustment Scale (Spanier, 1976).

The Sternberg Triangular Love Scale—Short Version (STLS–SV; Aron & Westbay, 1996; Sternberg, 1988). The STLS–SV is a 21-item scale that measures three aspects of love: intimacy, passion, and decision/ commitment. Intimacy refers to feelings of closeness and connection (premarital  $\alpha = .79$ ; 6-year  $\alpha = .88$ ). Passion refers to romance, physical attraction, and sexually related phenomena (premarital  $\alpha = .80$ ; 6-year  $\alpha = .94$ ), and Decision/Commitment reflects the commitment to maintain one's love for one's partner (premarital  $\alpha = .82$ ; 6-year  $\alpha = .85$ ). Participants described themselves and their relationship using 7-point Likert scales (1 = not at all true to 7 = extremely true). Each subscale has 7 items.

#### Results

The analyses examined relationship variables before marriage and at 6 years of marriage as a function of premarital AAI/CRI status. The first analyses used all original engaged participants, examining the relation between premarital AAI/CRI configuration and (a) premarital observations and reports of behavior and feelings and (b) subsequent relationship breakup. To address the implications of AAI/CRI configurations as the relationship developed, the second analyses addressed the association between configurations and relationship variables from before marriage to 6 years of marriage in the subset of participants who remained married to their original partners.

The chance of finding significant results where none actually exist is inflated by both repeated analyses and the interdependence associated with data from couples (Kashy & Snyder, 1995; Kenny, 1995; Keppel, 1982). We therefore followed two data-analytic procedures to reduce the possibility of Type I error.

First, to reduce the number of variables examined, we combined self-report variables along two dimensions, a Conflict dimension and a Feelings dimension. The two dimensions were (a) conceptually consistent with our prediction that there would be different patterns of findings for the configurations with respect to feelings and behaviors (conflict) and (b) supported by the high intercorrelations among the scales within each dimension (mean *r* for conflict behavior = .46, range [N = 314] = .20 to .67; mean *r* for

Intercorrelations Among Attachment and Marital Variables Before Marriage

Variable	1	2	3	4	5	6	7	8	9	10	11	12	М	SD
Attachment variables														
1. AAI Coherence													4.43	2.11
2. CRI Coherence	.47**												4.19	1.92
3. Secure Base Behavior	.39**	.33**	_										3.83	1.67
Relationship variables														
4. Conflict dimension	23**	27**	25**										01	3.09
5. Discord	11†	17**	18**	.69**	_								18.17	12.47
6. Partner Verbal Aggression	17**	25**	29**	.92**	.58**								17.24	16.67
7. Partner Physical Aggression	21**	22**	18**	.69**	.20**	.57**	_						1.10	2.15
8. Partner Threats to Abandon	21**	20**	14*	.78**	.36**	.69**	.37**	—					1.37	2.69
9. Feelings dimension	.08	.17**	.25**	37**	40**	.77**	13*	21**					01	3.26
10. Satisfaction	.12*	.20**	.22**	37**	40**	21**	15*	22**	.77**				4.72	.89
11. Passion	.01	.08	.13*	$18^{**}$	$21^{**}$	21**	03	05	.84**	.49**	—		42.74	4.81
12. Intimacy	.06	.17**	.23**	35**	40**	40**	11*	23**	.84**	.53**	.63**		38.11	3.97
13. Commitment	.08	.56**	.20**	30**	31**	31**	13*	19**	.81**	.47**	.60**	.56**	47.20	2.90

 $\dagger p \le .10. \quad *p \le .05. \quad **p \le .01.$ 

Table 1

relationship feelings = .55, range [N = 312] = .53 to .63). (See Table 1 for intercorrelations among the measures.) The FBS Discord and Partner Aggression scales were standardized (*z*-scored) and summed to yield a Conflict Behavior dimension. The Conflict factor provided an index of the amount of discord and aggression the individual reported experiencing in the relationship. The FBS Happiness scale and the three scales of the STLS–SV (Intimacy, Commitment, and Passion) were *z*-scored and summed to yield a Positive Relationship Feelings dimension.

Second, we were interested in the implications of AAI/CRI configurations for individuals, but because the individuals were members of couples, statistical issues pertaining to dyads were evaluated. With respect to means, partners' reports of feelings and behaviors did not differ before marriage, with the exception of discord (Crowell, Treboux, Gao, et al., 2002). Men reported a greater frequency of discord than women. Partners' scores were usually significantly related, ranging from r(156) = .11, ns, for commitment to r = .39,  $p \le .01$  for happiness, as were partners' secure base behavior scores, r(144) = .58,  $p \le .01$ . Partners' AAI coherence scores were not highly correlated,  $r(146) = .22, p \le .22$ .05. To address issues associated with couples' data analyses, we reduced the degrees of freedom to the number of couples in the analyses, that is, to half the number that would be used if the data were from independent individuals (J. Davila, personal communication, March 2003; Kashy & Snyder, 1995). All reported significance tests are based on the reduced number of degrees of freedom in both Study 1 and Study 2.

## Combining AAI and CRI Classifications

Correspondence between the premarital AAI and CRI classifications was 58% ( $\kappa = .35$ ,  $p \le .01$ ). Sixty-four percent of individuals classified as Secure<sub>CRI</sub> were classified as Secure<sub>AAI</sub>, 51% classified as Dismissing<sub>CRI</sub> were classified as Dismissing<sub>AAI</sub>, and 55% classified as Preoccupied<sub>CRI</sub> were classified as Preoccupied<sub>AAI</sub>. The correlation between the coherence scores of the two interviews was .47 ( $p \le .01$ , n = .287). Because previously published results (Crowell, Treboux, & Waters, 2002) revealed no differences between the  $Dismissing_{AAI}$  and  $Preoccupied_{AAI}$ groups in their premarital CRI coherence and reports of behavior or feelings, we elected to combine the two major classifications into an Insecure<sub>AAI</sub> group.

The 290 participants (144 women and 146 men) classified with the AAI and the CRI were assigned to one of four groups: Secure<sub>AAI</sub>/Secure<sub>CRI</sub> (Sec<sub>AAI</sub>/Sec<sub>CRI</sub>, n = 78), Secure<sub>AAI</sub>/Insecure<sub>CRI</sub> (Sec<sub>AAI</sub>/Ins<sub>CRI</sub>, n = 47), Insecure<sub>AAI</sub>/Secure<sub>CRI</sub> (Ins<sub>AAI</sub>/ Sec<sub>CRI</sub>, n = 44), and Insecure<sub>AAI</sub>/Insecure<sub>CRI</sub> (Ins<sub>AAI</sub>/Ins<sub>CRI</sub>, n =122). There was no difference between men and women in the distribution of the groups,  $\chi^2(3, n = 290) = 3.46$ , *ns*. The proportions of Insecure AAI classifications within the Ins<sub>AAI</sub>/Sec<sub>CRI</sub> and Ins<sub>AAI</sub>/Ins<sub>CRI</sub> groups were very similar: Within the Ins<sub>AAI</sub>/ Sec<sub>CRI</sub> group, the Ins<sub>AAI</sub> participants were 57% Dismissing<sub>AAI</sub> and 43% Preoccupied<sub>AAI</sub>, and within the Ins<sub>AAI</sub>/Ins<sub>CRI</sub> group, the Ins\_{AAI} participants were 61%  $\rm Dismissing_{AAI}$  and 39%  $\rm Preoccupied_{AAI}.$ 

## AAI/CRI Groups and Relationship Functioning

Premarital AAI/CRI groups and concurrent relationship functioning. We present the means for all scales for two reasons, to allow for comparisons with other studies and to clarify the meaning of the z-scored dimensions. See Table 2 for means and standard deviations for all scales and for post hoc comparisons for key dimensions. One-way analysis of variance (ANOVA) with AAI/ CRI status groups revealed that the groups differed significantly in secure base behavior, F(3, 288) = 14.47,  $p \le .01$ . One-way multivariate analyses of variance (MANOVAs) with AAI/CRI status groups was conducted with the dependent variables of

Table 2

Means and Standard Deviations for Scales and Dimensions and Post Hoc Analyses of AAI/CRI Groups for Premarital Behavior and Relationship Feelings

Dimension and/or scale	Sec <sub>AAI</sub> /Sec <sub>CRI</sub> (S/S)	Sec <sub>AAI</sub> /Ins <sub>CRI</sub> (S/I)	Ins <sub>AAI</sub> /Sec <sub>CRI</sub> (I/S)	Ins <sub>AAI</sub> /Ins <sub>CRI</sub> (I/I)	Post hoc Scheffé tests
Secure Base Behavior					S/S > I/I**, S/I*, I/S*
М	4.6	4.1	3.9	3.2	
SD	1.6	1.6	1.5	1.5	
Relationship Feelings (z scores)					$S/S > S/I^{**}, I/I^{\dagger};$ $I/S > S/I^{**},$ $I/I^{\dagger}$
М	0.79	-1.47	1.0	-0.38	
SD	2.57	4.11	2.71	3.39	
Satisfaction					
М	4.9	4.6	4.9	4.6	
SD	0.6	1.0	1.0	0.9	
Passion					
M	43.7	40.6	43.8	42.6	
SD	4.1	5.2	4.2	5.0	
Intimacy					
M	39.2	36.6	39.4	37.5	
SD	2.9	4.1	3.1	4.5	
Commitment					
М	47.6	46.2	47.9	47.2	
SD	2.3	4.2	2.5	2.7	
Conflict (z scores)					$S/S < I/I^{**}, S/I^{*};$ $I/S < I/I^{*}$
М	-1.12	0.25	-0.76	0.62	
SD	1.53	2.97	2.52	3.13	
Discord					
М	15.7	18.6	16.1	19.3	
SD	11.0	12.0	13.6	12.3	
Partner Verbal					
Aggression					
M	12.2	18.2	14.7	20.1	
SD	10.6	18.6	18.5	17.9	
Partner Physical Aggression					
M	0.6	1.0	0.6	1.6	
SD	1.3	2.1	1.1	2.7	
Partner Threats to Abandon					
M	0.7	1.3	0.9	1.9	
SD	1.3	2.1	2.1	3.4	

*Note.* Sec = Secure; Ins = Insecure; AAI = Adult Attachment Interview; CRI = Current Relationship Interview.

 $\dagger p \le .10. \quad *p \le .05. \quad **p \le .01.$ 

relationship conflict and positive relationship feelings, Rao's R(3, 288) = 5.94,  $p \le .01$ . We used the very conservative Scheffé test for post hoc analyses to reduce the chance of Type I error (Keppel, 1982).

The Sec<sub>AAI</sub>/Sec<sub>CRI</sub> group had the highest quality secure base behavior before marriage. They reported positive feelings about the relationship and low relationship conflict. In contrast, the Ins<sub>AAI</sub>/Ins<sub>CRI</sub> group had the lowest quality of observed secure base behavior. They reported the most relationship conflict and low positive feelings. The Ins<sub>AAI</sub>/Sec<sub>CRI</sub> group was very similar to the Sec<sub>AAI</sub>/Sec<sub>CRI</sub> group, having high positive feelings about the relationship and low conflict. However, they were significantly less effective in their secure base behavior than the Sec<sub>AAI</sub>/Sec<sub>CRI</sub> group. In contrast, the Sec<sub>AAI</sub>/Ins<sub>CRI</sub> group reported the least positive feelings and did not differ from the Ins<sub>AAI</sub>/Ins<sub>CRI</sub> group in reports of relationship conflict or feelings. They were less effective than the Sec<sub>AAI</sub>/Sec<sub>CRI</sub> group in secure base behavior and did not differ from the other two groups.

To illustrate the patterns of relationship variables that characterized each AAI/CRI group, we graphed *z* scores for the secure base behavior, positive feelings, and relationship conflict scales (see Figure 1). The graph shows similar patterns of high positive feelings and low conflict for the Sec<sub>AAI</sub>/Sec<sub>CRI</sub> and Ins<sub>AAI</sub>/Sec<sub>CRI</sub> groups. In contrast, the Ins<sub>AAI</sub>/Ins<sub>CRI</sub> group is characterized by relatively high conflict, but their reports of positive feelings are closer to the mean than are those of the other groups. The Sec<sub>AAI</sub>/ Ins<sub>CRI</sub> group has the opposite pattern in that their relationship conflict scores are near the mean, but they clearly feel very badly about their relationships.

#### Relationship Breakup

Premarital correlates of relationship breakup. Marital status was dummy coded (0 = split-up, 1 = married), and point biserial



*Figure 1.* Graph of standardized Secure Base Behavior, Relationship Conflict, and Positive Feelings dimensions for the four AAI/CRI configurations. Sec = Secure; Ins = Insecure; AAI = Adult Attachment Interview; CRI = Current Relationship Interview.

correlations were used to examine relations between marital status and reports of behaviors and feelings in the relationship and premarital attachment variables. There were a few correlations between marital status and predictor variables: CRI coherence,  $r(294) = .16, p \le .05$ ; feelings of commitment,  $r(312) = .17, p \le$ .05; and verbal aggression,  $r(132) = -.16, p \le .05$ .

AAI/CRI status and relationship breakup. Chi-square analysis (n = 290) of AAI/CRI status and marital status at 5–6 years (individuals who married versus those who divorced, separated, or never married, i.e., separated within 3 months of their weddings) was significant,  $\chi^2(3, n = 290) = 8.91, p \le .05.^3$  Individuals in the Sec<sub>AAI</sub>/Ins<sub>CRI</sub> group were more likely to divorce in the early years of marriage (34%, or 16 of 47) than were individuals in the other three groups. Sixteen percent (12 of 77) of the Sec<sub>AAI</sub>/Sec<sub>CRI</sub> group never married, separated, or divorced, 11% (5 of 44) of the Ins<sub>AAI</sub>/Sec<sub>CRI</sub> group never did, and 23% (28 of 122) of the Ins<sub>AAI</sub>/Ins<sub>CRI</sub> group never did.<sup>4</sup> Of all couples who separated or divorced (n = 30), 43% included at least one partner with the Sec<sub>AAI</sub>/Ins<sub>CRI</sub> configuration.

Three chi-squares examining the type of CRI insecurity associated with AAI classification were conducted. The chi-square for  $\text{Sec}_{AAI}$  with either a  $\text{Dismissing}_{CRI}$  or a  $\text{Preoccupied}_{CRI}$  representation was significant,  $\chi^2(1, n = 47) = 4.64, p \le .05$ , such that  $\text{Sec}_{AAI}$ /Dismissing<sub>CRI</sub> individuals were less likely to split up than were  $\text{Sec}_{AAI}$ /Preoccupied<sub>CRI</sub> individuals (24% vs. 56%). Similar analyses examining  $\text{Ins}_{AAI}$  participants with  $\text{Dismissing}_{CRI}, \chi^2(1, n = 88) = 0.89, ns$ , or  $\text{Preoccupied}_{CRI}, \chi^2(1, n = 41) = 0.04, ns$ , representations were not significant; thus no pattern of insecure AAI/CRI classifications was associated with a higher risk for breakup.

Premarital AAI/CRI status and the course of relationship functioning. To assess whether the premarital AAI/CRI pattern was related to the course of relationship functioning in marriage, we conducted a 4 (AAI/CRI group)  $\times$  2 (time: premarital and 6 years later) ANOVA using secure base behavior for individuals who remained married to their original partners. Four (AAI/CRI group)  $\times$  2 (time: premarital and 6 years later) MANOVAs were used to examine the Feelings and Conflict dimensions (see Table 3). These analyses addressed relationship course associated with the configurations after the removal of a significantly distressed subsample of participants, that is, those who separated or divorced. Data were available for 165 participants still married to their original partners.

The analyses showed a main effect for group for secure base behavior. Post hoc Scheffé analyses revealed that the  $\text{Sec}_{AAI}$ /Sec<sub>CRI</sub> group scored significantly higher than the other three groups. There was no effect of time and no interaction. The

<sup>&</sup>lt;sup>3</sup> We elected to include participants who never married in these analyses because we assumed that the distress associated with their decision not to marry was high given how close in time to the wedding dates they were at the time of assessment. The same pattern was found when the nevermarried individuals were excluded from the analyses and also for both men and women.

<sup>&</sup>lt;sup>4</sup> The chi-square was also significant when those with the Unresolved classification were assigned to the Insecure group,  $\chi^2(3, n = 290) = 7.58$ ,  $p \leq .05$ , with 33% of the Sec<sub>AAI</sub>/Ins<sub>CRI</sub> group no longer being with their original partners.

Table 3

	$\operatorname{Sec}_{AAI}$ (n =	<sub>I</sub> /Sec <sub>CRI</sub> = 42)	$\operatorname{Sec}_{AA}$ (n =	<sub>I</sub> /Ins <sub>CRI</sub> = 24)	$     Ins_{AAI}     (n =   $	/Sec <sub>CRI</sub> = 33)	$     Ins_{AA} $ $(n =$	<sub>I</sub> /Ins <sub>CRI</sub> = 66)	Main effect	Main effect	Interaction
Dimension	Pre-	6 years	Pre-	6 years	Pre-	6 years	Pre-	6 years	for AAI/CRI $F(3, 82)$	for time $F(1, 82)$	(Group $\times$ Time) F(3, 82)
Secure Base Behavior <sup>a</sup>									17.63**	2.97	0.89
M	5.3	4.7	3.8	3.9	3.8	3.6	3.3	2.6			
SD	1.4	1.8	1.5	1.5	1.2	0.9	1.3	1.2			
Positive Relationship											
Feelings (z scores)									6.63**	0.55	0.83
M	0.99	0.99	-1.92	-1.84	0.90	0.26	-0.03	-0.31			
SD	2.17	2.29	4.56	2.64	2.89	2.69	3.21	3.57			
Experience of Conflict											
(z scores)									2.25	5.07*	0.62
M	-1.10	-0.44	-0.40	0.15	-0.78	-0.39	-0.07	0.36			
SD	1.74	2.49	2.10	2.65	3.39	3.47	2.97	2.99			

Means, Standard Deviations, and 4 (AAI/CRI Premarital Group) by 2 (Repeated Measures: Premarital and 6 Years of Marriage) ANOVA and MANOVAs for Behavior and Relationship Dimensions

Note. Sec = Secure; Ins = Insecure; AAI = Adult Attachment Interview; CRI = Current Relationship Interview; Pre- = premarital.

<sup>a</sup> N = 92: Sec<sub>AAI</sub>/Sec<sub>CRI</sub>, n = 26; Sec<sub>AAI</sub>/Ins<sub>CRI</sub>, n = 13; Ins<sub>AAI</sub>/Sec<sub>CRI</sub>, n = 15; Ins<sub>AAI</sub>/Ins<sub>CRI</sub>, n = 38.

MANOVA for positive relationship feelings was significant for group. Post hoc Scheffé tests revealed that the  $Sec_{AAI}/Ins_{CRI}$  group was by far the most distressed group even when those individuals who had gone on to separate or divorce were not included. The  $Sec_{AAI}/Sec_{CRI}$  group did not differ in their relationship feelings from the  $Ins_{AAI}/Sec_{CRI}$  and  $Ins_{AAI}/Ins_{CRI}$  groups. There was no effect of time and no interaction effect. The MANOVA for relationship conflict was significant for time such that there was a decrease in relationship conflict over the 6-year period. There was no effect of group and no interaction effect.

## Study 2

Our goal in Study 2 was to examine the implications of the attachment configurations for coping with stressful life events. Because the attachment system is a primary system for responding to stress, we anticipated that differences in individual and relationship functioning among the configurations would be more apparent when individuals were stressed. We hypothesized that the most optimal functioning would be observed in the Sec<sub>AAI</sub>/Sec<sub>CRI</sub> group, that is, among those individuals who understood the secure base concept in general and could coherently describe the secure base phenomenon within their current relationships.

# Method

## **Participants**

To be included in Study 2, participants had to be married at least 36 months (mean months of marriage = 62.0, SD = 13.9). The sample comprised (a) married individuals from the original engaged sample described in Study 1 and (b) married individuals from a comparison group of 101 couples who were recruited at the same time as the engaged couples but who had identified themselves as steadily dating at the original assessment. They matched the engaged couples on all demographic variables. Eighty-two individuals (41%) from the dating sample had married and were assessed 6 years after the initial assessment; 29 of them were married long enough to be included in the study.

The sample for Study 2 consisted of 215 married individuals, 114 women and 101 men. There were 99 couples in which both partners participated (n = 198 individuals) and 17 individuals whose partners did not participate. Sixty-four percent of participants had at least one child. Participants were mostly White (96% White, 1% African American, 3% Hispanic) and, on average, had 15.4 years of education (SD = 2.5 years). The mean age for wives was 29.3 years (SD = 2.0), and the mean age for husbands was 30.5 years (SD = 2.6).

#### Procedure

All measures described in Study 1 were used in Study 2 except the Henmon–Nelson Test of Mental Ability. Several additional measures were administered at the 6-year assessment phase. They included the Dyadic Adjustment Scale (Spanier, 1976), the Life Events Survey (Sarason, Johnson, & Siegel, 1978), the Experiences in Close Relationship Scale (Brennan, Clark, & Shaver, 1998), the Multidimensional Self-Esteem Inventory (O'Brien & Epstein, 1988), and the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961).

## Attachment-Related Measures

Adult Attachment Interview. Coders achieved 88% agreement for two classifications (Secure, Insecure;  $\kappa = .75$ ,  $p \le .001$ ) and 88% agreement for four classifications ( $\kappa = .81$ ,  $p \le .01$ ) on 12% of the 6-year participants (n = 25). Agreement for the Unresolved classification was 92% ( $\kappa = .63$ ,  $p \le .01$ ). The interrater agreement for coherence was .70 (n = 25,  $p \le .001$ ). At 6 years, 51% of the participants were classified as Secure (n = 96, 18 also Unresolved), 32% were classified as Insecure–Dismissing (n = 59, 8 also Unresolved), 15% as Insecure–Preoccupied (n = 28, 11 also Unresolved), and 2% as Insecure–Can't Classify (n = 4). The distribution of the classifications did not differ from that of adult samples described by van IJzendoorn and Bakermans-Kranenburg (1996),  $\chi^2(1, n = 1,018) = 0.25$ , *ns*.

*Current Relationship Interview.* Coders achieved 87% agreement for three classifications on 23 cases (11%;  $\kappa = .78$ ,  $p \le .01$ ). Agreement for the Coherence scale was .62 (n = 23,  $p \le .001$ ). The distribution of classifications was as follows: Sec<sub>CRI</sub>, 47% (n = 108); Insecure–Dismissing<sub>CRI</sub>, 41% (n = 94); and Insecure–Preoccupied<sub>CRI</sub>, 12% (n = 28).

 $p \le .05. \quad p \le .01.$ 

#### Measures of Individual Experiences and Functioning

The Life Events Survey (LES; Sarason et al., 1978). The LES asks the respondent to indicate whether any of the listed events occurred within the past 12 months. The list includes marital, job-related, family, child, financial, health, death, and legal events. The LES was modified for this study by extending the time period to the preceding18 months, and items were rated for stressfulness on an 8-point scale (1 = not at all stressful, 8 = very stressful) rather than being rated on whether they were considered positive or negative. We examined only the 43 clearly negative events in this study, excluding negative events in the marriage (to avoid confounds with reports of the relationship). Examples of the events included major illnesses in the self or a family member, unemployment, legal problems, and death of a significant other. Endorsed events were summed for a total score.

#### **Relationship Measures**

The Experiences in Close Relationships Scale (ECR; Brennan et al., 1998). This 36-item Likert-type self-report scale assesses attachmentrelated feelings and behaviors. Items are summed on two dimensions: Avoidance of Closeness ( $\alpha = .89$ ) and Anxiety About Abandonment ( $\alpha =$ .87). Avoidance items indicate avoidant (nonapproach) behavior and a degree of concern about closeness that is within the participant's awareness (e.g., "I prefer not to show a partner how I feel deep down" and "I want to get close to my partner, but I keep pulling back"). Anxiety items indicate expression of concern about relationships and of the need for closeness (e.g., "I worry about being abandoned" and "I often want to merge completely with romantic partners, and this sometimes scares them away").

The Dyadic Adjustment Scale (Spanier, 1976). One of the most widely used measures of marital adjustment, the 32-item DAS asks participants to rate four dimensions of marital relationships: dyadic consensus, satisfaction, cohesion, and expression of affection. The total score is used to assess overall marital adjustment as reported by the individual ( $\alpha = .92$ ). A score under 100 is a strict indicator of marital distress, and a score of  $\leq 107$  represents a more liberal cutoff (Busby, Christensen, Crane, & Larson, 1995). Twenty-one percent of the sample (n = 45) scored  $\leq 107$ , and 11% (n = 24) scored  $\leq 100$ . The DAS score was substituted for the Happiness scale of the FBS in the Relationship Feelings dimension.

#### Feelings About the Self

The Multidimensional Self-Esteem Inventory (MSEI; O'Brien & Epstein, 1988). This 116-item questionnaire captures 11 components of self-esteem: Global, Competence, Lovability, Likeability, Personal Power, Self-Control, Moral Self-Approval, Body Appearance, Body Functioning, Defensive Self-Enhancement, and Integrity Integration. Each item is rated on a 5-point scale ranging from *completely false* to *completely true*. Three scales were selected for analysis given their face relation to the attachment and marital constructs. The Global Self-Esteem score reflects the degree to which the individual is pleased with himself or herself, feels significant, and is confident regarding the self and the future ( $\alpha = .90$ ). Lovability (10 items,  $\alpha = .79$ ) reflects the degree to which the individual feels worthy of love, cared for, accepted, supported, and able to receive love. Likeability (10 items,  $\alpha = .78$ ) reflects the individual's feelings of being popular, likeable, a good companion, and getting along with others.

The Beck Depression Inventory (BDI; Beck et al., 1961). This wellknown assessment of depressive symptoms and negative feelings about the self has 21 items, yields scores from 0 (no symptoms) to 63 (extremely depressed), and differentiates depression from anxiety (Beck, Steer, & Garbin, 1988). The scale was used as a continuous rating ( $\alpha = .80$ ).

Correlations among the BDI and MSEI scales ranged from -.38 to .61 (N = 212) with a mean correlation of .50. Few of the participants (7%) scored within the clinical range on the BDI (range = 0-30, M = 5.4, SD = 4.9), and for this reason we did not consider the scale to have clinical significance but rather to reflect a more general level of negative feelings. The BDI (reverse coded) and the MSEI were *z*-scored and summed to obtain a dimension of Feelings About the Self. Higher scores reflect more positive feelings.

#### Results

The first set of analyses focused on correlations among the attachment variables and the relation of the attachment variables to individual and relationship variables. The second set of analyses consisted of planned multiple regressions (Aiken & West, 1991; Holmbeck, 1997) that used attachment configuration, number of stressful events, and the interaction of the two to predict outcomes.

## Relations Among Variables

The relations among attachment variables (observed, interview, and self-reports of avoidance and anxiety) were examined with Pearson r correlations (see Table 4). The relations of attachment variables with reports of life events, marital quality, and feelings about the self were also examined. Results revealed moderate to strong relations among AAI coherence, CRI coherence, and secure base behaviors. The Anxiety and Avoidance scales of the ECR were significantly related to one another. However, few significant relations were found between the ECR Avoidance and Anxiety scales and AAI coherence and CRI coherence. No significant relation was found between reports of avoidance and anxiety and quality of observed secure base behavior.

Importantly, the experience of negative life events and the impact of those events were not related to AAI and CRI coherence. In contrast, negative events were related to ECR anxiety. Feelings about the self were low to moderately correlated with most attachment-related measures (observed, interview, and self-report). Relationship feelings and conflict showed significant although generally low correlations with CRI coherence, but not with AAI coherence. In contrast, all self-report variables, including the Avoidance and Anxiety scales of the ECR, were moderately to highly correlated with one another.

There were no mean differences between partners' reports of feelings and behaviors with one exception: Husbands were more likely to report positive feelings about themselves than were wives (husbands' *z*-scored mean for self-feelings = .61, SD = 2.60; wives, mean = -.54, SD = 3.66), t(97) = 2.55,  $p \le .01$ . Partners' scores were significantly related, with correlations ranging from .20 for feelings about the self to .79 for relationship conflict (n = 311, mean r = .48).

# Association of AAI/CRI Status and Stress With Relationship Variables and Feelings About the Self

Eight participants did not complete the LES, which resulted in 207 participants (114 women and 93 men) assigned to one of four groups based on AAI and CRI classifications:  $\text{Sec}_{AAI}/\text{Sec}_{CRI}$  (n = 68),  $\text{Sec}_{AAI}/\text{Ins}_{CRI}$  (n = 34),  $\text{Ins}_{AAI}/\text{Sec}_{CRI}$  (n = 29), and  $\text{Ins}_{AAI}/\text{Sec}_{CRI}$  (n = 29) (n = 20) (n =

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Correlations Among Adult Attachment Measures and of Adult Attachment Measures With Reports of Events, Relationship, and Self Dimensions

			Secure base	Experiences Relationsh report ques	s in Close ips (self- tionnaire)
Measure or dimension	AAI Coherence	CRI Coherence	(observation)	Avoidance	Anxiety
Attachment variables					
AAI Coherence		.51**	.48**	23*	03
CRI Coherence			.41**	25*	15
Secure Base Behavior			_	16	.01
Self-reported Avoidance					.42**
Partner AAI Coherence	.21*	.20*	.25*	09	17
Stress					
Negative events	01	09	.02	.11	.35**
Impact of events	.01	.01	05	.12	.30**
Feelings About Self dimension					
Beck Depression Inventory	.21*	.19*	.27*	37**	48**
Self-Esteem	20*	16	21*	.29**	.36**
Global self-esteem	.10	.09	.18	19	37**
Lovability	.30**	.27*	.21*	47**	43**
Likeability	.14	.19	.06	27*	36**
Relationship Feelings dimension	.11	.24*	02	61**	46**
Marital Satisfaction (DAS)	.12	.24*	.07	61**	52**
Passion	.04	.18*	10	47**	33**
Intimacy	.14	.22*	04	58**	46**
Commitment	.09	.22*	01	49**	32**
Relationship Conflict dimension	05	18*	17*	.41**	.44**
Marital Discord	01	10	10	.35**	.43**
Partner Verbal Aggression	08	22*	17*	.40**	.42**
Partner Physical Aggression	04	11	02	.25*	.26*
Partner Threats to Abandon	03	16	22*	.33**	.31**

*Note.* AAI = Adult Attachment Interview; CRI = Current Relationship Interview; DAS = Dyadic Adjustment Scale.

 $p \le .05. \quad p \le .01.$ 

Ins<sub>CRI</sub> (n = 76). There was no difference between men and women in the distribution of the groups,  $\chi^2(3, n = 207) = 3.46$ , *ns*.

A series of planned-comparison multiple regressions was conducted (Aiken & West, 1991; Holmbeck, 1997). This method allows for comparisons of the configurations using regression analyses to improve statistical power while at the same time not losing the order effect of the configurations; that is, Sec<sub>AAI</sub>/Ins<sub>CRI</sub> is not the same as  $\rm Ins_{AAI}/Sec_{CRI}.$  The planned regressions compared  $Sec_{AAI}/Sec_{CRI}$  participants in turn with each of the other configurations. Then the configurations with one insecure representation (Sec<sub>AAI</sub>/Ins<sub>CRI</sub> and Ins<sub>AAI</sub>/Sec<sub>CRI</sub>) were each compared with the Ins<sub>AAI</sub>/Ins<sub>CRI</sub> group, and then with each other. Thus each regression consists of a group contrast (e.g., Sec<sub>AAI</sub>/Sec<sub>CRI</sub> vs. other configurations), number of negative events, and the interaction of the two to predict the variable of secure base behavior and the dimensions of relationship feelings, relationship conflict, and feelings about the self. The Anxiety and Avoidance scales of the ECR were examined separately because of our interest in the meaning of the self-report of attachment vis-à-vis the attachment configurations. The results are presented in Table 5.

 $Sec_{AAI}/Sec_{CRI}$  versus other groups. In the regressions involving the Sec\_{AAI}/Sec\_{CRI} and Ins\_{AAI}/Ins\_{CRI} groups, significant variance for all variables was explained, ranging from 8% (relationship feelings) to 32% (secure base behavior). The group contrast uniquely accounted for variance in secure base behavior (13%), self-feelings (4%), and avoidance (3%). There was also an effect of stressful life events, such that more events were uniquely associated with more relationship conflict (4% of the variance), more negative feelings about the self (7%), and more ECR anxiety (2%, trend). There were no interactions.

Multiple regressions involving the Sec<sub>AAI</sub>/Sec<sub>CRI</sub> and Sec<sub>AAI</sub>/ Ins<sub>CRI</sub> groups revealed that significant variance was predicted for relationship conflict, relationship feelings, and self-feelings, ranging from 12% to 15%. All predictors contributed to relationship feelings, with no specific predictor contributing significantly unique variance. More events were associated with more relationship conflict (4%) and more negative feelings about the self (9%).

Analyses of the Sec<sub>AAI</sub>/Sec<sub>CRI</sub> and Ins<sub>AAI</sub>/Sec<sub>CRI</sub> groups were significant for feelings about the relationship and about the self, for relationship conflict, and for anxiety (trend). Negative events were uniquely associated with more relationship conflict (6% of the variance) and anxiety (4%). In addition, there was an interaction effect with respect to positive relationship feelings (4%), such that the Sec<sub>AAI</sub>/Sec<sub>CRI</sub> group did not significantly change in relationship feelings with increased stress, but the Ins<sub>AAI</sub>/Sec<sub>CRI</sub> group reported more negative feelings when more stressed.

 $Ins_{AAI}/Ins_{CRI}$  versus configurations with one insecure representation. The analyses of the  $Ins_{AAI}/Ins_{CRI}$  and  $Sec_{AAI}/Ins_{CRI}$ 

		Sec <sub>AAI</sub> /	Sec <sub>CRI</sub> VS	. Ins <sub>AAI</sub> /In	Scri		S	ec <sub>AAI</sub> /Se	CCRI VS.	Sec <sub>AAI</sub> /II	<sup>ns</sup> cri			Sec <sub>AAI</sub> /	/Sec <sub>CRI</sub> V	/s. Ins <sub>AAI</sub> /	'Sec <sub>CRI</sub>	
Variable	F(3, 138)	R	$R^2$	$AC^{a}$	$\operatorname{Neg}^{a}$	×	F(3, 96)	R	$R^2$	AC <sup>a</sup>	$\operatorname{Neg}^{a}$	ת	F(3, 90)	R	$R^2$	$AC^{a}$	$\operatorname{Neg}^{a}$	ת
SB Behavior <sup>b</sup>	$13.04^{**}$	.56	.32	36**	SU	su	1.79	.28	.08	su	su	us	1.28	.26	.07	Su	SU	us
Rel. Feelings	4.14*	.29	.08	14	us	us	$5.10^{**}$	.37	.14	us	17	SU	$8.12^{**}$	.46	.21	us	20*	19*
Rel. Conflict	$8.06^{**}$	.39	.15	us	.21*	us	$5.82^{**}$	.39	.15	us	.20*	su	$5.02^{*}$	.37	.14	su	.25*	ns
Self Feelings	8.46**	.39	.15	.19*	.26**	us	4.43*	.35	.12	us	.30**	su	$6.68^{*}$	.42	.18	su	.38**	ns
ECR Anxiety	$7.16^{**}$	.37	.13	us	.14†	us	2.42	.26	.07	us	ns	su	2.73†	.28	.08	su	.22‡	su
ECR Avoidance	4.82*	.31	60.	$.18^{*}$	su	us	0.79	.15	.02	su	su	su	1.56	.22	.05	us	SU	us
		Ins <sub>AAI</sub> /j	Ins <sub>CRI</sub> vs.	Sec <sub>AAI</sub> /In	Scri			Ins <sub>AAI</sub> /Ir	ls <sub>CRI</sub> VS.	Ins <sub>AAI</sub> /Se	eccri			Sec <sub>AAI</sub>	r/Ins <sub>CRI</sub> 7	vs. Ins <sub>AAľ</sub>	/Sec <sub>CRI</sub>	
	F(3, 138)	R	$R^2$	AC <sup>a</sup>	$Neg^{a}$	$\times^{a}$	F(3, 96)	R	$R^2$	$AC^{a}$	$Neg^{a}$	ת	F(3, 90)	R	$R^2$	$AC^{a}$	$\operatorname{Neg}^{a}$	$\times^{a}$
SB Behavior <sup>b</sup>	3.43†	.36	.13	.23*	SU	su	1.79	.29	.08	Su	SU	su	.39	.18	.03	su	SU	su
Rel. Feelings	1.43	.20	.04	su	ns	SU	$3.66^{*}$	.32	.10	.19‡	ns	su	4.82*	.45	.20	us	32**	us
Rel. Conflict	7.90**	.43	.18	su	.28**	.14†	$10.88^{**}$	.49	.24	us	.36**	su	$6.80^{**}$	.51	.26	us	.24*	us
Self Feelings	$2.81 \div$	.27	.07	su	$.19^{*}$	SU	3.48*	.31	60.	us	.21*	su	2.36	.33	.11	us	su	us
ECR Anxiety	6.44*	.39	.15	SU	.34**	SU	7.53**	.43	.18	ns	.39**	SU	2.65	.34	.07	us	Su	us
ECR Avoidance	1.44	.20	.04	su	ns	us	.59	.13	.02	su	us	su	.34	.13	.02	ns	su	us
<i>Note</i> . Sec = Sect. Scale.	rre; Ins = Inse	cure; A∕	M = Adu	dt Attachm	ent Intervie	w; CRI	= Current Re	elationshi	ip Interv	iew; SB =	= secure b	ase; Rel.	= relationsh.	ip; ECR	= Expe	riences in	Close Relatic	nships
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Planned Multiple Regressions Using Attachment Configurations and Events to Predict Relationship and Self Variables Table 5

For SB behavior, dfs are as follows: S/S vs. I/I, (3, 42); S/S vs. <sup>a</sup> Semi-partial correlations for AC (attachment configuration; AAI/CRI), negative events (Neg), and their interaction (×; AC × N). S/I, (3, 30); S/s vs. I/S, (3, 26); I/I vs. S/I, (3, 35); I/I vs. I/S, (3, 30); S/I vs. I/S, (3, 18).  $\ddagger p \leq .10$ .  $*p \leq .05$ .  $**p \leq .01$ .

# AAI/CRI CONCORDANCE AND MARITAL FUNCTIONING

groups revealed that a significant percentage of the variance was predicted for secure base behavior, relationship conflict, and ECR anxiety, ranging from 7% to 18% (see Table 5). The configurations differed significantly on secure base behavior (5% of the variance uniquely predicted). Overall there was increased ECR anxiety (12%) and more negative feelings about the self (4%) uniquely associated with negative events. There was a trend for an interaction effect with respect to relationship conflict such that the Sec<sub>AAI</sub>/Ins<sub>CRI</sub> group was not as impacted by stress as was the Ins<sub>AAI</sub>/Ins<sub>CRI</sub> group.

Regressions involving the  $Ins_{AAI}/Ins_{CRI}$  and  $Ins_{AAI}/Sec_{CRI}$ groups revealed that significant variance, ranging from 10% to 24%, was predicted for relationship conflict, feelings about the relationship and about the self, and ECR anxiety. The configurations differed little overall; there was a trend such that the  $Ins_{AAI}$ /  $Ins_{CRI}$  group was less positive overall about their relationships than was the  $Ins_{AAI}/Sec_{CRI}$  group. Both groups experienced increased relationship conflict (13% of the variance predicted), negative feelings about the self (4%), and ECR anxiety (16%) uniquely associated with negative events. There were no interaction effects.

 $Sec_{AAI}/Ins_{CRI}$  versus  $Ins_{AAI}/Sec_{CRI}$ . The regressions of the  $Sec_{AAI}/Ins_{CRI}$  and the  $Ins_{AAI}/Sec_{CRI}$  groups found that significant variance was predicted for relationship conflict (26% overall) and a decline in positive feelings about the relationship (20% overall), with significant unique variance predicted by negative events (6% for conflict and 10% for relationship feelings) (see Table 5). There were no interactions.

To illustrate the patterns of relationship variables characterizing each AAI/CRI group in a low-events situation versus a high-events situation, we standardized and graphed the scores for each group on the Relationship Feelings and Conflict dimensions (see Figure 2). Participants were placed in a high-stressful-events group (based on the top quartile for number of events) or a low-to-moderatestressful-events group (the other three quartiles; Phelps, Belsky, & Crnic, 1998). Women reported significantly more events (M =6.87, SD = 3.70; range = 0 to 18 events) than men (M = 5.54, SD = 3.58; range = 0 to 19 events), t(210) = 2.65,  $p \le .01$ . Therefore, the cutoff for the high-stress group was set at  $\ge 9$ events for women and  $\ge 7$  events for men. Thirty women (26%) and 29 men (31%) were placed in the high-stress group.

The patterns are quite different for the groups in the high-stress and low-stress conditions. Although stress did have an impact on those with the  $\text{Sec}_{AAI}/\text{Sec}_{CRI}$  configuration in that relationship conflict increased and feelings about the self become less positive, secure base behavior and feelings about the relationship remained above the mean. The  $\text{Ins}_{AAI}/\text{Ins}_{CRI}$  group also showed an increase in conflict and a decline in feelings about the self and the relationship. The two groups in which there was one incoherent representation are most striking in that there is a dramatic switch in the valence of self-reports from the low-events groups, with high negative feelings about the relationship and more conflict behaviors. The  $\text{Ins}_{AAI}/\text{Sec}_{CRI}$  group also showed that more negative feelings about the self were associated with negative events.

#### Discussion

Working under the hypothesis that the meaning of attachment within a specific relationship is referenced against the generalized representation, we addressed the implications of individual differences in attachment concordance versus discrepancy in individuals at two stages in their marital relationships. The first study examined premarital attachment configurations with respect to concurrent functioning and relationship outcome. The second examined married individuals and the relations among attachment configurations, stressful life events, and relationship functioning. The findings address important points about the protective effects of attachment security, the relations among types of representational security and feelings about relationships, and the breakup of relationships. Each of the representational configurations showed a particular pattern of relationship behavior and reports that have interesting implications for a developing theory of adult–adult attachment as well as possible clinical applications.

#### Attachment Security

The results support the idea that secure attachment representations are beneficial with respect to relationship functioning. However, there was no simple association between positive outcome and security for either the generalized or the specific representation. Rather, benefits were observed when the relationship-specific representation was consistent with or built upon a coherent generalized representation. Thus, individuals classified as secure with both the AAI and the CRI were most satisfied overall with their relationships, were most confident in themselves, and reported relationships that were low in conflict. The quality of their secure base behavior was the highest, and they did not endorse avoidance of closeness. With respect to stress, the experience of high negative events had little impact on participants' positive feelings about their relationships or their secure base behavior, supporting the idea that attachment security serves as a protective factor with respect to life stress.

Research with parents, especially mothers, suggests that a secure or coherent generalized representation of attachment is associated with positive parenting even in highly stressed mothers (Phelps et al., 1998). Our results suggest that in adult relationships, it is not enough to have a secure or coherent generalized representation of attachment to develop and maintain good relationship functioning. There was little evidence of an "inoculation" effect of good childhood experiences or representations. A secure generalized representation was associated with a somewhat greater likelihood of having a secure conceptualization of the current relationship. This may occur through a combination of picking a more coherent or supportive partner and having a more balanced, clear view of what the partner can and cannot provide. Thus, it is the synchrony at any given time between the representations-knowing how to use a secure base and believing that one is in a secure base relationship-that has a positive effect, especially when individuals are stressed.

#### Attachment Insecurity

In contrast to the Sec<sub>AAI</sub>/Sec<sub>CRI</sub> group, each of the configurations that included an incoherent perspective on the secure base phenomenon was associated with relationship vulnerability. In addition, each such configuration presented its own pattern of problems consistent with theoretical predictions.





*Figure 2.* Graphs of standardized Secure Base Behavior, Relationship Conflict, and Positive Feelings dimensions for each AAI/CRI configuration for low and high numbers of negative life events. AAI = Adult Attachment Interview; CRI = Current Relationship Interview.

## Concordance Between Representations: Insecure/Insecure

The  $Ins_{AAI}/Ins_{CRI}$  group was clearly vulnerable to relationship difficulties, especially with respect to behavior. They reported the most conflict in their relationships, their secure base behaviors were poor, and they reported greater avoidance of closeness than did the  $Sec_{AAI}/Sec_{CRI}$  group. Interestingly, they were not always the most distressed group with respect to their feelings about the relationship. In fact, given their high level of conflict, the  $Ins_{AAI}/Ins_{CRI}$  group was not as distressed as might have been expected. This finding, that congruence between the representations feels "right," is consistent with self-theory (Epstein, 1991) Thus, these individuals do not appear to register their relationship conflicts as highly meaningful emotionally. The incoherent pattern observed in their interview discourse about attachment, that is, their failure to make connections between reported experiences and the meaning of experience, was played out in the discrepancy between their relationship behaviors (both reported and observed) and their reported feelings about or appraisals of the relationship.

#### Discrepancy Between Representations: Insecure/Secure

The  $Ins_{AAI}/Sec_{CRI}$  group was intriguing because before marriage (Study 1) and 6 years into marriage when not experiencing stress (Study 2), this group appeared to function well. They reported very positive feelings about the relationship and low con-

flict. Despite these positive endorsements of the relationship, the results suggest that this configuration of representations is indeed shaky. Their secure base behavior was not as effective as that of the  $Sec_{AAI}/Sec_{CRI}$  group and did not differ from that of the  $Ins_{AAI}/Ins_{CRI}$  group. Furthermore, there was an interaction effect such that this group reported a drop in positive feelings about the relationship that was associated with stress. A secure specific representation built on an insecure generalized representation may be like the proverbial house built on sand. The results suggest that such a configuration looks nice and comfortable when all is calm, but it may not hold up in a storm.

## Discrepancy Between Representations: Secure/Insecure

The  $\mathrm{Sec}_{\mathrm{AAI}}/\mathrm{Ins}_{\mathrm{CRI}}$  group is perhaps the most interesting group. Individuals in this configuration understood the secure base concept, but their efforts to fit this cognitive framework onto relationship experiences that did not correspond to it led to confusion (incoherence) and distress. We found that, indeed, they reported the most relationship distress (lowest positive feelings). They were the most likely to separate or divorce, especially when their CRIs were characterized by anger or anxiety (Preoccupied), rather than by an idealizing or normalizing stance (Dismissing). The distress generated by the discrepant representations was identified by Bowlby (1973) and seems to be a part of the control system feedback loop, a warning signal that something should be done to correct the relationship situation, possibly by leaving the relationship or seeking help, such as through therapy. It is important to note that despite this group's high distress, they also demonstrated some benefit of the secure generalized representation in that their relationships were overall less conflicted than those of the  $Ins_{AAI}$ Ins<sub>CRI</sub> group and their feelings about themselves were not affected by negative events as much as those of other configurations were.

We speculate that each of the representational configurations may have particular predictors for relationship functioning. The path to success may differ for each group, and there may be sensitive periods for relationship difficulties. For example, individuals within all groups divorce; however, the causes and consequences may differ for each group. The majority of divorces occur early in marriage (Clarke, 1995), and our findings suggest that many early divorces are associated with having at least one partner who has a secure generalized representation and an insecure representation of adult relationships. We hypothesize that the distress associated with this configuration may lead many of these people to realize early on that they have a problematic relationship and to move on relatively quickly, that is, to "cut their losses." In contrast, those with insecure generalized representations may have a higher threshold for recognizing problems and, hence, may require more time, more severe problems, or a more powerful or salient precipitant to leave a relationship. These findings highlight the need for longitudinal research with a developmental and individual-differences perspective to examine such profiles.

# Stressful Life Events

It was not surprising that the participants overall reported difficulties associated with greater numbers of negative life events. The most uniform response across all the groups was an increase in relationship conflict. The other common responses to stressful events were a decline in positive feelings about the self and an increase in ECR anxiety. Thus security of attachment did not preclude the experience of distress in the face of difficult life experiences. Rather, the benefits of security seem more long term. That is, negative events did not appear to erode positive feelings about the relationship or the capacity to engage in secure base behavior; hence the relationship is preserved as a source of comfort and support.

Taking a longitudinal perspective, we found it interesting to compare the patterns of premarital behavior and feelings for the configurations presented in Figure 1 with the high and low stress patterns shown in Figure 2. The premarital patterns for the  $Sec_{AAI}$ Sec<sub>CRI</sub> and Ins<sub>AAI</sub>/Sec<sub>CRI</sub> groups are similar to their patterns in the low-stress condition. In contrast, the premarital patterns for the Sec<sub>AAI</sub>/Ins<sub>CRI</sub> and Ins<sub>AAI</sub>/Ins<sub>CRI</sub> groups are similar to their patterns in the high-stress condition. This finding suggests that individuals classified as CRI insecure, despite rating themselves as happy, react as if their weddings are stressful events. When individuals with these configurations are not stressed (married for 3 or more years with few life stresses), they function quite well. Thus, as predicted by the theory and infant research, individual differences in attachment are most evident in stressful conditions. Future research should address more specific stresses, such as illness in a spouse or an impaired child, to further examine and refine the role of adult attachment and stressful life events.

## Assessment of Attachment

Although the studies were not conducted to explore the meaning of self-report assessments of attachment versus other measures of the attachment system (interviews, observation), such information is relevant to understanding the course of relationships, both in terms of attachment and other important relationship constructs. It also highlights the need for more psychometric evaluations of the attachment measures.

Unlike in the sample on which the ECR was developed and the original conceptual distinctions between the scales were made (Brennan et al., 1998; Crowell, Fraley, & Shaver, 1999), feelings of anxiety about abandonment and avoidance of closeness were significantly correlated in this married sample. It is not surprising that married people who are anxious about their relationships, as opposed to college students, are also likely to report avoidance of closeness with their partners and that such negative feelings are related to other reports about the relationship. Clearly, however, if the relations between the scales change with relationship status (or possibly age), then studies using the ECR should be careful to use participants with comparable relationship experience and developmental status.

Furthermore, the results are consistent with previous findings that attachment self-reports are not highly correlated with other attachment assessments and do not operate as cognitive representations with respect to stability and relations to behavior (Crowell, Fraley, & Shaver, 1999; Crowell, Treboux, & Waters, 1999; Davila, Karney, & Bradbury, 1999; Shaver, Belsky, & Brennan, 2000; Simpson et al., 2002; E. Waters et al., 2002). Anxiety was more likely to be endorsed when negative events were high, and the Anxiety scale did not act as an attachment measure in any analysis. Rather it appears to reflect general feelings of anxiety. The Avoidance scale may be of greater interest from an attachment perspective.

The pattern of correlations among the attachment and relationship measures suggests a complexity compatible with Bowlby's (1969/1982) concept of the attachment control system. The representation assessed with the AAI or the CRI appears to reflect a knowledge base about attachment, that is, how the attachment system operates. The more coherent and comprehensive the knowledge base, both general and relationship-specific, the better the *quality* of attachment behavior and feelings about the relationship. In contrast, the self-report scales were minimally related to knowledge about attachment and had very little to do with the *quality* of observed behavior. It is possible that the Avoidance scale reflects the *likelihood* that an individual will approach the partner or close others, a construct not directly assessed in these studies.

The results suggest at least two reasons why an individual would endorse Avoidance scale items. Clearly, all people get upset; however, the reasons for their distress differ as a function of attachment status, a phenomenon that has been observed in young children (Lay, Waters, Posada, & Ridgeway, 1995). Some individuals may want to approach their partners when upset but do not, being aware that their partner cannot or will not be helpful. Consequently, their distress remains high and they endorse avoidant behaviors although they are "secure." Moving out of the attachment domain to illustrate these points, we know that it is quite common for a person to be both knowledgeable and skillful in a domain or activity. Yet, for a variety of reasons (e.g., she or he finds it or related aspects aversive or unrewarding; she or he has more compelling interests), the individual reports negative feelings about the activity. Although such feelings are clearly important, they may or may not influence actual behavior (e.g., engaging in the activity). In this situation, endorsement of avoidance seems to be a form of marital dissatisfaction. In contrast, for others, the endorsement of avoidant items is a reflection of their state of mind regarding attachment, that is, their incoherent knowledge base about attachment and their lack of comfort or confidence in relationships in general. Considering the interplay among the constructs, the elements provide different but potentially important information. Most clearly, the self-reports are related to emotions, and certainly the data highlight the important but not frequently stated idea that both AAI secure and insecure individuals can feel uncomfortable or badly about their relationships or themselves.

# Limitations of the Study and Directions for Future Research

Despite the longitudinal components of the studies, the approach here was predominantly cross-sectional, examining how at given points in the relationship generalized and specific representations interact and affect marital outcome. It was beyond the scope of this article to address issues of the development of these attachment representations in adult life and the complex interplay between partners; however, this is clearly an important and closely related topic (Crowell et al., 2003). Several of the variables (e.g., secure base behavior, feelings of intimacy, relationship breakup) assessed are clearly dependent on the behavior and/or feelings of the partner and on the partner's attachment configurations. This is a concern that is difficult to manage with this sample size and with the possible differences between men and women driving various developmental processes in the relationship.

The results highlight the need to assess developmentally comparable samples and to have measurement equivalence, whether the measures be interview or self-report, at different stages of adult development or relationships. These are obvious issues in child development research, but they are not often discussed in adult attachment research. For example, when we compared the engaged young adults with young adults in other samples in which there was a high proportion of AAI Dismissing individuals (Creasey, 2002; van IJzendoorn & Bakermans-Kranenburg, 1996), a greater proportion of the engaged sample was classified as AAI Preoccupied. Indeed, the proportion of individuals classified as  $Ins_{AAI}$ Ins<sub>CRI</sub> is high in the premarital group. Although this finding could certainly be explained by scoring procedures or be attributed to the characteristics of young adults on Long Island, we speculate that this is a developmental phenomenon, given two factors. First, young adult samples consistently have a higher proportion of individuals classified as Insecure with the AAI (Creasey, 2002; Furman et al., 2002; Roisman et al., 2002). Thus we raise the question, do the developmental tasks of late adolescents and young adults lead to temporary alterations in state of mind for some? For example, do preparing for a wedding and leaving home (two thirds of these participants lived with their parents at the premarital assessment) activate preoccupied ideation in certain individuals who in other life stages would not manifest such preoccupation? Second, with respect to the CRI classifications, CRI incoherence for some may reflect the lack of opportunity to engage in sufficient attachment-relevant interactions with the partner before marriage for a coherent secure base script to develop.

Following this line of thought, we must state that these studies unfortunately cannot address the meaning of the Unresolved classification with respect to marital outcome. Unresolved individuals with violence in their family backgrounds are likely to be at particularly high risk for marital difficulties in the face of stressful life events (Halford, Sanders, & Behrens, 2001; Holtzworth-Munroe, Hutchinson, & Stuart, 1997). Indeed, the Unresolved participants in this sample had the most conflicted relationships before marriage (although not subsequently), and this association was carried by the small number of individuals classified as Unresolved for abuse (n = 7; Crowell, Treboux, & Waters, 2002). Furthermore, the stability of the Unresolved classification was also found to be associated with the experience of negative life events. However, the stability of the classification is inherently low, a situation related to both the nature of the interview and the resolution/lack-of-resolution phenomenon itself (Crowell, Treboux, & Waters, 2002). In this sample, only 18 of the participants classified as Unresolved before marriage were Unresolved at 6 years of marriage. Thus, the characteristics of the sample did not allow us to examine important issues with respect to stress, marital functioning, and the Unresolved classification.

#### Conclusion

The findings are consistent with other research on the course of marriage. There was a decline in relationship conflict over 6 years (Davila et al., 1999; Karney & Bradbury, 1995; O'Leary, 1999). The results replicated previously identified associations between stress and marital quality (Bodenman, 1997; Bodenman & Cina,

1999; Bradbury, Cohan, & Karney, 1998; Cano & Vivian, 2001; Karney & Bradbury, 1995; Whiffen & Gotlib, 1989; Williams, 1995). However, in each case we found that individual differences in the configuration of attachment representations were helpful in understanding the course of marriage, indicating which individuals were more and less at risk and for what. There is evidence of the need to consider generalized attachment representations not only as having a direct effect on outcome but serving as moderating variables as well. With approaches to attachment that take both generalized and specific attachment variables into account, we can begin to understand important developmental processes and factors associated with adult attachment and with stability and change in adult relationships. For attachment theorists, the studies highlight the complex interplay among feelings, behavior, and representations that may influence our understanding of the developmental course of marriage.

These issues have clinical implications as well given that marital distress and divorce are serious public health issues (Clarke, 1995). The examination of marriage, attachment, and life stresses is in line with recent efforts to understand not only whether a treatment is effective but when and for whom it is effective (Brestan & Eyberg, 1998; Halford et al., 2001) and begins to address some of the important criticisms leveled at attachment theory and research by marital researchers.

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