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Working Models of Attachment and Reactions to Different Forms of Caregiving From Romantic Partners

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Inspired by attachment theory, the authors tested a series of theoretically derived predictions about connections between attachment working models (attachment to one's parents assessed by the Adult Attachment Interview; M. Main & R. Goldwyn, 1994) and the effectiveness of specific types of caregiving spontaneously displayed by dating partners during a stressful conflict-resolution discussion. Each partner first completed the Adult Attachment Interview. One week later, each couple was videotaped while they tried to resolve a current problem in their relationship. Trained observers then rated each interaction for the degree to which (a) emotional, instrumental, and physical caregiving behaviors were displayed; (b) care recipients appeared calmed by their partners' caregiving attempts; and (c) each partner appeared distressed during the discussion. Individuals who had more secure representations of their parents were rated as being more calmed if/when their partners provided greater emotional care, especially if they were rated as more distressed. Conversely, individuals who had more insecure (dismissive) representations of their parents reacted more favorably to instrumental caregiving behaviors from their partners, especially if they were more distressed. The broader theoretical implications of these findings are discussed.

Keywords: attachment, caregiving, support, conflict

Although the beneficial effects of perceived social support have been widely documented (Cohen & Willis, 1985), recent studies of supportive transactions have shown that recipients of support often do not benefit from social support or are sometimes worse off for having received it (Bolger, Foster, Vinokur, & Ng, 1996; Bolger, Zuckerman, & Kessler, 2000; Taylor, 2007; Westmaas & Jamner, 2006). Several explanations have been offered for this perplexing finding, including that support givers may be unskilled, that receiving support may undermine self-esteem or make the recipient feel indebted to the provider, or that the support received may be the wrong kind delivered to the wrong person (Bolger et al., 2000; Cohen & Willis, 1985; Taylor, 2007).

In the present study, we investigate a version of this latter "matching" explanation. We hypothesize that personality characteristics tied to perceptions of having received sensitive versus insensitive care early in life might partially dictate what kind of support from relationship partners in adulthood most effectively calms people. Guided by attachment theory (Bowlby, 1969, 1973, 1980), we suggest that adults who have a secure attachment history with their parents ought to benefit from emotional support provided by their current romantic partners, whereas adults who have an insecure (i.e., dismissive) attachment history with their parents should benefit more from receiving instrumental forms of support from their current romantic partners.

Adult Attachment and Working Models

According to Bowlby (1973, 1980), experiences with attachment figures generate representational or "working models" that guide behavior, affect, and perceptions in later relationships. The earliest working models are formed during infancy and early childhood, partly in response to interactions with parents and other significant caregivers (van IJzendoorn, 1995). During social development, models of different attachment figures coalesce into more generalized, higher-order models of the self and significant others, even though models of central attachment relationships remain intact (Main, Kaplan, & Cassidy, 1985). Throughout childhood and adolescence, working models of new people and new relationships begin to develop on the basis of these earlier models. New models, therefore, are not entirely independent of earlier ones, given that earlier models guide how information about new persons and relationships is encoded, processed, interpreted, stored in memory, and eventually acted on (Bowlby, 1973; Collins, Guichard, Ford, & Feeney, 2004; Crittenden, 1985).

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Although a considerable amount is known about how different types of working models (e.g., toward parents, toward romantic partners) are associated with caregiving behavior (see, for example, Feeney & Collins, 2001; Kunce & Shaver, 1994), relatively little is known about how people who harbor different attachment models *respond* to caregiving in situations that should activate the attachment system. In a study that induced stress by the prospect of handling a snake, Mikulincer and Florian (1997) found that individuals who had secure romantic attachment orientations reported less negative affect after engaging in either emotionally or instrumentally scripted interactions with strangers while waiting to handle the snake. Avoidant persons, in contrast, reported less negative affect following instrumental conversations with strangers, but more negative affect following emotional interactions. Ambivalent persons reported greater negative affect only after instrumental interactions. In a social-interaction study in which one partner was distressed and in need of support, Collins and Feeney (2004) found that more avoidant individuals were more likely to appraise an ambiguously supportive note ostensibly written by their dating partners more negatively if the message was delivered before performing a stressful task (giving a videotaped speech), whereas more ambivalent individuals appraised the ambiguously supportive note more negatively after having done the stressful task. By examining secure-base behaviors, Crowell et al. (2002) investigated how attachment classifications on the Adult Attachment Interview (AAI; Main & Goldwyn, 1994) are associated with problem-solving behavior using the Secure Base Scoring System (Crowell et al., 2002). Relative to insecure people, secure people on the AAI typically display more secure-base behaviors when trying to resolve relationship problems and comfort their partners. What makes the current research unique is its focus on how different *forms* of caregiving spontaneously enacted by romantic partners in a stressful situation differentially calm/soothe individuals who possess different attachment patterns.

Informed by attachment theory (Bowlby, 1969, 1973, 1980) and the caregiving model (George & Solomon, 1996, 1999), we tested a set of theoretically derived predictions involving how different working models associated with one's parents (assessed by the AAI) should predict the manner in which individuals react to different forms of caregiving provided by their romantic partners in a stressful situation (trying to resolve an important relationship conflict).

In contrast to self-report measures of attachment that are designed to assess more consciously held beliefs, values, and emotions about attachment issues related to mating and pair bonding, adults' representations of experiences with their own attachment figures during childhood are assessed by measures that "surprise" the unconscious and tap more temporally distant and implicit attachment working models. The most widely used measure is the AAI, which is a semistructured interview that assesses recollections of childhood experiences with parents and other attachment figures. The interview is scored for discourse properties and violations of norms regarding clear and coherent communication. The degree to which respondents describe their childhoods with their parents in a clear, credible, and coherent manner principally determines attachment classifications on the AAI. Thus, some people who claim to be "secure" or to have had "secure" relationships with their parents during childhood are classified as insecure on the basis of the manner and coherence (rather than the content) of how they describe their childhoods in the interview. This partially explains why self-report adult romantic-attachment styles are not systematically correlated with scores on the AAI (see Roisman et al., 2007; Shaver, Belsky, & Brennan, 2000). Bowlby (1979), in fact, believed that initial models of relationships formed during early childhood exist alongside more complex models formed later in development when individuals have the more advanced cognitive abilities required to form more sophisticated levels of mental representation (see also Wilson, Lindsey, & Schooler, 2000).

The AAI was designed to measure individuals' current "state of mind" with respect to past attachment issues, rather than their childhood attachment to parents per se (Main et al., 1985). Unless individuals have unusual, unresolved attachment issues or cannot be classified in a single attachment category, most people are assigned to one of three general categories: secure, dismissive (avoidant), or preoccupied. The subclassification scores of the three major categories can be transformed to create a continuous measure of the degree of attachment security (Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble, 1993; Simpson, Rholes, Oriña, & Grich, 2002). Translating AAI subclassification scores into a single security index is an appropriate and good way to assess attachment security (see Roisman et al., 2007; Simpson et al., 2002).

Persons who score as secure on the AAI present a clear, well-supported description of their past relationship with both parents. Their episodic memories of childhood are vivid and coherent, and they have little difficulty recalling important childhood experiences, even if their upbringing was difficult. Persons classified as dismissive on the AAI typically view their parents and upbringing as normal or even ideal but cannot support these claims with specific, episodic memories of significant childhood events. Others classified as dismissive actively disregard or dismiss the importance of attachment figures or attachment-related emotions and behavior. Individuals who are preoccupied on the AAI usually discuss their childhood experiences with attachment figures extensively during the interview. Their interviews often reveal deep-seated, unresolved anger toward one or both parents, which taints their descriptions and interpretations of past experiences. Because only 12 participants (6.45% of the current sample) were classified as preoccupied, the predictions and analyses reported below focus on individuals who were scored F (secure) or Ds (dismissive).

Attachment and Caregiving

A few behavioral observation studies have found connections between the AAI and behaviors related to caregiving in different types of attachment-relevant relationships. Individuals who are more securely attached on the AAI, for example, are rated by observers as more sensitive, warmer, and displaying more positive maternal caregiving behaviors toward their children (Crowell & Feldman, 1988, 1991; see also van IJzendoorn, 1995). During conflict-resolution discussions with their romantic partners, individuals who are more secure on the AAI enact more secure-base behaviors than do insecure persons (Crowell et al., 2002), and they tend to display more proactive emotion-regulation behaviors (Bouthillier, Julien, Dube, Belanger, & Hamelin, 2002). More secure individuals also display greater collaboration (i.e., mutual, coherent discourse) during problem-solving discussions with their romantic partners (Roisman et al., 2007). Simpson et al. (2002)

videotaped dating couples while one partner (the male) waited to do a stressful task, after which observers rated each woman's support-giving behavior and each man's support-seeking behavior. Women who were more secure on the AAI and whose partners sought greater support during the waiting period offered more support, whereas less secure women provided less support, regardless of how much support their partners sought.

Thus, although a reasonable amount is known about how AAI attachment security is related to the *enactment* of caregiving in general, almost nothing is known about which types of support (e.g., emotional, instrumental, physical) work best to calm and soothe individuals who have different attachment histories. This constitutes a critical gap in our current knowledge.

Attachment Theory and Responses to Different Types of Caregiving

Bowlby (1973) believed that working models of early experiences with caregivers should affect the type of care that adults find most comforting, especially when they are distressed. According to George and Solomon (1996, 1999), early experiences with primary caregivers—particularly during situations in which individuals are upset and need comfort—convey diagnostic information about an individual's self-worth and what he or she can expect from caregivers in the future. As a result, perceptions and memories of the type or quality of care that individuals received from early attachment figures should shape how they respond to different forms of care offered by their attachment figures in adulthood. The AAI assesses working models of parents associated with early and middle childhood (ages 5–12 years), a period of development in which individuals are less self-sufficient and more outcome-dependent on their caregivers for care and support. Accordingly, the AAI should be a good predictor of how people who have different attachment orientations react to different types of caregiving in stressful situations.

According to Bowlby (1969, 1973), individuals who have received sensitive, situationally contingent care learn to cope with distress by turning to others for comfort and support in times of need (see also Ainsworth, Blehar, Waters, & Wall, 1978). During development, these individuals should have received more constructive, emotionally focused forms of care from their caregivers (parents and perhaps later attachment figures), especially when they were distressed and their attachment systems were activated (Kunce & Shaver, 1994). As adults, therefore, more secure persons should respond more favorably to emotional forms of caregiving, especially when they are distressed. In particular, more secure persons should be more calmed if their attachment figures (romantic partners) offer them greater emotional support than greater instrumental support when they are distressed.

Although they may be physiologically aroused in attachment-relevant situations (Roisman, Tsai, & Chiang, 2004), individuals who have been rejected by attachment figures (i.e., highly dismissive persons) tend not to turn to others to reduce their distress (Crittenden & Ainsworth, 1989). Because highly dismissive individuals have learned to cope by being more self-sufficient (Bowlby, 1973), they place a premium on independence and self-reliance. To the extent that emotional forms of care (e.g., nurturance, reassurance, soothing) could undermine feelings of strength and emotional independence more than instrumental forms of care (e.g., offering concrete suggestions or advice about how to solve a problem; see Bowlby, 1973), more dismissive persons should respond better to instrumental forms of care from their romantic partners, especially when they are distressed. Highly dismissive persons should also be less comfortable with emotional support, because it might signal that they are getting too close to their partners emotionally, whereas instrumental care may indicate that they are being respected and "taken seriously" by their partners.

According to Ainsworth et al. (1978), mothers whose infants are avoidantly attached are emotionally constricted and dislike close bodily contact with their infants. Consequently, most avoidant infants learn not to seek close contact (e.g., to be picked up, to be held) from their primary caregivers. Mothers who score as dismissive on the AAI (an adult form of avoidance) are also uncomfortable with close bodily contact with their infants (Main et al., 1985). Finally, adults who report being avoidantly attached to their romantic partners also claim to have negative reactions to intimate forms of physical contact with their romantic partners (Brennan, Wu, & Loev, 1998). On the basis of these findings, we tentatively hypothesized that more dismissive adults would not benefit from support from their partners that involves physical contact.

Overview of the Present Study

Research on caregiving to date has focused almost exclusively on how AAI attachment security predicts the amount or quality of *general* caregiving behavior in social interactions (Mikulincer & Shaver, 2003). To our knowledge, no research has investigated how differences in AAI security are linked to which specific types (forms) of caregiving best *reduce* distress in taxing situations. We also measured participants' romantic attachment orientations in light of the fact that one previous study found associations between self-reported romantic-attachment measures and self-reported affect in a stressful situation immediately following emotionally focused and/or instrumentally focused conversations (Mikulincer & Florian, 1997). In the current research, we used attachment theory (Bowlby, 1969, 1973, 1980) and the caregiving model (George & Solomon, 1996, 1999) as conceptual frameworks to test how working models of attachment to parents (assessed by the AAI) are related to responses to different forms of caregiving provided by adult romantic partners. In so doing, we considered the multifaceted nature of caregiving and measured three major types of care provision: emotional, instrumental, and physical caregiving (see Cohen & Wills, 1985; Cutrona, 1990).

Our behavioral observation lab study had three phases. In Phase 1, romantic partners involved in long-term dating relationships each completed the AAI, which was audiotaped and then transcribed and coded by trained raters. One week later, as part of Phase 2, each couple returned to the lab, completed self-report relationship measures (individually), and then engaged in a 10-min videotaped conflict-resolution discussion. In Phase 3, trained observers rated the extent to which each partner spontaneously displayed emotional, instrumental, and physical caregiving behaviors during the interaction when his or her partner (the care recipient) appeared distressed, the impact that these caregiving behaviors had on the care recipient, and the level of distress/anxiety displayed by each partner during the discussion.

Hypotheses

We tested five primary hypotheses. First, we predicted that individuals who had more secure attachment representations of their parents (assessed by the AAI) would react more favorably (i.e., be more calmed and satisfied, rated by observers) if their partners provided greater emotional care (rated by observers; Hypothesis 1). Conversely, we predicted that individuals who had more insecure (dismissive) representations of their parents on the AAI would respond more favorably to greater instrumental (e.g., rational, advice-based) caregiving from their partners (Hypothesis 2) and less favorably to physical caregiving (Hypothesis 3).

We also predicted that AAI attachment security would interact with individuals' levels of distress (rated by observers) during the conflict discussions in predicting reactions to their partners' specific caregiving behaviors. Specifically, more favorable responses to greater emotional caregiving should be witnessed in more secure individuals than in more dismissive ones, particularly when individuals appear more distressed (Hypothesis 4). Conversely, more favorable responses to more instrumental caregiving should be evident in more dismissive individuals than in more secure ones, especially when individuals appear more distressed (Hypothesis 5).

Method

Participants

Ninety-three heterosexual dating couples participated in the study. At least one member of each couple was enrolled in an introductory psychology class at a university in the southwestern United States and received partial course credit for participation. Couples were required to have dated each other for at least 3 months to ensure that they were involved in meaningful relationships. The mean length of dating relationships was 17.63 months (SD = 15.30 months, range = 3–65 months). Mean ages of men and women were 19.53 and 18.80 years, respectively (ranges = 17–24 years for men and 17–21 years for women).

Procedure

The study had three phases. In Phase 1, the AAI was administered in a private room to each dating partner (individually). Each AAI was audiotaped for later transcription and coding. Approximately 1 week later, each couple returned to the lab for Phase 2. Each partner privately completed self-report relationship measures, after which the couple engaged in a standard videotaped conflict-resolution discussion task (see Simpson, Rholes, & Phillips, 1996). In Phase 3, trained observers rated each partner's caregiving behaviors, focusing on points during the discussion when each individual's *partner* appeared distressed/upset (see below). Observers also rated the effect that these caregiving behaviors had on the care recipient (i.e., how calmed and satisfied he or she was by the care offered), and the amount of distress/anxiety displayed by each partner during the discussion.

Phase 1: The AAI Interview

When couples arrived for the study (in individual pairs), they were told they would do two "unrelated" projects. The first project ostensibly examined how people think about, and what they remember about, their childhoods. To ensure privacy and confidentiality, each dating partner was interviewed in a separate room by a different interviewer who had been trained to administer the AAI. Participants were promised that what they said during the interview would not be disclosed to anyone, including their partners.

Each interview was audiotaped and then transcribed verbatim. Each transcript was then coded independently by two scorers who had been trained in AAI scoring at one of the AAI Institutes conducted by Mary Main and Erik Hesse (Department of Psychology, University of California at Berkeley). Scorers coded each transcript without any knowledge of participants' other data. Each participant was first classified into an attachment subcategory on the basis of his or her rated scores on the major AAI subscales (e.g., coherence of mind, coherence of transcript, involving anger, derogation of attachment, idealization). More specifically, each participant received both a primary score (either secure-free/autonomous [F], preoccupied [E], dismissive [Ds], unresolved [U], or cannot classify [CC]), as well as a subclassification within each major attachment category (e.g., Ds1, F3, E3). Eighty-nine men and 88 women were scored as being in one of the three major attachment categories (i.e., some form of F, E, or Ds). Because our predictions pertained to variation in these "normal" attachment categories, our analyses focused on these participants (i.e., Us and CCs were not included in the analyses reported below). Similar to prior studies in which the AAI has been administered to college students (e.g., Simpson et al., 2002), few participants in the current study (n = 12, or 6.45% of the sample) were classified as preoccupied.[1] For this reason, the primary analyses reported below included only participants who were scored as Fs or Ds's. These individuals composed approximately 90% of the sample.

On the basis of the primary attachment-subcategory scores, each participant was then assigned a score for his or her degree of attachment security. The attachment-security dimension was created by assigning the highest security score to those individuals rated as most secure according to AAI scoring criteria. The lowest security scores were assigned to those rated as the most insecure. Thus, each participant was assigned a score on a 6-point AAI degree-of-security scale, where Ds2 = 1, Ds1 = 2, Ds3 = 3, F1 and F5 = 4, F2 and F4 = 5, and F3 = 6 (see Simpson et al., 2002).[2] Thirty-three percent of the sample was classified as some form of Ds, and the remaining 67% was classified as some form of F.

[1] Given the small number of preoccupied persons and the greater clarity of what attachment security means when it ranges from high levels of security (F3) to high levels of dismissiveness (Ds2), the primary analyses did not include preoccupied individuals. The results, however, remained the same (i.e., all statistically significant effects remain significant) when preoccupied people were included in the analyses.

[2] For exploratory purposes, we also calculated an AAI activation dimension. To do so, we treated all of the normal AAI subcategory scores as points along a single attachment deactivation-versus-hyperactivation dimension. Specifically, participants were also given scores on a 10-point AAI degree-of-activation scale, where Ds2 = 1, Ds1 = 2, Ds3 = 3, F1 = 4, F2 = 5, F3 = 6, F4 = 7, F5 = 8, E1 = 9, and E2 and E3 = 10 (see Simpson et al., 2002). Analyses revealed that AAI security scores were highly correlated with AAI activation scores in both men (r = .80) and women (r = .47). In addition, AAI activation scores did not yield any meaningful, statistically significant findings. Thus, we do not report findings for the AAI activation dimension.

Phase 2: Questionnaire and Conflict-Resolution Discussion Task

When each couple returned to the lab 1 week later, each partner was first led to a private room to complete the self-report questionnaires. Embedded in the survey were the seven-item Relationship Satisfaction Scale (Hendrick, 1988; αs = .74 for men and .70 for women) and the 17-item Adult Attachment Questionnaire (AAQ; Simpson et al., 1996). We included the satisfaction scale to assess how satisfied individuals were with their current relationship. We administered the AAQ to determine whether either of the two dimensions that underlie self-report adult romantic-attachment measures—anxiety and avoidance—yielded any systematic effects for different forms of caregiving. Given that (a) the AAI should be more closely tied to caregiving than should adult romantic-attachment orientations (see George & Solomon, 1996, 1999) and (b) neither AAQ dimension yielded any statistically significant effects (see Footnote 3 in the Results section), we do not discuss the AAQ further.

Once both partners had completed the questionnaire, they were led to a room where the conflict-resolution discussion was to take place. At this point, the experimenter said the following:

> In all relationships, there are times when partners don't necessarily agree or see eye-to-eye. Your dating partner may have a habit, attitude, or behavior that you find troublesome. In this study, we are investigating how dating couples discuss problems and disagreements in their relationship. To do this, we are going to videotape the two of you [with your consent] discussing a current, unresolved problem in your relationship. No one will be watching you during your interaction. Your videotape will be coded at a later point in time by trained raters. During the videotaping session, we will tape you for about 7–10 min while you talk about a [minor/major] problem in your relationship. Before you begin this discussion, we would like you both to identify some problems.

To ensure that the discussions varied in importance and intensity, the experimenter assigned each couple to discuss either a major or a minor unresolved relationship problem.[3] After the experimenter instructed each couple to identify a particular problem, each partner listed up to four topic-relevant problems. Once both partners had created their separate lists, each person examined his or her partner's list, and both partners then jointly agreed on which specific issue to discuss. The partners were then left alone to discuss the issue, which was videotaped on a split-screen, dual camera system. Each couple was asked to state the problem they had agreed to discuss at the start of the discussion, so it would be clear to the raters what the primary issue of contention was. At 7 min, each couple was notified by intercom that they needed to wrap up the discussion. All discussions lasted 7–10 min.

Phase 3: Behavioral Codings

The conflict discussions were viewed and coded by nine independent observers who were blind to the hypotheses and to participants' other data. To estimate interrater reliability, we calculated Cronbach's alpha. Cronbach's alpha is an appropriate estimate of interrater reliability in this context, because all nine observers rated all participants (targets), and averages of all nine observers' ratings were used in the data analyses.

Caregiving behaviors. Coders first rated each participant's caregiving behaviors, focusing on when each participant's *partner* expressed a concern or appeared upset. To identify specific caregiving behaviors for coding, we drew upon attachment theory, Cutrona's (1996) work on support provision, Johnson's (2004) work on emotion-focused therapy, and the secure-base scales created for the Minnesota Study of Risk and Adaptation From Birth to Adulthood (see Sroufe, Egeland, Carlson, & Collins, 2005).

Given our theoretical interest in the specific types of caregiving that should alleviate distress in secure versus insecure people, observers rated each partner's caregiving behavior on three dimensions: (a) *instrumental caregiving*, which included behaviors such as giving specific, concrete advice or suggestions about how to solve a problem and/or discussing or clarifying a problem in an intellectual, rational manner; (b) *emotional caregiving*, which included behaviors such as encouraging the partner to talk about his or her emotions or experiences relevant to a problem, being nurturant and soothing, and expressing or sharing emotional intimacy and closeness; and (c) *physical caregiving*, which involved behaviors such as leaning forward and giving (or attempting to provide) physical contact to console the partner by touching him or her. During extensive training, coders were given detailed definitions and numerous behavioral examples of each form of caregiving.

Observers rated the degree to which each participant displayed each form of caregiving when his or her partner appeared distressed, upset, or concerned during the discussion on 9-point scales (anchored 1 = *not at all*, 9 = *a great deal*).[4] Interrater reliabilities for the caregiving items ranged from .75 to .93 (M = .83). The ratings for each item were then summed across raters to form a mean value for each rated item. Because the items hypothesized to measure each type of caregiving were internally consistent (instrumental caregiving = .84, emotional caregiving = .92, physical caregiving = .75), they were aggregated to form separate scales reflecting instrumental caregiving, emotional caregiving, and physical caregiving. Higher scores on each scale indicated more of that type/form of caregiving. Exploratory factor analyses confirmed that all items within each scale loaded on a single factor within each gender.

Reactions to caregiving. In a separate wave of coding, nine trained observers rated how care recipients (i.e., participants who received support/care from their partners when they expressed a concern or appeared distressed in the discussion) responded to their partners' caregiving attempts. Specifically, observers rated the extent to which each care recipient (a) appeared calmed by his or her partner's caregiving and (b) appeared satisfied with the resolution of the problem (at the end of the discussion). Each item was rated on a 9-point scale (anchored 1 = *not at all*, 9 = *a great deal*). Cronbach's alphas for all items ranged from .82 to .93 (M =

[3] Typical minor conflicts included how to spend free time together, how to divide time with friends, and minor aggravating habits or personal annoyances. Typical major conflicts involved feelings about former dating partners, perceived relationship betrayals, and issues that generated stress, anxiety, or hard feelings between partners.

[4] After being trained on what different effective caregiving behaviors entail, coders rated the extent to which each form of caregiving was displayed. Thus, these codes involved both the quality and extent of different forms of care provided.

.88). The ratings were then aggregated for each item. The two items were highly correlated ($r = .89$). Thus, they were aggregated into a single index of partner reaction to caregiving (Cronbach's $\alpha = .92$). Scores could range from 2 to 18. Higher scores indicated more favorable reactions (i.e., greater calming/more satisfaction).

Stress/anxiety. To assess the level of stress/anxiety displayed by each partner during the discussion, a new set of five independent observers evaluated each participant's behavior on the following items using 9-point scales (anchored 1 = *not at all*, 9 = *extremely*): stressed, anxious, upset, calm (reverse scored), and relaxed (reverse scored). Ratings of each item were reasonably reliable across raters (mean Cronbach's $\alpha = .65$), so each item was averaged across raters to form a mean for each rated item. All five items loaded on a single factor within each gender. Thus, we aggregated these scores to form a global observer-rated index of stress/anxiety (Cronbach's $\alpha = .90$ for men, .89 for women). Higher scores indicated greater stress/anxiety.

Results

Descriptive Statistics

Table 1 contains means, standard deviations, mean differences, and matched-pairs *t* tests for the primary variables in the study. The distribution of participants' attachment classifications was similar to other college samples on the AAI security dimension (e.g., Simpson et al., 2002). Matched-pairs *t* tests revealed two significant gender differences. Women were rated as having provided more instrumental care than men, and men's reaction to their partners' caregiving attempts were rated as slightly more favorable than women's reactions to their partners' caregiving attempts.

Zero-order correlations between all of the variables are displayed in Table 2. Among the most noteworthy findings, men who scored higher on the AAI (i.e., more secure men) engaged in more emotional caregiving during the conflict-resolution discussion. In addition, greater emotional, instrumental, and physical caregiving by men was associated with more favorable reactions and less observer-rated stress in their female partners, and greater instrumental and emotional caregiving by women was associated with more favorable reactions (but not less observer-rated stress) in their male partners.

APIM Analyses

As is evident in Table 2, dating partners' scores were significantly correlated for some variables, indicating that some degree of dyadic interdependence existed within couples. Therefore, we analyzed the data using the Actor–Partner Interdependence Model (APIM; Kenny, 1996; Kashy & Kenny, 2000). The APIM allows one to determine the degree to which dyad members' responses or behaviors are associated with factors attributable to the actor (i.e., the individual providing the response or behavior) and to the actor's partner. That is, the APIM estimates both *actor effects* (the effect that an individual's predictor-variable score has on his or her own outcome score) and *partner effects* (the effect that an individual's *partner's* predictor-variable score has on the actor's outcome score). The APIM allows one to conduct analyses appropriate for the dyadic nature of the current data, permitting the proper testing of actor and partner effects. In this approach, the dyad is treated as the unit of analysis, and actor and partner effects are tested with the proper degrees of freedom.

All analyses were conducted with SAS Version 9.1. Actor and partner effects are reported as regression coefficients; all of the independent variables are standardized, and all of the dependent variables are unstandardized. All predictor variables were centered on the grand sample mean (see Aiken & West, 1991). The degrees of freedom were calculated for each step (i.e., they were estimated for both the between-dyad and the within-dyad variables). All of the significant effects that emerged are reported below.

Tests of Hypotheses

According to Hypothesis 1, individuals who have more secure attachment representations of their parents should be more calmed if their partners offer greater emotional care, especially when the individuals appear more distressed. Conversely, individuals who have more dismissive representations should respond more favorably to more instrumental (i.e., rational, advice-based) caregiving behaviors provided by their partners (Hypothesis 2) and perhaps less favorably to their partners' physical caregiving efforts (Hypothesis 3).

To test these predictions, we conducted APIM analyses using the PROC MIXED program in SAS. The primary predictor vari-

Table 1
Descriptive Statistics

Measure	Men		Women		Difference		
	M	*SD*	*M*	*SD*	*M*	*SD*	*t*
AAI security (rater-scored)	3.94	2.00	4.31	1.84	−0.37	2.63	−1.30[a]
Instrumental caregiving (observer-rated)	3.91	1.06	4.19	1.20	−0.28	1.23	−2.23[b]**
Emotional caregiving (observer-rated)	3.33	0.98	3.48	0.95	−.15	1.15	−1.26[b]
Physical caregiving (observer-rated)	4.53	1.02	4.35	0.91	0.18	1.17	1.50[b]
Partner's reaction (observer-rated)	4.53	1.23	4.27	1.40	1.26	0.84	3.08[b]*
Stress/anxiety (observer-rated)	24.77	1.83	25.02	1.73	−0.25	1.49	−1.68[c]

Note. $N = 93$ men and 93 women. Actual scale ranges were as follows: Adult Attachment Interview (AAI) security, 1–6; instrumental caregiving, 4.56–22.22; emotional caregiving, 9.44–46.89; physical caregiving, 6.89–29.33; partner's reaction to caregiving, 3.00–15.11; and stress/anxiety, 5–43. *t* values are for matched-pairs *t* tests.
[a] 82 degrees of freedom. [b] 92 degrees of freedom. [c] 95 degrees of freedom.
* $p < .05$. ** $p < .03$.

Table 2
Correlations Among the Variables

Variable	A	B	C	D	E	F	G	H	I	J	K	L
A	—	.09	.22*	−.01	−.07	.00	.07	−.20	.01	−.12	.08	−.06
B		—	.76***	.37***	.54***	−.31***	−.14	.41***	.21*	−.10	.70***	−.24*
C			—	.43***	.55***	−.28***	−.10	.24*	.30***	−.05	.74***	−.27***
D				—	.27***	−.16	−.12	.32***	.26*	.27*	.40***	−.27*
E					—	−.27***	−.15	.63***	.67***	.17	.81***	−.37***
F						—	−.01	−.06	−.05	.00	−.41***	.62***
G							—	−.21	−.21	−.11	−.14	−.05
H								—	.67***	.31***	.45***	−.14
I									—	.42***	.51***	−.18
J										—	.06	−.01
K											—	−.46***
L												—

Note. $N = 93$ women and 93 men. All correlations are two-tailed. Higher scores indicate higher values on each variable. A = male Adult Attachment Interview security dimension; B = male instrumental caregiving; C = male emotional caregiving; D = male physical caregiving; E = male reaction to caregiving; F = male observer-rated stress/anxiety; G = female Adult Attachment Interview security dimension; H = female instrumental caregiving; I = female emotional caregiving; J = female physical caregiving; K = female reaction to caregiving; L = female observer-rated stress/anxiety.
* $p < .05$. *** $p < .01$.

ables in our analyses were actors' continuous scale scores on the AAI security dimension (with higher scores reflecting greater security), actors' continuous observer-rated stress/anxiety, and the three continuously rated partner caregiving behaviors (instrumental, emotional, and physical). The other predictor variables were the condition to which each couple was randomly assigned (discussing a major vs. a minor problem) and gender. Condition and gender were effect coded (i.e., 1, −1). The dependent variable was actors' response to partners' caregiving (i.e., the observer-rated index of partner reaction to caregiving).

Preliminary analyses testing for two-way and three-way interactions involving gender, condition, and each of the predictor variables revealed only one significant three-way interaction involving actor gender, condition, and partners' physical caregiving, $b = -.09$, $t(82) = -2.13$, $p < .05$. This interaction indicated that women reacted more favorably to physical care when a major issue (as opposed to a minor one) was discussed. Separate preliminary analyses examining interactions between condition and all of the predictor variables also revealed one significant interaction involving condition, actors' AAI scores, and partners' physical caregiving, $b = -.06$, $t(112) = -2.73$, $p < .05$. This interaction indicated that dismissive care recipients (actors) reacted more favorably to their caregivers' (partners') physical care when a major versus a minor issue was discussed. Because two significant interactions would be expected by chance, and these particular effects were not relevant to our main predictions, the interaction terms involving gender and condition were not included in the primary analyses reported below.

To test our primary hypotheses, we included in our APIM model all of the predictor variables mentioned above, all relevant two-way interactions (i.e., those needed to test the predicted three-way interactions) involving actors' AAI scores, actors' observer-rated stress, partners' caregiving behaviors, and the predicted three-way interactions involving actors' AAI scores, actors' observer-rated stress, and partners' caregiving behaviors.

Several significant main effects emerged. A main effect for actors' stress revealed that the more observer-rated stress/anxiety actors displayed during the discussion, the less favorable were their responses to their partners' caregiving attempts, $b = -.11$, $t(147) = -6.44$, $p < .001$. Main effects for both partners' instrumental caregiving, $b = .17$, $t(153) = 2.93$, $p < .01$, and partners' emotional caregiving, $b = .12$, $t(148) = 4.31$, $p < .001$, also indicated that both of these forms of caregiving were associated with more favorable responses to caregiving by care recipients (actors).

Consistent with our predictions, an interaction between actors' degree of AAI security and partners' amount of emotional caregiving also emerged, $b = .03$, $t(122) = 2.14$, $p < .04$. As shown in Figure 1 and supporting Hypothesis 1, care recipients (actors) who were more secure on the AAI displayed more favorable responses to their caregivers' (partners') emotional caregiving efforts, whereas more dismissive care recipients' reactions were relatively less favorable. Supporting Hypothesis 2, care recipients' (actors') degrees of AAI security also interacted with partners' amounts of instrumental caregiving, such that more dismissive care recipients, compared with securely attached care recipients, were rated as more calmed/satisfied when they received more

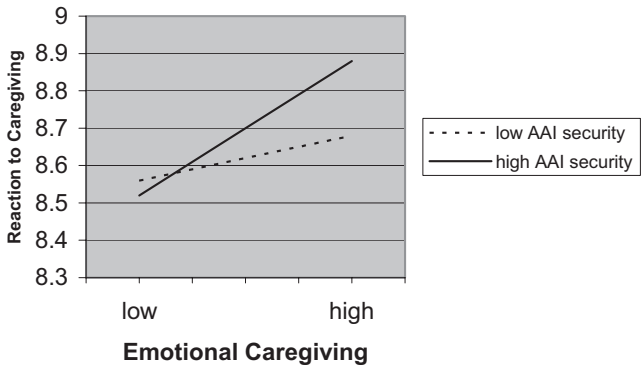

Figure 1. The interaction of actor's Adult Attachment Interview (AAI; Main & Goldwyn, 1994) security and partner's emotional caregiving, predicting actor's reaction to caregiving. Slopes are computed 1 *SD* above and 1 *SD* below the mean on AAI security.

instrumental care from their partners, $b = -.07$, $t(123) = -2.60$, $p = .01$ (see Figure 2). Our prediction that more dismissive persons would react more poorly to their partners' physical caregiving attempts was not supported (Hypothesis 3), $b = -.002$, $t(129) = -.12$, *ns*. We discuss possible reasons for this null result in the Discussion section.

We also predicted that AAI attachment security would interact with the level of stress/anxiety displayed during the discussions to predict reactions to partners' caregiving behaviors. Specifically, the calming effects of emotional caregiving ought to be most apparent in more secure persons relative to more dismissive ones when individuals are more distressed (Hypothesis 4). Conversely, the calming effects of instrumental caregiving should be most evident in more dismissive persons relative to more secure ones when individuals are more distressed (Hypothesis 5). Supporting Hypothesis 4, among care recipients (actors) who were rated as more distressed during the discussion, more secure care recipients were more calmed if their caregivers (partners) provided greater emotional caregiving than were their more dismissive counterparts, $b = .004$, $t(117) = 2.27$, $p < .03$ (see Figure 3, lower panel). Simple slopes tests indicated that the regression line for more secure people who were more distressed (see the lower panel of Figure 3) was significantly different from zero, $t(87) = 2.30$, $p < .05$, whereas the regression line for more dismissive people who were more distressed was not, $t(87) = .19$, *ns*. None of the regression lines for people who were lower in distress was significantly different from zero, *t*s $< .91$, *ns*. Consistent with Hypothesis 5, among care recipients (actors) rated as more distressed, more dismissive care recipients were more calmed if their partners provided greater instrumental caregiving than were more secure persons, $b = -.008$, $t(117) = -2.29$, $p < .025$ (see Figure 4, lower panel).[5] Further tests revealed that the regression line for more dismissive people who were more distressed (see the lower panel of Figure 4) was significantly different from zero, $t(87) = 2.10$, $p < .05$, whereas the regression line for more secure people who were more distressed was not, $t(87) = -.48$, *ns*. None of the regression lines for people lower in distress was significantly different from zero, *t*s $< .71$, *ns*.

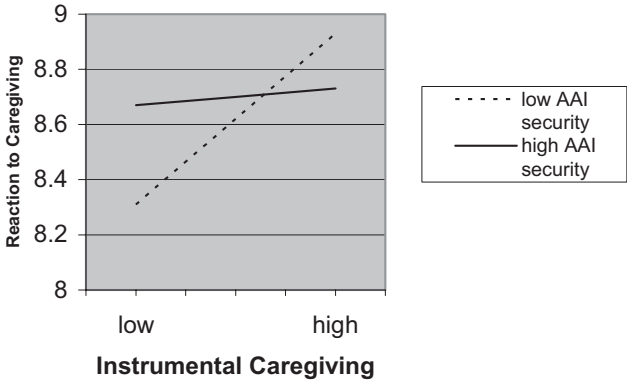

Figure 2. The interaction of actor's Adult Attachment Interview (AAI; Main & Goldwyn, 1994) security and partner's instrumental caregiving, predicting actor's reaction to caregiving. Slopes are computed 1 *SD* above and 1 *SD* below the mean on AAI security.

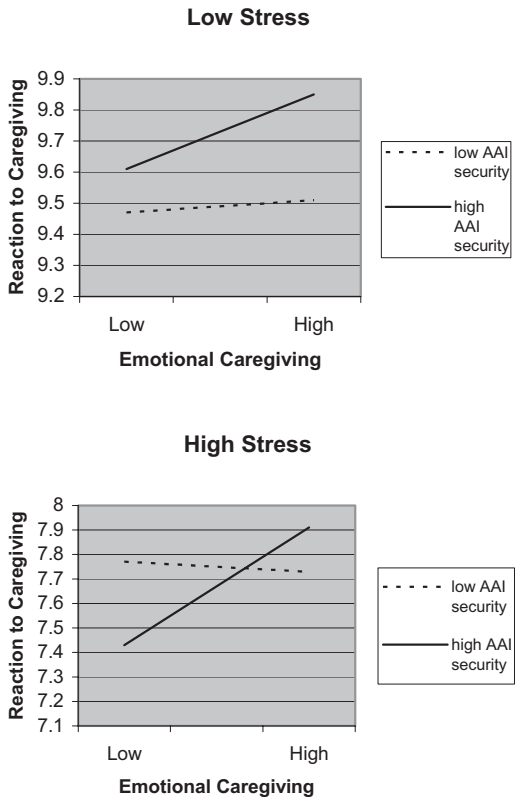

Figure 3. The interaction of actor's Adult Attachment Interview (AAI; Main & Goldwyn, 1994) security, partner's emotional caregiving, and actor's observer-rated stress/anxiety, predicting actor's responses to caregiving. Slopes are computed 1 *SD* above and 1 *SD* below the mean on AAI security. High and low stress refer to values 1 *SD* above and 1 *SD* below the sample mean, respectively.

Discriminant Validity Analyses

We next conducted three additional analyses to rule out possible alternative explanations. More insecurely attached people may be involved in less satisfying romantic relationships (cf. Simpson, 1990). In the current sample, participants classified as more secure

[5] We also conducted APIM analyses in which actor and partner scores on the two AAQ dimensions (anxiety and avoidance) were treated as predictor variables. We did so to test whether self-reported romantic attachment predicted how calmed care recipients were when they received different amounts of emotional, instrumental, and/or physical caregiving from their partners. No statistically significant main effects or interactions were found for either AAQ dimension. As expected, the AAI security dimension was not significantly correlated with either the AAQ avoidance dimension ($r = -.04$, *ns*) or the AAQ anxiety dimension ($r = .08$, *ns*). The AAQ avoidance dimension was significantly correlated with ratings of emotional caregiving ($r = -.26$, $p < .05$) and instrumental caregiving ($r = -.28$, $p < .05$). No significant effects emerged between AAQ anxiety and different forms of caregiving.

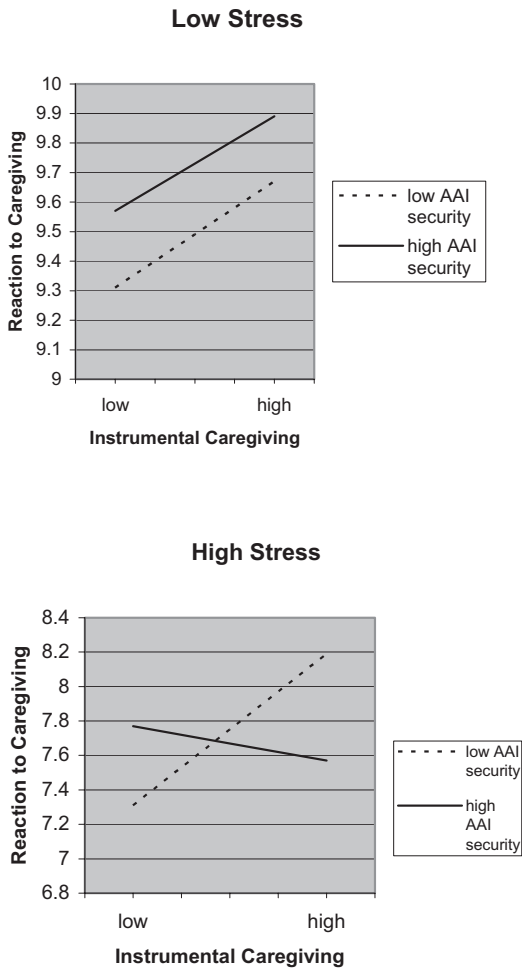

Figure 4. The interaction of actor's Adult Attachment Interview (AAI; Main & Goldwyn, 1994) security, partner's instrumental caregiving, and actor's observer-rated stress/anxiety, predicting actor's responses to caregiving. Slopes are computed 1 *SD* above and 1 *SD* below the mean on AAI security. High and low stress refer to values 1 *SD* above and 1 *SD* below the sample mean, respectively.

on the AAI did not report higher levels of satisfaction with their current romantic partners than did less secure participants. Nevertheless, we conducted an additional set of analyses in which we controlled for the effects of relationship satisfaction (the Hendrick Satisfaction Scale; Hendrick, 1988) in the primary analysis reported above. When we did so, all previous attachment effects remained statistically significant (all ps $< .05$). The quality of care seeking could also be associated with attachment security, with more dismissive persons being less effective, less cooperative, or less likely to seek care when they are upset (cf. Crittenden & Ainsworth, 1989). Accordingly, we also had raters evaluate the quality of each participant's care-seeking behavior to statistically control for care recipients' (actors') quality of care seeking in our primary analysis.[6] When we repeated the APIM analysis controlling for rated care seeking, all of the significant effects reported above remained statistically significant (all ps $< .05$). Finally, we repeated the primary APIM analysis controlling for partners' scores of AAI security. We conducted this analysis to determine whether it was the partners' type/amount of provided caregiving, rather than their AAI scores, that explained the effects reported above. When we controlled for caregivers (partners') AAI scores, only one of our reported findings—the interaction between care recipients' (actors') AAI scores and caregivers' (partners') emotional caregiving—became marginally significant ($p = .09$).

In sum, after statistically controlling for relationship satisfaction, the extent of care sought, and the partners' degree of AAI security, all of our findings remained statistically significant (with the one becoming marginal). These findings, therefore, are robust.

Discussion

To our knowledge, this study is the first to investigate which forms of caregiving—emotional, instrumental, or physical—reduce distress most effectively in individuals who differ in AAI security. This research has several unique features. First, it tests core predictions about responsiveness to different forms of caregiving derived from attachment theory and informed by George and Solomon's (1996, 1999) caregiving model. Second, it examines different forms that partner caregiving and "availability" can take, as called for by Mikulincer and Shaver (2003). Third, the different forms of caregiving were rated by trained observers as caregiving *spontaneously* occurred in a common stressful situation—trying to resolve an existing relationship problem with one's partner.

The results provided support for nearly all of our hypotheses. Specifically, as we predicted, we found that individuals who had more secure attachment representations of their parents were rated as more calmed if their partners offered greater emotional caregiving (Hypothesis 1), whereas those who had more insecure (dismissive) representations of their parents were more calmed by higher levels of instrumental caregiving (Hypothesis 2). It is important to note that we also predicted and found that individuals' level of stress/anxiety during the discussion (rated by observers) moderated these effects. Specifically, among more distressed individuals, more positive reactions to emotional caregiving were witnessed in more secure than in more dismissive individuals (Hypothesis 4), whereas more positive reactions to instrumental caregiving were evident in more dismissive than in more secure persons (Hypothesis 5). Only Hypothesis 3 was not supported: More dismissive individuals did *not* respond more negatively to physical forms of caregiving.

In light of these results, this study fills two noteworthy gaps in knowledge and understanding of caregiving processes in romantic relationships. First, it confirms that different types of behavioral caregiving—especially emotional and instrumental—have differential effects on different people. Most prior attachment research on caregiving has not distinguished between different types or forms of caregiving enacted by partners in specific social contexts (for two important exceptions, see Collins & Feeney, 2000; Florian, Mikulincer, & Bucholtz, 1995), and no research has examined the impact of these three forms of caregiving on observed

[6] To measure care-seeking behavior, we had coders rate the extent to which participants exhibited effective care-seeking behavior in general. The AAI degree-of-security dimension correlated .19 ($p < .08$) with the observer-rated care-seeking measure.

behavior. Second, this study confirms that certain people are more calmed/soothed by certain forms of caregiving in ways anticipated by both attachment theory (Bowlby, 1973) and the caregiving model (George & Solomon, 1996, 1999).

The only hypothesis that did not receive support was Hypothesis 3, which anticipated that dismissiveness would predict discernibly poorer reactions to physical caregiving. Although physical forms of caregiving could be associated with the sexual/mating system instead of the attachment system in young adults, we suspect another culprit. Research involving young children in lab and home settings (e.g., Ainsworth et al., 1978) and adults in romantic relationships (e.g., Brennan et al., 1998) has indicated that more avoidant individuals dislike close body contact. Though there could be myriad reasons why Hypothesis 3 was not supported, one cause might be the physical setting of our conflict-resolution task. During the videotaped discussions, partners sat across a table from each other, which limited the type and perhaps amount of physical contact that could be expressed when one's partner needed comfort. If partners had been seated next to one another on a couch, this may have permitted more intimate, spontaneous, and frequent physical contact, which highly dismissive persons may have found particularly aversive. The physical setting of our discussion task, therefore, could have limited the likelihood of finding effects supporting Hypothesis 3.

Another reason why Hypothesis 3 was not supported was that more dismissive individuals reacted more favorably to physical caregiving if the couple was discussing a major (but not a minor) relationship problem. This unanticipated interaction probably counteracted the effects anticipated in Hypothesis 3. This result, however, underscores a theme found in some past studies. When individuals who have more avoidant working models find themselves in stressful situations and their romantic partners "come through" with clear, unsolicited support, more avoidant persons are rated as being more calmed (see Simpson, Rholes, & Nelligan, 1992). This indicates that such persons can benefit from noninstrumental forms of care in certain contexts, especially in difficult situations in which partners engage in actions that directly counteract the negative caregiving expectations of highly dismissive/avoidant people.

Larger Theoretical Issues

The results of this study raise some important metatheoretical questions and issues. One involves why effects emerged for the AAI but not the self-report measures of adult romantic attachment. The AAI asks respondents to discuss how they were treated—or recall being treated—by their parents between the ages of 5 and 12 years. The AAI, therefore, taps how individuals remember, construe, and have made sense of the caregiving that they received—or believe that they received—when they were young and highly outcome dependent. Self-report adult attachment measures, on the other hand, tap current perceptions of and attitudes toward romantic partners and relationships, and none of the items on the AAQ (or on other measures of adult romantic attachment) inquires about caregiving. Because the AAI centers on perceptions of the type and amount of care received during childhood, it should be more closely tied to caregiving outcomes in subsequent relationships than even measures of self-reported adult romantic-attachment orientations.[7] This is what we found. Although we do not definitively know whether the AAI accurately assesses working models that were actually formed *during* early childhood, the fact that a temporally distant measure of attachment outperforms a contemporary one lends further support to a major tenet of attachment theory (Bowlby, 1973)—that attachment working models associated with relationship experiences that occurred earlier in life continue to guide and impact behavior in close relationships, even in adulthood.

The fact that the hypothesized patterns of caregiving and calming were most apparent when individuals appeared more distressed fits quite well with recent theorizing about how latent constructs may, at times, override manifest constructs to govern behavior. Using attachment theory as an example, Wilson et al. (2000) proposed that stressful situations may activate latent working models developed earlier in life (e.g., patterns of attachment measured by the AAI) that then override more contemporary and manifest models (e.g., self-reported attachment representations of recent romantic partners). This should be particularly true when stressful events rekindle dormant memories of what happened and how individuals were treated in similar stressful situations when *they* were young and vulnerable. Once activated, latent (i.e., less conscious) models may then guide and regulate behavior more strongly than do manifest (i.e., more conscious) models, which normally direct behavior in less stressful contexts. More specifically, when individuals are upset and need care from their romantic partners, distant memories or reconstructed perceptions of how they were treated by their parents should be more accessible and salient than should contemporary working models, even those models that are relevant to the current partner and relationship. This could be one mechanism through which intergenerational transmission of attachment patterns or parenting styles occurs over time.

In many instances, of course, both instrumental and emotional forms of caregiving may be necessary to provide "complete" caregiving. Receiving emotional support and comfort may make many individuals (especially more secure ones) feel better in the short run, but across time, concrete advice and information from partners may be needed to solve or circumvent persistent problems. The differential responses to different types of caregiving documented in this study most likely reflect the *initial* (i.e., first-line) caregiving strategies that "work best" for secure and dismissive persons. As discussed above, this does not mean that secure individuals cannot benefit from receiving instrumental forms of care or that dismissive persons cannot benefit from receiving emotional care and support. Indeed, there are situations in which people who report being highly avoidant toward romantic partners do benefit from receiving emotional forms of care and support from their partners, particularly when they are afraid (see Simpson et al., 1992). Although highly avoidant individuals do not actively seek support in such situations, they discernibly benefit from

[7] AAI scores could be more strongly associated with observer ratings than with the self-report attachment scales because of shared method variance. Ratings of an audiotape interview, however, actually involve a different method than do ratings of verbal and nonverbal interaction behavior. We doubt, therefore, that method variance explains the closer correspondence between the AAI security dimension and the observer-rated behavioral measures than is true of the self-report attachment scales.

it—sometimes even more than individuals who report being more securely attached—when clear support is provided.

According to George and Solomon (1996, 1999), emotional caregiving typically should reduce distress more quickly and more completely than should other initial forms of caregiving, especially for individuals who have more secure attachment histories. Although the initial caregiving preferences of highly dismissive people may seem to be less functional at first glance, they may actually serve adaptive goals. Given their history of experiencing rejection from past caregivers, more dismissive individuals may gravitate to and rely on instrumental forms of caregiving as a primary means for reducing distress for two reasons. First, unlike emotional caregiving, instrumental caregiving may be less likely to trigger unpleasant memories of past failures to elicit and receive emotional care and support from attachment figures (cf. Kunce & Shaver, 1994). Second, instrumental forms of caregiving, such as giving straightforward advice without additional emotional investment, could be perceived as less taxing on some caregivers, reducing the likelihood of further rejection (Main, 1981).

Although we had too few preoccupied people (Es) in our sample to conduct proper tests, from a theoretical standpoint preoccupied individuals are likely to be more calmed by emotional than by instrumental caregiving from attachment figures when they are upset. Highly preoccupied individuals are strongly motivated to achieve greater felt security (Mikulincer & Shaver, 2003), which might be conveyed better or more directly via emotional forms of caregiving. Given the nature of their working models, however, we suspect that some highly preoccupied persons may be reluctant to acknowledge or give full credit to their partners, even when partners offer high-quality emotional caregiving. This, in turn, may render the care that highly preoccupied people do receive less effective in terms of soothing them.

Caveats and Conclusions

The effectiveness of caregiving should depend on the particular skills and motives of the caregiver in relation to the specific needs and state of the care recipient. Unfortunately, theory and research on caregiving in interpersonal relationships has developed relatively independently of the wider research literature on social support. The broader social support literature primarily has been concerned with identifying adaptive and maladaptive consequences of social support on individuals (see Cohen, 2004). The interpersonal relationships field, on the other hand, has focused on how support and caregiving affects the origins and development of close relationships. Our findings suggest that the two fields could inform one another and should be integrated to better understand the processes by which caregiving in close relationships affects mental and physical health over time.

The results of this research should be interpreted bearing some caveats in mind. First, given the correlational nature of the current data, causal conclusions cannot be made about connections between AAI security and optimal forms of caregiving. Second, many variables, in addition to AAI security, are likely to predict which specific form of caregiving a given individual finds most helpful. Third, the current effects could be limited to support provided by a romantic partner or to the particular interaction task (resolving a relationship conflict) used in this study. Fourth, although we have no reason to believe that the current results would not generalize to older or different kinds of romantic relationships (e.g., marriages), one cannot necessarily generalize these findings to other types of couples.

These caveats notwithstanding, this research advances our knowledge and understanding of caregiving in some novel ways. Supporting the "matching" explanation, attachment patterns associated with perceptions of having received sensitive versus insensitive care from parents earlier in life do predict the type of care that most effectively calms people in adult romantic relationships. Future research needs to identify the physiological substrates that accompany these effects. Seeman, Berkman, Blazer, and Rowe (1994), for example, found that emotional support is more closely linked to neuroendocrine functioning than is instrumental support.

To our knowledge, we are the first researchers to measure three unique forms of caregiving *and* to make clear theoretical distinctions between them in a behavioral-observation study involving established couples. Moreover, it is the first study to test a major prediction derived from attachment theory and the caregiving model—namely, whether individuals who vary in attachment security measured by the AAI are more effectively calmed by certain forms of initial caregiving provided by their partners. Both secure *and* insecure individuals benefit from receiving care. The types of care that work best, however, are quite different.

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