

A Safe Haven: An Attachment Theory Perspective on Support Seeking and Caregiving in Intimate Relationships

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This study used an attachment theoretical framework to investigate support-seeking and caregiving processes in intimate relationships. Dating couples ($N = 93$) were videotaped while one member of the couple (support seeker) disclosed a personal problem to his or her partner (caregiver). Results indicated that when support seekers rated their problem as more stressful, they engaged in more direct support-seeking behavior, which led their partners to respond with more helpful forms of caregiving. Responsive caregiving then led seekers to feel cared for and to experience improved mood. Evidence for individual differences was also obtained: Avoidant attachment predicted ineffective support seeking, and anxious attachment predicted poor caregiving. Finally, couples in better functioning relationships engaged in more supportive interactions, and participants' perceptions of their interaction were biased by relationship quality and attachment style.

To remain within easy access of a familiar individual known to be willing and able to come to our aid in an emergency is clearly a good insurance policy—whatever our age. (Bowlby, 1988, p. 27)

When individuals experience stressful or threatening events, they often turn to close others for comfort, assistance, and support. Indeed, a large body of research indicates that receiving social support, or feeling confident that it will be available when needed, helps individuals cope more effectively with stressful life events and appears to have long-term benefits for health and psychological well-being (for reviews, see Cohen & Syme, 1985; Pierce, Sarason, & Sarason, 1996; B. R. Sarason, Sarason, & Gurung, 1997; Vaux, 1988). Although the links between social support and important personal outcomes are now well documented, researchers still know little about the specific ways in which social support processes are carried out in dyadic interaction or about the role that social support plays in the development and maintenance of close relationships. One reason for this gap is that the social support and close relationships literatures have evolved within different research traditions and have developed along largely independent lines. Fortunately, researchers from both traditions are beginning

to acknowledge the importance of integrating the study of social support with the study of close relationships (e.g., Acitelli, 1996; Barbee & Cunningham, 1995; Bolger, Foster, Vinokur, & Ng, 1996; Cutrona, 1996; Pasch, Bradbury, & Davila, 1997; I. G. Sarason, Sarason, & Pierce, 1994). Although these developments are extremely encouraging, there are still many topics that need to be studied, and there is a clear need for integrative theoretical models.

In the present study, we contributed to this effort by using *attachment theory* as a framework for exploring support-seeking and caregiving processes in adult intimate relationships. Attachment theory offers a useful framework for studying social support for a number of reasons. First, attachment theory explicitly acknowledges that social support is a dyadic process that involves the interaction of two distinct behavioral systems: the attachment system and the caregiving system (Bowlby, 1982). Second, attachment theory highlights the importance of support and caregiving processes for the development of trust and felt security in intimate relationships. Finally, attachment theory identifies important individual differences in attachment style that may influence the nature and quality of supportive exchanges between intimate partners.

In this study, we conceptualized social support as an interpersonal, transactional process that involves one partner's support-seeking efforts and the other partner's caregiving responses. Using observational methods, we examined how support-seeking and caregiving behaviors are coordinated in dyadic interaction and how these behaviors are related to support seekers' subjective perceptions of their interaction and to their well-being (mood) after the interaction. We also examined how individual differences in attachment style shape the nature and quality of support interactions and how these interactions are linked to relationship satisfaction. Finally, we examined the degree to which partners' per-

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ceptions of their interaction agreed with each other and with outside observers and how such perceptions are biased by partners' prior expectations.

Attachment Theory

The Attachment System

Normative processes. Attachment theory was first developed to explain why infants become attached to their caregivers and emotionally distressed when separated from them. Drawing from principles of evolutionary theory, Bowlby (1982) argued that attachment behaviors in infancy are regulated by an innate behavioral system that functions to promote safety and survival by maintaining a child's proximity to a nurturing caretaker. Thus, when a child is frightened, ill, or in unfamiliar surroundings, the attachment system will be activated, and the child will seek protection and comfort from an attachment figure (Bowlby, 1982; Bretherton, 1985). Furthermore, the child's ability to rely on his or her attachment figure as a *safe haven* at such times is considered to be a key component of well-functioning attachment bonds and a key predictor of healthy emotional development.

Although Bowlby focused primarily on infants and young children, he acknowledged the importance of studying attachment processes in adulthood and argued that the basic functions of the attachment system continue to operate across the life span (Bowlby, 1988). This implies that the attachment system in adulthood will be activated whenever felt security is threatened so that, when adults are faced with events that they perceive as stressful or threatening, they will tend to desire or seek contact with significant others. Thus, support-seeking behavior (e.g., expressing distress or seeking comfort or assistance) in adulthood can be considered a manifestation of the attachment behavioral system. Furthermore, attachment theory postulates that emotional well-being in adulthood, as in childhood, will depend in part on having an accessible attachment figure who can serve as a reliable safe haven in times of need.

Individual differences. Although the need for felt security is believed to be universal, people differ systematically in the way they cope with distress and regulate feelings of security (Ainsworth, Blehar, Waters, & Wall, 1978). These differences in "attachment style" are thought to reflect underlying differences in internal working models of oneself (as worthy or unworthy of love and support) and others (as responsive or unresponsive), which are thought to develop, at least in part, from interactions with important attachment figures (Ainsworth et al., 1978; Bowlby, 1973; Bretherton, 1985; Main, Kaplan, & Cassidy, 1985). Once formed, working models are expected to be relatively stable, to operate largely outside awareness, and to play an important role in guiding cognition, emotion, and behavior in attachment-relevant contexts (Bowlby, 1973; Collins & Read, 1994; Shaver, Collins, & Clark, 1996).

Adult attachment researchers typically define four prototypic attachment styles derived from two underlying dimensions: *anxiety* and *avoidance* (Bartholomew & Horowitz, 1991; Brennan, Clark, & Shaver, 1998; Fraley & Waller, 1998). The anxiety dimension refers to one's sense of self-worth and acceptance (vs. rejection) by others, and the avoidance dimension refers to the degree to which one approaches (vs. avoids) intimacy and inter-

dependence with others. *Secure* adults are low in both attachment-related anxiety and avoidance; they are comfortable with intimacy, willing to rely on others for support, and confident that they are valued by others. *Preoccupied* (anxious-ambivalent) adults are high in anxiety and low in avoidance; they have an exaggerated desire for closeness and dependence, coupled with a heightened concern about being rejected. *Dismissing avoidant* individuals are low in attachment-related anxiety but high in avoidance; they view close relationships as relatively unimportant, and they value independence and self-reliance. Finally, *fearful avoidant* adults are high in both attachment anxiety and avoidance; although they desire close relationships and the approval of others, they avoid intimacy because they fear being rejected.

Much like children's working models direct their attachment behavior in parent-child interactions, working models in adulthood should shape the way that adults express and regulate their attachment needs. In fact, Kobak and Sceery (1988) suggested that the different attachment styles can be understood in terms of rules that guide responses to emotionally distressing situations (see also Bartholomew, Cobb, & Poole, 1997). Consistent with this assumption, a number of self-report studies have shown that adults with different attachment styles differ in their tendency to seek social support as a coping strategy. As would be expected, avoidant adults are less likely than secure adults to report that they seek support in response to stress (Mikulincer & Florian, 1995; Mikulincer, Florian, & Weller, 1993; Ognibene & Collins, 1998). In addition, two observational studies have shown links between avoidance and support-seeking behavior among women. Simpson, Rholes, and Nelligan (1992) exposed women to a stressful laboratory situation and found that avoidant women sought less support from their romantic partners as their level of anxiety increased. Likewise, Fraley and Shaver (1998) observed couples who were separating from each other at an airport and found that women who were higher in avoidance sought less contact with their partner.

Insecure attachment is also associated with pessimistic beliefs and expectations about the risks, costs, and futility of seeking help from others (Wallace & Vaux, 1993) and with subjective perceptions of available support (Bartels & Frazier, 1994; Blain, Thompson, & Whiffen, 1993; Davis, Morris, & Kraus, 1998; Kobak & Sceery, 1988; Ognibene & Collins, 1998; Priel & Shamai, 1995). Secure adults tend to be confident that support is available to them and generally satisfied with the support they receive. In contrast, insecure adults report less available support, less satisfaction with the support they receive, and a larger gap between what they say they need and what they say they receive.

The Caregiving System

Normative processes. Although attachment scholars have tended to focus on the attachment (care-seeking) system, the caregiving system is an integral component of attachment bonds (Kunce & Shaver, 1994). Indeed, Bowlby (1982) referred to attachment bonds as a "shared dyadic programme" (p. 377) in which care seekers and caregivers play complementary roles and in which the behavior of one partner commonly meshes with that of the other. Whereas the attachment system is a normative safety-regulating system that reduces the risk of the self coming to harm, the caregiving system reduces the risk of a close other coming to harm. In its optimal form, caregiving includes sensitivity and

responsiveness to another person's expressed needs (Reis & Patrick, 1996) and should include a broad array of behaviors that complement a partner's attachment behavior (Kunce & Shaver, 1994).

From a normative perspective, the caregiving system alerts individuals to the needs of others and motivates them to provide comfort and assistance to those who are dependent on them. Thus, the provision of support in close relationships can be considered a manifestation of the caregiving system. Furthermore, Bowlby suggested that, in happy, secure relationships, attachment and caregiving occur together in harmony, with each person providing kindness and support on which the other person comfortably relies. Thus, feeling nurtured and cared for by one's partner should be a critical component of stable and well-functioning intimate relationships. Consistent with this idea, two recent studies (Carnelley, Pietromonaco, & Jaffe, 1996; Feeney, 1996) showed that relationship satisfaction in dating and married couples depended, in large part, on whether one's partner was perceived as a good caregiver who provides a safe haven of comfort and security.

Individual differences. Not everyone is equally skilled at being, or equally motivated to be, a responsive caregiver. Just as there are individual differences in the operation of the attachment system, there are also signs of systematic individual differences in caregiving (Kunce & Shaver, 1994). Because individuals learn about caregiving in part through their own attachment experiences, information about the likelihood of receiving care from others is likely to be linked to beliefs about, and strategies for, providing care to others (Kunce & Shaver, 1994; Main et al., 1985). Thus, working models of attachment may be best conceptualized as working models of attachment-caregiving relationships, which consist of rules that guide support-seeking behaviors and the regulation of personal distress, as well as rules that guide caregiving behaviors and the regulation of a significant other's distress.

On the basis of this reasoning, individual differences in attachment style should influence caregiving behavior. Consistent with this idea, several questionnaire studies have shown that attachment style is linked in predictable ways to patterns of caregiving in intimate relationships (Carnelley et al., 1996; Feeney, 1996; Kunce & Shaver, 1994). Overall, secure attachment tends to be associated with more beneficial forms of caregiving including more responsive and less overinvolved care. Consistent with these self-report studies, Simpson et al.'s (1992) observational study showed that secure men offered more support as their partners displayed greater anxiety, whereas avoidant men offered less support. Likewise, Fraley and Shaver (1998) found that avoidant women displayed less caregiving behavior toward their partner during airport separations.

An Attachment Theory Perspective on Social Support

As the preceding review makes clear, attachment theory offers an ideal framework for exploring support-seeking and caregiving processes in intimate relationships, and recent studies provide encouraging initial support for this perspective. Nevertheless, the existing literature is limited in both scope and methodology. Most studies have relied on self-report methodologies that explore individual differences in global perceptions of support or caregiving. Although self-report studies offer valuable insights, they must be supplemented by observational studies that examine the interper-

sonal nature of the social support process as it unfolds in dyadic interaction. In addition, although individual differences are clearly important, it is vital that researchers also explore normative patterns of attachment and caregiving and the ways in which these patterns contribute to feelings of security and well-being among intimate partners. Finally, with few exceptions (Fraley & Shaver, 1998; Simpson et al., 1992), past studies have investigated either support-seeking or caregiving processes but not both processes simultaneously. As a result, little is known about the ways in which the attachment and caregiving systems influence each other in the manner proposed by attachment theory. Bowlby's notion of attachment and caregiving as a shared dyadic program has not yet been fully articulated or investigated in the adult literature.

The current research addressed these gaps by examining how attachment and caregiving processes are coordinated in the context of dyadic interaction. To accomplish this goal, we brought couples into the laboratory and asked one member of the couple (the *support seeker*) to discuss a personal problem or stressful event with his or her partner (the *caregiver*).¹ Our specific research goals centered around three key issues. First, we tested a general model of social support as an interpersonal process. This model includes a number of detailed hypotheses (described subsequently) regarding normative patterns of support-seeking and caregiving behavior as well as individual differences in these patterns. Second, we explored the links between caregiving and relationship quality. Finally, because of the unique nature of our data set (which included objective ratings of the interaction as well as partners' perceptions), we examined the degree to which observers and partners agreed about the interaction and the degree to which partners' unique (nonshared) perceptions were colored by their prior expectations.

Our research differs from prior observational work (Fraley & Shaver, 1998; Simpson et al., 1992) in a number of ways. First, unlike prior studies that have examined attachment processes in somewhat unusual circumstances (Simpson et al., 1992, exposed women to an anxiety-provoking but ambiguous laboratory stressor, and Fraley and Shaver, 1998, observed couples separating at an airport), we examined support-seeking and caregiving behavior in response to the types of daily stressors that are apt to make up a large portion of adult attachment interactions. In doing so, we were able to explore a wider variety of support-seeking and caregiving strategies and to draw links between attachment theory and the broader literature on social support in couples. Second, unlike prior studies that focused exclusively on objective ratings of behavior, we also assessed partners' subjective perceptions of their interactions and their emotional responses to them. This approach enabled us to explore the complex interplay among behavior, emotion, and social construal processes in dyadic interaction. Finally, unlike past studies that have focused primarily on individual differences in attachment style, we examined relationship quality as a unique correlate of effective caregiving, which enabled

¹ We use the labels "support seeker" and "caregiver" to distinguish the different roles in which participants were placed in the interaction. However, it is important to note that participants in either the support seeker or caregiver role may not have actually sought support or provided care during the interaction.

us to link attachment and caregiving interactions to broader issues of relationship functioning.

Support Seeking and Caregiving as an Interpersonal Process

On the basis of attachment theory, we conceptualized social support as an interpersonal process that involves one partner's support-seeking efforts and the other partner's caregiving responses, the goal of which is the amelioration of a partner's distress (Figure 1). Our model was inspired both by attachment theory and by other relevant theories in the close relationships literature, most notably Reis and Shaver's (1988) interpersonal model of intimacy. Consistent with attachment theory, our model incorporates normative processes as well as individual differences. We begin by describing the normative portion of the model (Paths *a-d*). We then consider how these normative processes may be shaped by partners' attachment styles (Paths *e-k*).

Normative processes. As shown in Figure 1, the social support process is set into motion with the occurrence of an event that is perceived as stressful or threatening. This event should activate the attachment system and motivate an individual to express his or her distress and seek support (Path *a*). Of course, adults have a variety of coping strategies available to them, and not every event will require support or assistance from others. We expect that higher levels of perceived stress (or threat) will increase the likelihood that the attachment system will be activated, thereby increasing the desire for help and support from significant others. Thus, we predicted that support seekers who evaluated their problem as more serious and distressing (i.e., threatening) would exhibit more direct support-seeking behavior (*Hypothesis 1*).

In the next stage of the model, the support seeker's expressions of distress should elicit caregiving feelings (e.g., sympathy and concern) and behavior (e.g., comfort, reassurance, and instrumental aid) from the potential support provider (Path *b*). Two general patterns were expected in this study. First, because the caregiving system should be activated in response to the support seeker's distress, clear and direct expressions of need should be associated with increased caregiving efforts and more responsive forms of caregiving (*Hypothesis 2a*). Second, if caregiving behavior and support-seeking behavior are meshed in complementary ways, as proposed by attachment theory, then the type of help that is offered should be coordinated with the type of support that is sought (*Hypothesis 2b*). For example, if the support seeker expresses emotional distress, the caregiver should respond with emotional

support; if the support seeker expresses a need for assistance or advice, the caregiver should provide help that is aimed at problem resolution.

Next, the support seeker's subjective perception of the interaction should depend directly on the caregiver's behavior (Path *c*). Behaviors that communicate concern, understanding, and reassurance or that provide instrumental aid appropriate to the stressor should be perceived by the recipient as more supportive. In contrast, behaviors that are critical or that minimize or dismiss one's problem should be viewed as unsupportive (Lehman & Hemphill, 1990). Thus, we predicted that support seekers' subjective perceptions of support would be associated with specific helpful and unhelpful behaviors exhibited by their partner (*Hypothesis 3*).

Finally, to the extent that the support seeker subjectively evaluates the interaction as supportive, he or she should experience immediate short-term benefits in well-being (Path *d*), including reduced anxiety, improved mood, greater perceived ability to cope, and so on. In the present study, we focused on changes in mood from before to after the interaction. We hypothesized that when support seekers evaluated their interaction as more caring and supportive, they would feel better after the interaction than before the interaction (*Hypothesis 4*).

Individual differences. The normative portion of the model represents a prototypical support interaction. However, this prototypical pattern should be shaped by the needs and skills that each partner brings to the interaction and, consequently, should be systematically associated with partners' attachment styles. (Our hypotheses concerning individual differences focus on the dimensions of attachment-related anxiety and avoidance.) Individual differences in attachment style can affect support interactions in at least two ways. First, individuals with different attachment styles may differ in their patterns of cognition or behavior (the boxes in the model). For example, they may differ in their tendency to use particular support-seeking strategies. We refer to these differences as "main effects" of attachment style. Second, the component processes in the model (the paths in the model) may be moderated by attachment style. For example, the link between stress and support seeking may differ for support seekers with different attachment styles. We refer to these differences as "moderated effects" of attachment style.

Not all individuals will be willing to disclose their distress or able to seek support in an adaptive manner. Thus, individual differences in attachment style should be associated with differences in support-seeking behavior (Path *f*). Consistent with theo-

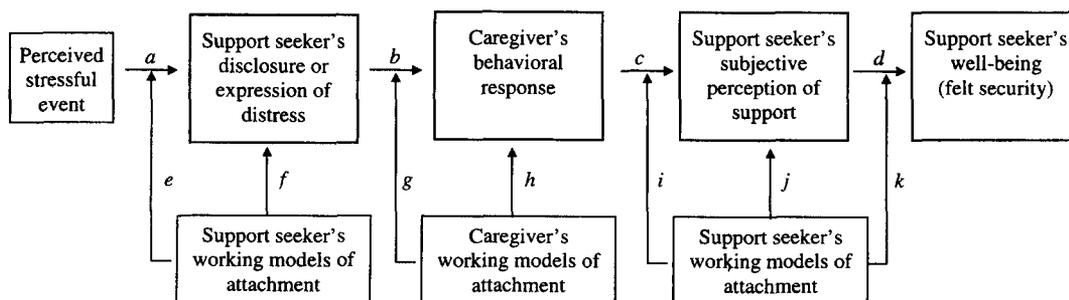


Figure 1. Interpersonal model of support-seeking and caregiving interactions.

retical expectations and past research, we predicted that adults higher in avoidance would be less likely to acknowledge their distress or to communicate their support needs in a direct and open manner during the interaction (*Hypothesis 5a*). In addition, although anxious adults should be willing to disclose their distress, their lack of confidence in the availability of others may make them ambivalent about expressing their needs. Thus, we expected that attachment-related anxiety would be associated with the use of indirect support-seeking strategies (*Hypothesis 5b*).

We also expected that attachment style may moderate the link between stress and support-seeking behavior (Path *e*). Specifically, individuals who are high in avoidance should be less likely to seek support in response to greater stress. Thus, we expected that the link between stress and support-seeking behavior would be weaker for individuals high in avoidance than for individuals low in avoidance (*Hypothesis 6*).

Next, not all caregivers will be equally skilled and motivated to respond appropriately to their partner's needs (Path *h*). We reasoned that caregivers higher in avoidance would be less motivated to care for others' attachment needs and might lack the interpersonal skills needed to provide responsive support. Thus, we predicted that caregivers who were higher in avoidance would display less responsive and more negative caregiving behaviors during the interaction (*Hypothesis 7a*). Although anxious adults value closeness and nurturance, they tend to be preoccupied with their own attachment needs, which may limit their ability to attend to the needs of others. Thus, we hypothesized that caregivers who were higher in attachment-related anxiety would also exhibit less effective caregiving behavior (*Hypothesis 7b*).

We also explored the possibility that the caregiver's attachment style may moderate the link between the support seeker's behavior and the caregiver's response (Path *g*). Theory and past research led us to derive two competing hypotheses. To the extent that responsive caregiving involves a high level of coordination between support seekers and caregivers, we would expect a stronger link for caregivers who are more secure (lower in attachment-related avoidance or anxiety, or both). However, to the extent that sensitive caregiving involves the provision of comfort and assistance without requiring that the support seeker make an explicit request for help (Cutrona, Cohen, & Igram, 1990; Eckenrode & Wethington, 1990), we would expect a weaker link for caregivers who are more secure. Given these two plausible alternatives, we advanced no specific hypothesis but considered this an important research question to explore in our data (*Research Question 1*).

Individual differences in attachment style are also likely to influence perceptions of support (Path *j*). Working models of attachment should act as interpretive filters, shaping the way that support seekers construe their partner's behavior (Collins, 1996; Collins & Allard, 1999; Lakey & Cassady, 1990; Lakey, McCabe, Fiscaro, & Drew, 1996). Overall, individuals with more pessimistic models should be less likely to perceive their partner's behavior as supportive and well intentioned. Thus, we hypothesized that high levels of attachment-related anxiety and avoidance would be negatively associated with the support seeker's subjective perceptions of support (*Hypothesis 8*).

We also explored the possibility that the support seeker's attachment style moderates the link between the caregiver's objective behavior and the support seeker's subjective perceptions (Path *i*). Once again, we derived two plausible hypotheses. To the extent

that a strong link indicates that the support seeker's perceptions were rooted in "reality," we hypothesized that secure attachment (lower levels of attachment-related anxiety and avoidance) would be associated with a stronger link (i.e., greater accuracy) between the caregiver's behavior and the support seeker's perceptions (Collins & Allard, 1999). However, to the extent that secure working models enable partners to be more generous in their perceptions, regardless of their partner's actual behavior, we expected a weaker link (i.e., less accuracy) for those with more secure working models (Ickes & Simpson, 1997; Murray, Holmes, MacDonald, & Ellsworth, 1998). Thus, we advanced no specific hypothesis but considered this an important research question to explore (*Research Question 2*).

Finally, although we did not expect attachment style differences in mood after the interaction, we did expect that the link between support and mood would be moderated by the support seeker's attachment style (Path *k*). Specifically, emotional outcomes for avoidant individuals (who are unlikely to desire support) should be less tied to whether or not they received support, whereas emotional outcomes for anxious individuals (who rely heavily on support from others) should be strongly linked to the quality of the support they received. Thus, we predicted that the link between perceived support and changes in mood would be weaker for those higher in avoidance and stronger for those higher in attachment-related anxiety (*Hypotheses 9a and 9b*).

Caregiving and Relationship Quality

Overall, we expected that couples with better functioning relationships would engage in more supportive and caring interactions. We had two primary reasons for expecting this association. First, social support and caregiving processes should be essential to the development and maintenance of trust and felt security in adult relationships (Holmes, 1991). Much like a child's sense of security stems from the caregiver's sensitivity and responsiveness to the child's needs, a sense of felt security in adult relationships should depend in large part on the degree to which one's partner is available and responsive when needed (a *dyadic* effect). Thus, we predicted that support seekers who rated their relationship as closer and more satisfying would have partners who were more effective caregivers during their interaction (*Hypothesis 10a*).

Second, a caregiver's motivation to respond to a partner's needs should be shaped by the caregiver's feelings of closeness, interdependence, and commitment. Attachment relationships in adulthood are fundamentally communal relationships in which partners are expected to provide benefits (e.g., social support) to each other in response to needs as they arise (Clark & Mills, 1993). Nevertheless, romantic partners have considerable flexibility in the degree to which they feel responsible for "managing" their partner's feelings of security. We expect that caregivers who feel closer to their partner (Aron, Aron, Tudor, & Nelson, 1991), and who are more committed to their relationship (Rusbult & Buunk, 1993), should feel a greater sense of responsibility for their partner's well-being and should be more motivated to provide help when needed. Thus, we predicted that caregivers who rated their relationship as closer and more satisfying would be more supportive toward their partners during the interaction (*Hypothesis 10b*).

Shared and Unique Perceptions of Social Support

Exploring social support from a dyadic perspective raises important questions regarding partners' and observers' perceptions of interpersonal processes. Do dyadic partners agree with each other about the supportiveness of their interaction, and do they agree with outside observers? To the extent that partners have unique (nonshared) perspectives, are these perspectives biased by their preexisting expectations? These questions have important theoretical and methodological implications, which we consider later. For now, we begin with the assumption that subjective perceptions will be shaped in part by objective features of the interaction ("bottom-up" processes) and in part by the perceivers' existing schemas that they bring to the interaction ("top-down" processes). First, we predicted that support seekers' and caregivers' perceptions of their interaction would be significantly associated with the ratings made by outside observers (*Hypothesis 11a*). Second, romantic partners are likely to share pathways of communication that cannot be identified or understood by outside observers. Partners may also share biases or unique images of their relationship that are not shared by observers. Thus, we predicted that dyadic partners would share a view of their interaction that was not shared by observers (*Hypothesis 11b*). Finally, we predicted that each individual partner's unique perception (that not shared with either his or her partner or observers) would be shaped by his or her preexisting expectations. In the current study, we were interested in two factors that may bias perceptions: attachment style and relationship satisfaction.² Specifically, we hypothesized that, after controlling for observer and partner perceptions, perceivers with more secure working models of attachment (those lower in attachment-related anxiety and avoidance) and with more satisfying relationships would perceive their interaction as more supportive (*Hypothesis 11c*).

Method

Participants

Participants were 93 dating couples from the State University of New York at Buffalo. One member of each couple was recruited from the undergraduate participant pool and was asked to bring his or her romantic partner to the study. For clarity, we refer to our recruited participant as the "support seeker," his or her romantic partner as the "caregiver," and both members of the couple as "participants." The mean age of support seekers was 19 years (range: 17 to 26), and the mean age of caregivers was 19.8 years (range: 17 to 33). All couples were heterosexual, with the exception of one lesbian couple. Mean relationship length was 12.6 months (range: 1 to 60 months). Fifty-two women and 41 men were assigned to the support-seeker role, and 42 women and 51 men were assigned to the caregiver role.

Laboratory Procedure

We used a laboratory paradigm similar to that of Cutrona and Suhr (1992) in which we videotaped romantic couples while one member of the couple disclosed a stressful problem to his or her partner. Couples were informed that they would be completing questionnaires and participating in two social interactions that would be videotaped. In the first phase of the study, participants completed preliminary questionnaires that included measures of attachment style and relationship quality. Next, the couple was videotaped while they played a game together. The purpose of this game was to help participants relax in front of the cameras and to provide a filler activity between the preliminary questionnaires and the upcoming social

support interaction. After the game, participants were told that the next part of the study would involve an interaction period in which one of them would be asked to talk about a recent personal concern or worry. (The recruited participant was always assigned to the support-seeker role, and his or her partner was always assigned to the caregiver role.) Support seekers were allowed to choose any type of problem except one that involved conflict with their romantic partner. Support seekers completed a brief questionnaire in which they were asked to describe the problem they had selected to discuss. Preinteraction mood was also measured at this time. Couple members were then videotaped while they discussed (for up to 10 min) whatever stressful issue the support seeker had selected. Finally, participants completed questionnaires that measured their current (postinteraction) mood and their perceptions of their interaction. Videotaped interactions were later coded for support-seeking and caregiving behaviors with a modified version of a coding scheme developed by Barbee and Cunningham (1995).

Measures

Attachment style. There is growing consensus (Brennan et al., 1998; Fraley & Waller, 1998) that individual differences in attachment style are best conceptualized in terms of two continuous dimensions: attachment-related anxiety and avoidance. To obtain the most reliable assessment of these dimensions, we asked participants to complete two attachment scales. First, participants completed the revised version of the Adult Attachment Scale (AAS; Collins & Read, 1990). This 22-item scale contains three subscales that can be used to measure attachment-related anxiety and avoidance (Collins, 1996). The *close* subscale measures the extent to which a person is comfortable with closeness and intimacy ($\alpha = .85$), and the *depend* subscale measures the extent to which a person is comfortable depending on others ($\alpha = .85$). Together, these two subscales reflect the degree to which individuals tend to avoid (vs. approach) intimacy and interdependence with others. The *anxiety* subscale measures the extent to which a person is worried about being rejected or unloved ($\alpha = .88$). Participants responded in terms of their general orientation toward close relationships.

Participants also read Bartholomew's (Bartholomew & Horowitz, 1991) four attachment prototypes (secure, preoccupied, fearful, and dismissing) and were asked to rate (on a 7-point scale) the extent to which each one corresponded to their general style in romantic relationships. Following Bartholomew's guidelines, we computed two attachment dimensions: (a) a *model of self* dimension [(fearful + preoccupied) - (secure + dismissing)], in which higher scores reflect a sense of self-worth and confidence and a lack of anxiety about being rejected, and (b) a *model of other* dimension [(dismissing + fearful) - (secure + preoccupied)], in which higher scores reflect comfort with closeness and a tendency to approach intimate relationships.

The AAS and Bartholomew measures were standardized and combined to form two composite attachment dimensions. An attachment-related *anxiety* dimension was computed by combining the AAS anxiety index and Bartholomew's model of self index, which were highly correlated ($r = -.70, p < .001$). Scores were coded such that high scores reflected greater anxiety about being rejected by others and a lower sense of self-worth. An *avoidance* dimension was computed by combining the AAS close and

² When we use the term *bias*, we do not mean to imply that a perceiver's subjective perception of an interaction is either "accurate" or "inaccurate." We simply mean that a perceiver's unique perspective may be systematically associated with factors outside the interaction. We make no assumptions about whose perspective (the support seeker, the caregiver, or the outside observer) represents the objective "truth." We assume only that each person has a unique perception that is a legitimate target of inquiry and that may have different implications for understanding support and caregiving processes.

depend indexes with Bartholomew's model of other index. All three indexes were highly intercorrelated ($r = .68$ for close and depend, $r = .73$ for close and model of other, $r = .59$ for depend and model of other, all $ps < .001$). Scores were coded such that high scores reflected greater discomfort with closeness and a tendency to avoid intimacy. (A principal-components analysis confirmed that the five attachment indexes [close, depend, anxiety, model of self, and model of other] were clearly defined by two underlying dimensions assessing attachment-related anxiety and avoidance.) The attachment-related anxiety and avoidance composites were moderately correlated ($r = .26, p < .05$).

Relationship quality. Participants completed a comprehensive, 25-item measure of relationship quality adapted from Collins and Read (1990). Items assessed a variety of relationship features including satisfaction, intimacy, conflict, commitment, and perceptions of partner's commitment. Items were standardized and averaged to form an index of relationship quality ($\alpha = .92$). Higher scores indicate better relationship quality.

Perceived stressfulness of the problem. As a means of assessing the degree to which support seekers perceived their problem as stressful and threatening, respondents wrote a brief open-ended description of their problem and rated it along a series of dimensions including the extent to which it was (a) stressful-upsetting, (b) important, and (c) pleasant-unpleasant. Items were rated on 7-point scales with appropriate anchors. These three items were summed to form an index of perceived stressfulness of the problem.³ Support seekers also rated how much they had already discussed the problem with their partner on a scale ranging from 1 (*not discussed at all*) to 7 (*discussed fully*).

Preinteraction and postinteraction mood. As a means of assessing current mood, support seekers completed a nine-item mood scale immediately before and after their interaction. This scale asked them to describe how they felt "right now" by rating a series of positive (happy, pleased, loved, satisfied, and accepted) and negative (disappointed, angry, nervous, and rejected) emotions along 7-point scales. The positive and negative mood subscales were strongly correlated with each other (preinteraction $r = -.50$, postinteraction $r = -.53$) and were associated with other study variables in similar ways. Thus, to simplify the analyses, we reverse scored the negative mood items and created an overall index of the support seeker's preinteraction mood ($\alpha = .86$) and postinteraction mood ($\alpha = .85$). Higher scores indicate more positive mood.

Subjective perceptions of the interaction. As a means of assessing support seekers' perceptions of their interaction, support seekers rated six items concerning their partner's behavior during the interaction including such things as listening, understanding, criticizing, responsiveness, and concern (e.g., "Overall, how supportive was your partner during the interaction?" "During the interaction, did you feel that your partner was responsive to your needs?" and "During the interaction, did your partner seem to understand the way you felt about things?"). Items were rated on 7-point scales. The six items were averaged to form a support seeker perceived support index ($\alpha = .87$), with higher scores indicating greater perceived support.

As a means of assessing caregivers' perceptions of their interaction, caregivers responded to a parallel set of six items that assessed the degree to which caregivers believed their own behavior had been supportive (e.g., "Overall, how supportive were you toward your partner?" "During the interaction, did you feel that you were responsive to your partner's needs?" and "During the interaction, did you feel that you understood the way your partner felt about things?"). Items were averaged to form a caregiver perceived support index ($\alpha = .79$).

Coding Interactions

Videotapes were coded by trained observers who were unaware of the study hypotheses and participants' attachment characteristics. Two independent observers rated each support interaction. To assess interobserver

reliability, we computed intraclass correlations (ICCs; McGraw & Wong, 1996) for all coded dimensions.⁴ Averages of the two observers' ratings were then used in data analysis.

Support-seeking behaviors. The behavior of primary interest involved the extent to which the support seeker self-disclosed and used direct versus indirect support-seeking strategies. Initially, observers rated the amount of *emotional disclosure* (ICC = .87) and *descriptive disclosure* (ICC = .88) along two scales ranging from 1 (*no disclosure at all*) to 7 (*full disclosure*).

Next, we used a coding scheme developed by Barbee and Cunningham (1995) to identify specific support-seeking behaviors. This scheme crosses the dimension of verbal versus nonverbal support seeking with the dimension of direct versus indirect expressions of need, yielding four categories of behavior: (a) *Ask* (ICC = .87) is a direct-verbal strategy that includes behaviors such as asking directly for help and giving details of the problem; (b) *pout-cry* (ICC = .83) is a direct-nonverbal strategy that involves conveying one's need for help through expressions of distress and behaviors such as crying or pouting; (c) *hint-complain* (ICC = .82) is an indirect-verbal strategy that involves complaining about a situation or hinting that a problem exists without directly requesting aid or making it clear that help is desired; and (d) *sulk-fidget* (ICC = .79) is an indirect-nonverbal strategy that involves subtly showing negative affect in the form of sighing, sulking, or fidgeting. Observers rated the degree to which support seekers used each of these types of support-seeking strategies on a scale ranging from 1 (*none at all*) to 7 (*a great deal*).

On the basis of these ratings, we computed three indexes of support seeking: (a) *emotional disclosure*, which was the sum of emotional disclosure and pout; (b) *instrumental disclosure*, which was the sum of descriptive disclosure and ask; and (c) *indirect support seeking*, which was the sum of hint and sulk. Finally, for use in some analyses, we computed a global index of *direct support seeking*, which was formed by summing the

³ The alpha coefficient for this index was low (.34) because ratings of the negativity of the problem were only weakly correlated with ratings of stressfulness ($r = .20$) and importance ($r = -.075$). (Stressfulness and importance were strongly correlated with each other [$r = .55$]). However, because severity of the problem should be greatest when the problem is perceived as stressful, important, and negative, we retained all three items for our index.

⁴ As summarized by McGraw and Wong (1996), there are a variety of ICC coefficients that can be computed, and the choice of a coefficient will depend on the nature of one's data and the goal of one's analysis. In the present case, we computed McGraw and Wong's ICC (C, k), which assesses the degree of consistency (C) across k measurements (in this case, $k = 2$ independent observers). This ICC, which is equivalent to Cronbach's alpha, is the appropriate estimate of interobserver reliability when k observers rate all targets and when the averages of the observers' ratings are used in data analysis.

⁵ Alpha coefficients are not presented for any of the composite support-seeking and caregiving behavioral indexes because the individual behavioral components of each index were not intended to reflect a single underlying construct and were therefore not expected to be highly correlated with each other. For example, increases in one type of negative behavior (e.g., blame) were not necessarily expected to covary with increases in other types (e.g., escape). As such, classical test theory and factor analysis models, on which the alpha coefficient is based, are not the appropriate measurement models for these data (Bollen & Lennox, 1991). Instead, our behavioral ratings reflect what Bollen and Lennox (1991) referred to as "causal" indicators or "composite" indicators. This measurement model assumes that the indicators (e.g., blame, escape, or dismiss) determine the underlying latent construct (e.g., negative support), rather than vice versa.

direct behaviors (emotional disclosure, descriptive disclosure, ask, and pout) and then subtracting the indirect behaviors (hint and sulk).⁵

Finally, to provide an objective assessment of the type and severity of problems being discussed by our couples, observers rated two aspects of the problems. First, they categorized the problem as personal, interpersonal, or achievement. Second, they rated the seriousness or ego relevance of the problem (low, medium, or high), which was defined as the degree to which a lot was at stake for the support seeker (ICC = .87).

Caregiving behaviors. Initially, coders rated four global aspects of caregiving: (a) the extent to which the caregivers appeared to be *listening-attentive* (ICC = .83); (b) the extent to which they communicated *understanding* (ICC = .87), which included such things as clarifying the problem, reframing it, and showing empathy; (c) the extent to which the caregiver *blamed* (ICC = .90) the support seeker for his or her problem or criticized the support seeker's feelings or behaviors; and (d) *overall support effort* (ICC = .82), which was defined as the extent to which the caregiver was actively engaged in the interaction. These aspects of the caregiver's behavior were rated on a scale ranging from 1 (*not at all*) to 7 (*extremely*).

Next, we used Barbee and Cunningham's (1995) coding scheme to identify specific forms of support behavior. This scheme crosses problem-versus emotion-focused coping with approach versus avoidance of the problem, yielding four types of support-giving strategies: (a) *Solve* (ICC = .77) involves approaching the problem and offering instrumental aid; (b) *solace* (ICC = .90) involves attempting to deal directly with the emotional aspects of the stressful situation by providing such things as reassurance and empathic remarks; (c) *dismiss* (ICC = .83) involves minimizing the importance of the problem or avoiding it by changing the topic; and (d) *escape* (ICC = .81) involves avoiding the emotional aspects of the stressful situation by acting distracted or ignoring the support seeker's emotional displays. Observers rated the extent to which caregivers used each of these strategies on a scale ranging from 1 (*not at all*) to 7 (*a great deal*).

On the basis of these ratings, we computed two indexes of caregiving behavior: (a) *responsiveness*, which was the sum of listening, understanding, and support effort, and (b) *negative support*, which was the sum of dismiss, escape, and blame. The solace ratings were used as a measure of *emotional support*, and the solve ratings were used as a measure of *instrumental support*. For use in some analyses, we also computed a global index of *caregiving quality*, which was formed by summing all positive support behaviors (solve, solace, listening, understanding, and effort) and then subtracting all negative support behaviors (dismiss, escape, and blame).

Results

Preliminary Analyses

Before describing tests of specific hypotheses, it is useful to consider the nature of the stressors discussed by our couples. The stressors were primarily achievement (55%) and interpersonal (46%), with a small percentage of personal problems (13%); some problems were coded into more than one category. On average, participants rated their problems as fairly stressful ($M = 5.51$, $SD = 1.06$, on a 7-point scale), and our outside observers agreed by rating the problems as fairly serious ($M = 2.55$, $SD = 0.57$, on a 3-point scale). (The correlation between support-seeker and observer ratings of problem severity was .35 [$p < .001$].) Thus, our couples were discussing a variety of personally relevant and stressful problems.

Additional analyses revealed few systematic differences in the nature of the problems discussed. Problem type and severity were not significantly associated with the support seeker's sex, relationship length, or relationship quality. The support seeker's attach-

ment style was not significantly associated with the type of problem discussed, but it was related to problem severity. Support seekers who were higher in attachment-related anxiety discussed problems that they rated as more stressful ($r = .21$, $p < .05$) and that observers viewed as more serious ($r = .25$, $p < .05$).

Finally, there were some individual differences in the degree to which support seekers had previously discussed their problem with their partner. Those who were higher in relationship quality ($r = .30$, $p < .001$) and involved in relationships of longer length ($r = .25$, $p < .05$) were more likely to have previously discussed their problem, whereas those who were higher in avoidance were somewhat less likely to have done so ($r = -.17$, $p < .10$).⁶

Overview of Hypothesis Testing

Hypothesis testing was organized around the four central concerns of the study: (a) normative patterns of support seeking and caregiving, (b) attachment style differences in these patterns, (c) links between caregiving and relationship quality, and (d) biases in perceptions of the interaction. All analyses were conducted with the full sample. However, we ran a parallel set of analyses to determine whether support-seeking and caregiving processes operated similarly for men and women. We report the results of these analyses (in footnotes) only when the difference between men and women was statistically significant.

Normative Processes

In our first series of analyses, we began by testing each individual link in the normative portion of the model outlined in Figure 1. We then tested the overall model using path analysis.

Stress and support seeking. Our first hypothesis was that support seekers who evaluated their problem as more distressing would exhibit more support-seeking behavior. To test this hypothesis, we correlated support seekers' ratings of the stressfulness of their problem (assessed before the interaction) with observers' ratings of their support-seeking behavior during the interaction. Consistent with our hypothesis, when support seekers described their problems as more stressful, they sought more emotional support from their partner during the interaction ($r = .22$, $p < .05$). However, stressfulness of the problem was not significantly associated with the tendency to seek instrumental support ($r = .16$, *ns*) or the use of indirect support-seeking strategies ($r = -.01$, *ns*).

Coordination of support-seeking and caregiving behaviors. We expected that specific support-seeking behaviors would be associated with specific caregiving responses. For example, we predicted that clear and direct expressions of need (by support seekers) would be associated with increased caregiving efforts (by caregivers) and more responsive forms of caregiving (Hypothesis 2a). Consistent with this hypothesis, there was a strong positive

⁶ The positive association between relationship quality and prior discussion tended to be stronger for men ($r = .44$, $p < .01$) than for women ($r = .19$, *ns*), although these correlation coefficients did not differ significantly from each other ($z = 1.37$, *ns*). Likewise, the negative association between the support seeker's avoidance and prior discussion of the problem was stronger for men ($r = -.34$, $p < .05$) than for women ($r = -.06$, *ns*), although these correlations did not differ significantly from each other ($z = 1.3$, *ns*).

Table 1
Correlations Between Observed Support-Seeking and Caregiving Behaviors

Caregiving behavior	Support-seeking behavior			
	Overall support seeking ^a	Emotional disclosure	Instrumental disclosure	Indirect support seeking
Overall caregiving quality ^b	.46***	.41***	.37***	-.27**
Emotional support	.28**	.48***	.11	-.05
Instrumental support	.33**	.36***	.27**	-.11
Responsiveness	.44***	.40***	.38***	-.21*
Negative support	-.40***	-.13	-.39***	.43***

Note. *N* = 93 couples.

^a This variable is the standardized average of the other three support-seeking variables. ^b This variable is the standardized average of the other four caregiving variables.

* *p* < .05. ** *p* < .01. *** *p* < .001.

correlation (*r* = .46, *p* < .001) between overall support-seeking behavior and the caregiver's overall caregiving quality. In addition, an inspection of the correlations between specific support-seeking and caregiving behaviors (see Table 1) indicates that direct expressions of need (emotional and instrumental disclosure) were strongly associated with the receipt of helpful forms of support (more responsiveness, emotional, and instrumental support), whereas indirect expressions of need were associated with unhelpful forms of support (less responsiveness and more negative support).⁷

We also expected that support-seeking and caregiving behavior would be coordinated such that the type of help offered would be matched to the type of help sought (Hypothesis 2b). Consistent with this hypothesis, support-seeking behavior and caregiving behavior were meshed in complementary ways. As shown in Table 1, when support seekers sought more emotional support, their partners provided both more emotional and instrumental support. When support seekers engaged in instrumental support seeking, their partners responded with more instrumental (but not more emotional) support. Taken together, these findings are con-

Table 2
Correlations Between Support Seeker's Subjective Perception of Support Received and Observer Ratings of Caregiver's Behavior

Observer rating	Support seeker's perception of support
Overall caregiving quality ^a	.43***
Emotional support	.29**
Instrumental support	.32**
Responsiveness	.29**
Negative support	-.45***

Note. *N* = 93 couples.

^a This variable is the standardized average of the other four caregiving variables.

** *p* < .01. *** *p* < .001.

Table 3
Correlations Between Support Received During the Interaction and Support Seeker's Mood After the Interaction

Perception or rating	Change in mood
Support-seeker perception of support received	.53***
Caregiver perception of support provided	.39***
Observer rating of caregiving provided	.22*

Note. *N* = 93 couples.

* *p* < .05. *** *p* < .001.

sistent with our predictions and indicate a high level of behavioral coordination between partners during their interactions.

Observed caregiving behavior and subjective perceptions of support. Were support seekers' subjective perceptions of support associated with their partner's observed caregiving behaviors (Hypothesis 3)? As shown in Table 2, support seekers rated their interaction as more supportive when their partner provided more emotional and instrumental support and when their partner behaved in ways that were more responsive (e.g., listening and understanding). In contrast, support seekers evaluated their interaction as much less supportive when their partner engaged in negative support behaviors (e.g., dismissing and blaming). These findings are consistent with our hypothesis and indicate that support seekers' subjective sense of being cared for was directly rooted in specific caregiving acts performed by their partner.

Perceived support and changes in mood. Our next hypothesis was that social support received during the interaction would be associated with short-term improvements in the support seeker's mood (Hypothesis 4). To control for mood before the interaction and to assess changes in mood, we partialled out preinteraction mood scores and used the residualized postinteraction mood variable in all analyses. Thus, we labeled this variable *change in mood*.

We began by correlating changes in mood with the support seeker's subjective perceptions of the interaction. As shown in Table 3, when support seekers perceived their partner's behavior as more supportive, they experienced greater improvements in mood after the interaction. Although this finding provides strong support for our hypothesis, it may be inflated by method variance because both perceived support and mood were reported by support seekers shortly after their interaction. Fortunately, we had two other perspectives on the support interaction: the partner's report of his or her own caregiving behavior and our observer ratings of that behavior (for this analysis, we used our overall index of observed caregiving quality). As shown in Table 3, support seekers reported better mood when caregivers perceived their own behavior as more supportive and when observers rated the caregiver as being more supportive. Taken together, these findings are consis-

⁷ Regression analyses testing whether the links between support-seeking behavior and caregiving behavior were moderated by the caregiver's sex revealed only one significant interaction for the link between indirect support seeking and negative support, *t*(89) = 2.85, *p* < .01. When female support seekers engaged in indirect support-seeking behavior, their male partners were much more likely to provide negative support (β = .56, *p* < .001). However, this pattern did not occur between male support seekers and female caregivers (β = .19, *ns*).

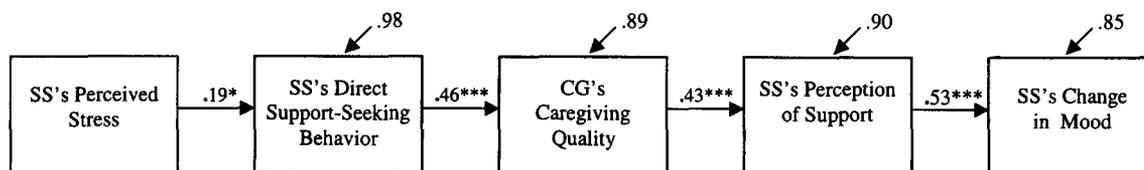


Figure 2. Path analysis of support seeking, caregiving, and improved mood ($N = 93$ couples). Path values are standardized regression coefficients. SS = support seeker; CG = caregiver. Comparative fit index = 1.0, $\chi^2(6, N = 93) = 3.73, p = .71$. * $p < .05$. *** $p < .001$.

tent with our hypothesis and provide converging evidence that support seekers felt better after their interaction when their partners provided more responsive support.

Path Analysis: Testing the Normative Model

Specifying the model. The results presented thus far provide support for each component process of our theoretical model. In our next analysis, we put these components together to test the overall normative model shown in Figure 1. To simplify this analysis, we used composite variables for most constructs. The following variables were used: (a) support seeker's rating of the stressfulness of his or her problem, (b) our composite index of overall support-seeking behavior (as observed), (c) our composite index of caregiving quality (as observed), (d) the support seeker's subjective perception of the supportiveness of his or her interaction, and (e) residualized postinteraction mood. (A correlation matrix of variables used in this model appears in Appendix A.)

Estimating the model. AMOS software (Arbuckle, 1997) and maximum-likelihood estimation were used in testing the hypothesized path model. The fit of the model was evaluated with a joint consideration of the chi-square statistic and the comparative fit index (CFI; Bentler, 1990). The chi-square statistic tests whether the hypothesized model adequately explains the observed pattern of data. A nonsignificant chi-square value provides evidence of good model fit. The CFI reflects the extent to which the hypothesized model fits the data better than does a null model. The CFI ranges from 0 to 1.00, with higher scores reflecting better model fit. A CFI value of .90 is considered acceptable, although values of .95 or greater are desirable.

The goodness-of-fit statistics indicated that our hypothesized model provided an excellent fit to the data, $CFI = 1.00, \chi^2(6, N = 93) = 3.73, p = .71$. Standardized path coefficients are shown in Figure 2. As expected, support seekers who rated their problem as more stressful tended to seek support more directly during the interaction. When support seekers sought support more directly, their partners responded with more effective caregiving behavior. Also, when caregivers exhibited more caring behavior, support seekers perceived the interaction as much more supportive. Finally, when support seekers felt cared for by their partner, they experienced immediate short-term benefits in mood.⁸

In a series of follow-up analyses, we tested direct paths linking each of the one-step mediational relationships in the model. For example, we tested whether stressfulness of the problem was directly linked to caregiving, whether support seeking was directly linked to perceived support, and so on. None of these paths were statistically significant, and adding them did not improve the fit of the model. Furthermore, the addition of these paths did not alter

the direct paths shown in Figure 2. Thus, the sequence of direct and indirect effects specified by the hypothesized model was well supported by the data.

Plausible alternative models. Although the path analysis provided strong support for the hypothesized sequence of events, it is possible that other models may fit these data equally well. Thus, our confidence in the proposed model would be increased if we could rule out plausible alternative models. We tested two such models. First, we reasoned that emotional responses (mood) may have shaped perceptions of support, rather than vice versa. Thus, we reversed the order of the last two steps in the model. This model was a very poor fit to the data, $CFI = .82, \chi^2(6, N = 93) = 18.35, p = .005$, indicating that the link between objective behavior and perceived support was not mediated by the support seeker's mood. Second, we reasoned that caregiving behavior may have affected support seeking, rather than vice versa. Thus, we reversed the order of support seeking and caregiving. This model was also a very poor fit to the data, $CFI = .74, \chi^2(6, N = 93) = 23.86, p = .001$.⁹

Attachment Style Differences in Support-Seeking and Caregiving Processes

The results presented thus far provide encouraging support for the normative portion of the model shown in Figure 1. In our next series of analyses, we investigated the extent to which this process was shaped by each partner's attachment style. For ease of presentation, we report hypothesis tests for all of the "main effects" of attachment style first, followed by hypothesis tests regarding all of the moderated (interactive) effects of attachment style. We used

⁸ We ran follow-up analyses to test whether the normative model differed significantly for male and female support seekers (and, hence, caregivers). Results revealed a significant sex difference for the path linking support-seeking behavior to caregiving behavior (Path *b*), $t(89) = -1.96, p = .05$. Follow-up analyses indicated that this association was stronger for female support seekers (and male caregivers), $\beta = .55, p < .001$, than for male support seekers (and female caregivers), $\beta = .35, p < .05$, although this path was positive and significant for both types of dyads. No other sex differences were obtained.

⁹ Our ability to derive plausible alternative models is limited by the temporal order of the variables assessed in our study and included in our model. For example, mood measured after the interaction could not have caused support-seeking behavior during the interaction. Likewise, processes that occurred during or after the interaction could not have caused ratings of the stressfulness of the problem (which were assessed before the interaction).

Table 4
Regression Analyses Predicting Support-Seeking and Caregiving Behaviors From Attachment Style

Observed behavior	Anxiety		Avoidance		Total R ²
	β	r	β	r	
Support seekers					
Overall support seeking	-.07	-.10	-.13	-.14	.03
Emotional disclosure	.05	.03	-.05	-.04	.00
Instrumental disclosure	-.14	-.15	-.04	-.07	.02
Indirect support seeking	.03	.10	.28**	.29**	.08*
Caregivers					
Overall caregiving quality	-.29**	-.28**	.04	-.04	.08*
Emotional support	-.14	-.14	.03	-.01	.02
Instrumental support	-.22*	-.19†	.13	.07	.05†
Responsiveness	-.33**	-.31**	.06	-.02	.10**
Negative support	.22*	.24*	.06	.12	.06†

Note. N = 93 couples.
† p < .10 (marginally significant). * p < .05. ** p < .01.

the continuous dimensions of attachment-related anxiety and avoidance in all regression analyses.

Main Effects of Attachment Style

Support-seeking behavior. We predicted that support seekers who were higher in avoidance would seek less emotional and instrumental support and would engage in more indirect support-seeking behavior (Hypothesis 5a). We also expected that support seekers who were higher in attachment-related anxiety would use more indirect support-seeking strategies (Hypothesis 5b). To test these hypotheses, we conducted a series of simultaneous regression analyses predicting observed support-seeking behavior from the support seeker’s attachment-related avoidance and anxiety.¹⁰ As shown in the top panel of Table 4, results provided only partial support for our hypotheses. As predicted, individuals who were higher in avoidance tended to use indirect support-seeking strategies. However, contrary to our expectations, avoidance was not significantly related to emotional or instrumental support seeking, and attachment-related anxiety was not related to indirect support-seeking behavior.^{11,12}

Caregiving behavior. Next, we tested the hypothesis that caregivers who were higher in attachment-related avoidance and anxiety would be less effective caregivers (Hypothesis 7a and Hypothesis 7b). As shown in the lower panel of Table 4, our hypotheses were confirmed for anxiety but not for avoidance. Caregivers who were higher in attachment-related anxiety provided less instrumental support, were less responsive, and exhibited more negative caregiving behavior. Contrary to our expectations, caregiver avoidance was not significantly related to caregiving behavior.^{13,14}

Support seeker’s perceptions of the interaction. Our next analysis tested the hypothesis that insecure support seekers would perceive their interaction as less supportive (Hypothesis 8). Contrary to our expectations, a regression analysis predicting support seekers’ perceptions of the interaction from their attachment style (anxiety and

avoidance) indicated no significant associations, R² = .01, F(2, 90) = 0.53, ns (β = -.11 for anxiety, β = .02 for avoidance).

¹⁰ In these and all subsequent analyses, we also tested the interaction term involving the two attachment dimensions (Anxiety × Avoidance). The interaction term did not significantly predict any of the dependent measures.

¹¹ Because preliminary analyses revealed that support seekers who were high in anxiety tended to be discussing problems that were more stressful and serious, we re-ran these analyses controlling for support-seeker and observer ratings of the stressfulness of the problem. The pattern of results remained unchanged. In addition, because support seekers’ attachment style was correlated with their relationship satisfaction (r = -.44, p < .001, for anxiety; r = -.18, p < .10, for avoidance), we re-ran these analyses controlling for relationship satisfaction. The pattern of results remained unchanged. Finally, because preliminary analyses revealed that support seekers who were higher in avoidance were somewhat less likely to have previously discussed their problem with their partner, we re-ran these analyses controlling for degree of prior discussion. The pattern of results remained unchanged.

¹² Although we were primarily interested in the support seeker’s attachment style, we also explored whether the support seeker’s behavior was linked to the attachment style of his or her partner, the caregiver. Regression analyses indicated that support-seeking behavior was unrelated to the caregiver’s attachment style. We ran one additional set of exploratory analyses testing for the interaction of support-seeker and caregiver attachment style. To explore this issue, we conducted hierarchical regression analyses predicting support-seeking behavior from the following variables: the support seeker’s anxiety and avoidance, the caregiver’s anxiety and avoidance, and a series of two-way interactions representing the combined effects of both partners’ attachment characteristics. Regression analyses revealed four marginally significant interactions. (Because these analyses were exploratory, we present just a general description of the patterns.) An analysis of simple slopes revealed the following patterns. First, when support seekers were high in avoidance, they tended to seek less emotional support when their partner (the caregiver) was also high in avoidance. Second, when support seekers were low in avoidance, they sought more instrumental support when their partner (the caregiver) was low (vs. high) in anxiety. In contrast, support seekers who were high in avoidance sought low levels of instrumental support regardless of their partner’s degree of anxiety. Third, when support seekers were high in anxiety, they tended to seek more emotional support when their partner (the caregiver) was high in avoidance. Finally, when support seekers were high in anxiety, they tended to use more indirect support-seeking strategies when their partner (the caregiver) was also high in anxiety. Taken together, these exploratory analyses suggest that both partners’ attachment style may play an important role in shaping the support seeker’s behavior.

¹³ Because caregivers’ attachment style was correlated with their relationship satisfaction (r = -.36, p < .001, for anxiety; r = -.33, p < .001, for avoidance), we re-ran these analyses controlling for relationship satisfaction. The pattern of results remained unchanged, although the beta coefficients linking anxiety to instrumental support (β = -.20, p < .10), responsive support (β = -.27, p < .05), and negative support (β = -.19, p < .10) were slightly reduced.

¹⁴ Although we were primarily interested in the caregiver’s attachment style, we also explored whether the caregiver’s behavior was linked to the attachment characteristics of his or her partner, the support seeker. Regression analyses indicated that caregiving behavior was unrelated to the support seeker’s attachment style. Thus, caregivers did not differ in the way they responded to secure and insecure support seekers. We ran one additional set of exploratory analyses testing the interaction of support seeker and caregiver attachment characteristics. No significant interactions were obtained.

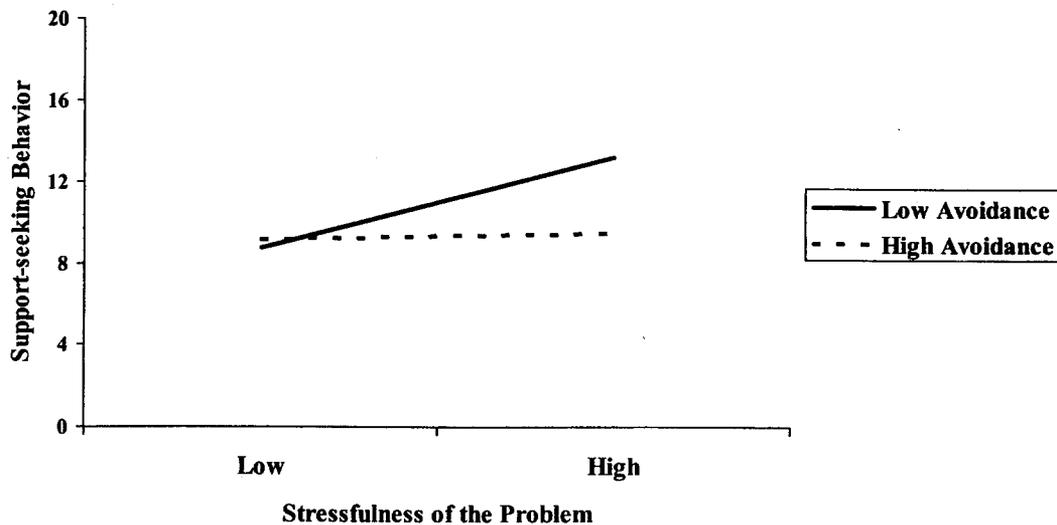


Figure 3. Relationship between perceived stress and support-seeking behavior for support seekers who were high or low in avoidance ($N = 93$ couples). Support-seeking scores ranged from 0 to 25 ($M = 10.2$, $SD = 5.2$). Simple slopes were computed at 1 SD above and below the mean on avoidance.

Summary of main effects of attachment style. The analyses presented thus far can be summarized as follows. Avoidant support seekers were more likely to use indirect strategies in their efforts to obtain support. Contrary to our expectations, attachment-related anxiety was not related to support-seeking behavior. With regard to caregiving behavior, anxious caregivers provided less instrumental support, were less responsive, and displayed more negative support behaviors. Contrary to our expectations, avoidance was unrelated to caregiving behavior. Finally, contrary to our expectations, attachment style was not systematically related to the support seeker's perception of the interaction.

Moderating Role of Attachment Style

Our next series of analyses tested the moderating role of attachment style in the support-seeking and caregiving process. To simplify these analyses and reduce the number of hypothesis tests, we used composite variables for most analyses.

Did avoidance moderate the link between stress and support seeking? To address this question (Hypothesis 6), we conducted a hierarchical regression analysis in which we entered stress and support seeker avoidance in Step 1 and the Stress \times Avoidance interaction in Step 2. The dependent variable was our combined index of support-seeking behavior. As predicted, results revealed a significant Stress \times Avoidance interaction, $\Delta R^2 = .05$, $t(89) = -2.32$, $p < .05$. To illustrate this interaction (Figure 3), we computed the simple slope of stress on support seeking at one standard deviation above and below the mean on avoidance (Aiken & West, 1991). Consistent with our predictions, support seekers who were high in avoidance tended to seek relatively low levels of support regardless of how stressful they perceived their problem ($\beta = .03$, ns). In contrast, those who were low in avoidance tended to seek more support the more stress they perceived ($\beta = .48$, $p < .01$).

Did attachment style moderate the link between support seeking and caregiving? In addressing this question (Research Question 1), the predictors were overall support seeking, caregiver avoid-

ance, and caregiver anxiety in Step 1 and the Seeking \times Avoidance and Seeking \times Anxiety interactions in Step 2. The dependent variable was overall caregiving quality. Results revealed a significant Support Seeking \times Anxiety interaction, $\Delta R^2 = .04$, $t(89) = 2.01$, $p < .05$. As shown in Figure 4, caregivers who were high in attachment-related anxiety tended to provide relatively high levels of support when their partner's needs were clear and direct but much lower levels when their partner's needs were less clear ($\beta = .43$, $p < .001$). In contrast, caregivers low in anxiety (more secure) tended to provide relatively high levels of support regardless of whether their partner's support-seeking efforts were clear and direct ($\beta = .22$, $p < .10$).

Did attachment style moderate the link between observed support and perceived support? In exploring this research question (Research Question 2), the predictors were overall caregiving quality, support seeker avoidance, and support seeker anxiety in Step 1 and the Caregiving \times Avoidance and Caregiving \times Anxiety interactions in Step 2. The dependent variable was the support seeker's perception of the interaction. Results revealed no significant interactions.

Did attachment style moderate the effects of perceived support on changes in mood? The predictors in this analysis were the support seeker's perception of support, avoidance, and attachment-related anxiety in Step 1 and the Support \times Avoidance and Support \times Anxiety interactions in Step 2. The dependent variable was changes in mood. Contrary to our expectations (Hypothesis 9a and Hypothesis 9b), results revealed no significant interactions.¹⁵

Summary of the moderating effects of attachment style. The results reported thus far can be summarized as follows. In com-

¹⁵ We also tested this interaction using our other two support measures: (a) the caregiver's rating of his or her own support behavior and (b) our observer ratings of caregiving behavior. Neither analysis revealed a significant interaction between attachment style and caregiving in the prediction of mood. It is also important to note that there were no main effects of support seeker's attachment style on changes in mood.

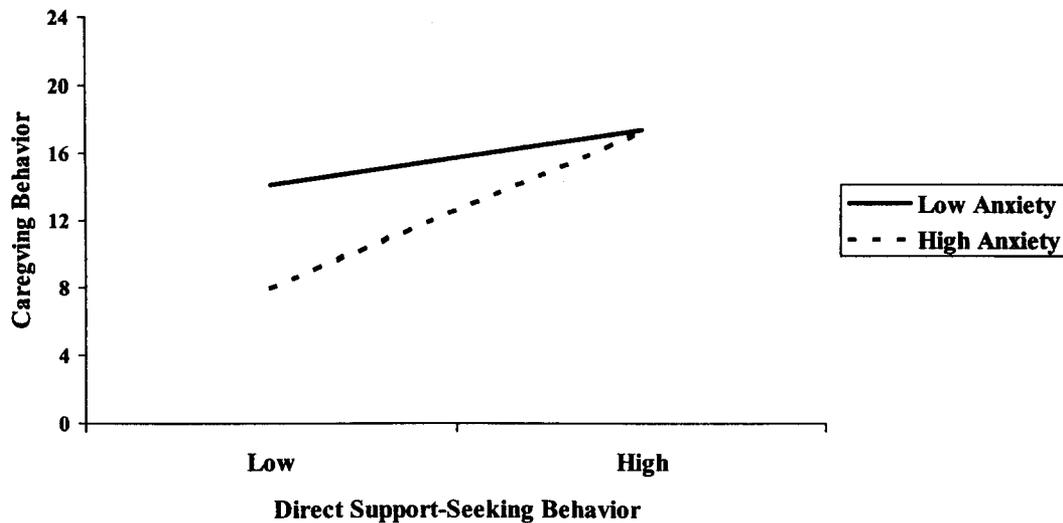


Figure 4. Relationship between support-seeking behavior and caregiving behavior for caregivers who were high or low in anxiety ($N = 93$ couples). Caregiving scores ranged from -8.5 to 32 ($M = 14$, $SD = 7.3$). Simple slopes were computed at 1 SD above and below the mean on anxiety.

parison with those low in avoidance, support seekers higher in avoidance were less likely to seek support in response to increased stress. Caregivers who were lower in attachment-related anxiety tended to provide relatively high levels of caregiving to their partner even when their partner sought support less directly. However, those high in anxiety provided relatively low levels of support when their partner displayed less effective support-seeking behavior but relatively high levels when their partner's needs were more clear. Finally, attachment style did not moderate the degree to which the support seeker's perceptions of support were linked to objective features of the interaction or the degree to which the support seeker's mood was linked to his or her perception of having received support.

Caregiving and Relationship Functioning

In our next series of analyses, we examined the links between effective caregiving and relationship quality. We began by correlating each partner's report of relationship quality with observer ratings of the caregiver's behavior (see Table 5). Consistent with Hypothesis 10b, caregivers who rated their relationship as more satisfying were observed to be better caregivers overall; they provided more emotional support to their partners and tended to display more responsiveness and less negative support. In addition, consistent with Hypothesis 10a, support seekers who rated their relationship as more satisfying had partners who were better caregivers overall and who displayed less negative support. Taken together, these results indicate that caregivers and support seekers who were involved in better functioning relationships had interactions in which the caregiver was rated, by independent observers, as being more caring and supportive.

Next, we examined associations between relationship quality and subjective perceptions of the interaction. As shown in Table 5, caregivers who were more satisfied with their relationship perceived that their own behavior during the interaction was more supportive, and their partners agreed. In addition, support seekers

who rated their relationship as more satisfying perceived their partner's behavior as more supportive. These results indicate that participants who were involved in better functioning relationships experienced their interactions as more caring and supportive.

In our final analysis, we tested a latent variable correlational model that enabled us to make full use of our multivariate data and to estimate the association between relationship quality and effective caregiving at the couple level (Gonzalez & Griffin, 1997). We created one latent variable, labeled "relationship quality," that included two manifest variables: (a) support seeker's relationship quality and (b) caregiver's relationship quality. This latent variable represents the shared variance between partners in their reports of relationship quality. The second latent variable, labeled "effective caregiving," included three manifest variables: (a) observed caregiving quality, (b) support seekers' ratings of received support, and (c) caregivers' ratings of provided support. This latent variable represents the shared variance between couple members and observers in their reports of the supportiveness of the interaction. The resulting correlation between latent variables represents the association between relationship quality and effective caregiving at the couple level rather than at the individual level.¹⁶ (A correlation matrix of variables used in this model can be found in Appendix B.) As shown in Figure 5, this analysis provided strong evidence

¹⁶ In this model, we allowed the error terms for each partner's report of each construct to be correlated with each other. Specifically, we included a correlation between the error terms for support seekers' report of relationship satisfaction and their report of perceived support. Likewise, we included a correlation between the error terms for caregivers' report of relationship satisfaction and their report of perceived support. (To aid in the identification of this model, we constrained these two correlations to be equal. Analyses confirmed that this constraint was reasonable and appropriate.) With the inclusion of these correlated errors, the resulting correlation between the latent support and caregiving variables represents the dyadic-couple effect that is uncontaminated by individual method variance (Gonzalez & Griffin, 1997).

Table 5
Correlations Between Relationship Quality and Observed and Perceived Caregiving Behavior During the Interaction

Measure	Relationship quality	
	Caregiver	Support seeker
Observed caregiving quality	.21*	.17†
Emotional support	.20*	.16
Instrumental support	.10	-.02
Responsiveness	.20†	.10
Negative support	-.17†	-.26*
Caregiver's perception of support provided	.32**	.16
Support seeker's perception of support received	.40***	.45***

Note. $N = 93$ couples.

† $p < .10$ (marginally significant). * $p < .05$. ** $p < .01$. *** $p < .001$.

that couples who were involved in happy, well-functioning relationships (as perceived by both partners) engaged in more supportive and caring interactions (as perceived by couple members as well as outside observers), $CFI = 1.0$, $\chi^2(3, N = 93) = 0.40$, $p = .94$.

Shared and Unique Perspectives on the Support Interaction

To what extent did observers and participants agree about what took place in the interaction, and were participants' unique (non-shared) perspectives colored by their existing expectations (Hypotheses 11a–11c)? To explore these questions, we conducted hierarchical regression analyses (explained subsequently) predicting support seekers' and caregivers' perceptions.

Support seeker's perceptions. In our first analysis, we used the support seeker's perception of the interaction as our criterion variable. In the first step of the equation, we entered observed caregiving quality. This enabled us to assess the degree to which support seekers' perceptions were shared with "objective" observers. In the second step, we entered the caregiver's perception of the interaction. This enabled us to assess the degree to which romantic partners shared a perception of their interaction that was not shared by observers. Finally, to determine whether support seekers' working models of attachment and current levels of relationship quality colored their perceptions, we entered support seekers' attachment dimensions (anxiety and avoidance) and relationship quality in the final two steps of the equation.

As shown in Table 6, when observers rated the caregiver's behavior as more supportive, support seekers agreed and evaluated the interaction more favorably (Step 1). When the caregiver perceived that his or her own behavior had been supportive, the support seeker agreed and rated the interaction as more supportive (Step 2). Thus, after controlling for the objective features of the interaction, partners shared a perspective that was not shared by outside observers. Finally, attachment style did not explain additional variance (Step 3), but relationship quality did (Step 4). After controlling for both the objective features of the interaction and caregiver perceptions, support seekers who had more positive images of their relationship perceived their interaction as much more supportive. Thus, support seekers' unique (nonshared) perspective appeared to be strongly colored by their relationship satisfaction.

Caregiver's perceptions. We ran a comparable analysis using the caregiver's perception of the interaction as our criterion variable. As shown in Table 6, caregivers' perceptions were significantly predicted by the objective features of the interaction (Step 1). However, once again, caregivers and support seekers shared a perspective that was not shared by observers (Step 2). Finally,

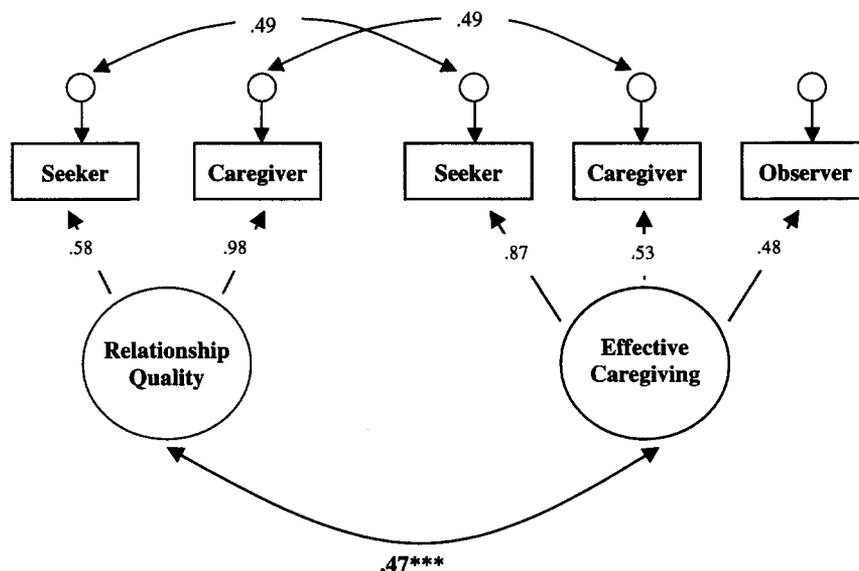


Figure 5. Latent variable correlational model linking relationship quality to effective caregiving ($N = 93$ couples). Comparative fit index = 1.0, $\chi^2(3, N = 93) = 0.40$, $p = .94$. Path values represent standardized coefficients (factor loadings and correlations). Correlated errors were constrained to be equal. *** $p < .001$.

Table 6
Hierarchical Regression Analyses Predicting Each Partner's Perception of the Interaction

Predictor variable	Support-seeker perceptions			Caregiver perceptions		
	ΔR^2	β	r	ΔR^2	β	r
Step 1: Observer ratings	.19***	.43***	.43***	.07*	.26*	.26*
Step 2: Partner's perception	.13***	.37***	.46***	.15***	.43***	.46***
Step 3: Attachment style	.01			.06*		
Anxiety		-.09	-.11		-.17†	-.30**
Avoidance		-.02	-.01		-.14	-.23*
Step 4: Relationship quality	.11***	.38***	.45***	.00	.07	.32**

Note. $N = 93$ couples. Betas are shown for the step at which each variable entered the equation.

† $p < .10$ (marginally significant). * $p < .05$. ** $p < .01$. *** $p < .001$.

caregivers' attachment style explained additional variance in their perceptions (Step 3), but relationship quality did not (Step 4). Caregivers who were more insecure (higher in attachment-related anxiety and avoidance) evaluated their interaction as less supportive. Thus, caregivers' unique (nonshared) perspective appeared to be colored by their attachment models but not by their relationship satisfaction.

Discussion

In this study, we used an attachment theoretical framework to investigate support-seeking and caregiving interactions in close relationships. In doing so, we conceptualized social support as an interpersonal process that involves the interaction of two behavioral systems: the attachment system and the caregiving system. In this section, we highlight our major findings and consider their implications for research and theory on both social support and adult attachment processes.

Support Seeking and Caregiving as a Dyadic Process

We began by proposing an interpersonal model of social support that included cognitive, emotional, and behavioral components. Path analysis of the full model, and detailed analyses of each individual link in the model, provided strong support for our overall theoretical framework. Results revealed that individuals who rated their problem as more stressful engaged in more direct support-seeking behavior, which in turn was associated with more effective caregiving responses from their partner. These caregiving responses were then linked to the support seeker's subjective experience of support, which predicted improvements in the support seeker's mood.

Taken together, these results illustrate the value of studying social support as an interpersonal exchange that has immediate, measurable benefits to emotional well-being. Two aspects of these findings are especially noteworthy. First, support-seeking and caregiving behaviors were highly interdependent and meshed in complementary ways. These findings are compatible with Bowlby's notion of attachment and caregiving as a shared dyadic program, and they highlight the joint contributions that support seekers and caregivers make to shaping the nature and quality of

their interactions. Although our data do not permit us to draw causal inferences, it is reasonable to assume that the causal links between support-seeking behavior and caregiving behavior are reciprocal. Evidence for this assumption was provided by Gulley (1993, as cited in Barbee & Cunningham, 1995), whose sequential analyses of dyadic interactions revealed that help seekers and help providers influence one another's behaviors during support interactions. Findings such as these make it clear that neither the support seeker nor the caregiver is solely responsible for the outcome of an interaction (Barbee, 1990; Cutrona, 1996). Although this point may seem intuitive, it has not been emphasized in prior empirical work on social support, which has focused primarily on individuals rather than on relationships (for exceptions, see Barbee & Cunningham, 1995; Cutrona, 1996). Even when social support has been framed in more interpersonal terms (as "received" or "enacted" support; Collins, Dunkel-Schetter, Lobel, & Scrimshaw, 1993), the distressed person's role in shaping, soliciting, or mobilizing support has been largely ignored (for exceptions, see Dunkel-Schetter, Blasband, Feinstein, & Herbert, 1992; Hobfoll & Lerman, 1988).

Second, our data offer compelling evidence for the short-term benefits of receiving responsive support. When support seekers perceived their partner's behavior as more caring and supportive, they felt better after the interaction than they did before the interaction. It is noteworthy that this association was not limited to the support seeker's self-reports; changes in the support seeker's mood were also linked to the caregiver's perception of the interaction and to ratings made by observers. To our knowledge, this study is the first to show clear emotional benefits of receiving social support in the context of a specific interaction. Whereas short-term benefits (or costs) in emotional well-being are important in their own right, they also provide a bridge to understanding the longer term benefits of supportive relationships. Small acts of caring offered by one's partner, which reduce feelings of distress and help one manage daily burdens, are likely to accumulate over time and to contribute to longer term outcomes such as improved health and psychological well-being (DeLongis, Folkman, & Lazarus, 1988). In contrast, unsupportive acts that lead individuals to feel misunderstood or rejected after disclosing a problem are likely to have harmful effects on well-being (e.g., Lepore, Silver, Wortman, & Wayment, 1996; Major, Zubek, Cooper, Cozzarelli, & Richards, 1997).

Attachment Style Differences in Support Seeking and Caregiving

Our results revealed that not everyone is equally skilled at negotiating the social support process. Two clear patterns emerged when we examined how support interactions were shaped by participants' attachment styles: Attachment-related avoidance was associated with ineffective support-seeking behavior, and attachment-related anxiety was linked to ineffective caregiving.

Support-seeking behavior. Support seekers who were higher in avoidance were less likely to seek support in response to increased stress, and when they did seek support they were more likely to use indirect strategies (hinting and sulking). These findings are consistent with theoretical expectations and with prior self-report (Mikulincer & Florian, 1995; Mikulincer et al., 1993; Ognibene & Collins, 1998) and observational (Fraley & Shaver, 1998; Simpson et al., 1992) studies, which indicate that under conditions of stress (when the attachment system is likely to be activated) adults who are higher in attachment-related avoidance tend to direct their attention away from attachment figures.

Contrary to our expectations, attachment-related anxiety was not systematically associated with support-seeking behavior. (Interestingly, other researchers using observational methods [Fraley & Shaver, 1998; Simpson et al., 1992] have also failed to find such links.) How can we explain these findings? One possibility is that our laboratory paradigm, which required participants to discuss a problem with their partner in a controlled setting, may have weakened our ability to detect individual differences in support-seeking behavior that may occur in more natural settings.¹⁷ Another possibility is that our observational coding scheme was simply not sensitive enough to detect subtle differences in the support-seeking strategies of those high and low in attachment-related anxiety.

In addition to these methodological explanations, Fraley and Shaver (1998) offered a theoretical explanation for the lack of association between anxiety and proximity seeking in their study of airport separations, one that may also help explain our findings. Specifically, they suggested that the attachment behavioral system includes two components: an *appraisal* component that influences the amount of distress an individual experiences when the attachment system is activated and a *behavioral* component that organizes the interpersonal strategies an individual characteristically uses to cope with this distress. Furthermore, they suggested that individual differences in attachment-related anxiety will primarily shape appraisals of distress (the tendency to feel anxious or threatened), whereas attachment-related avoidance will primarily shape behavioral responses to this distress (the tendency to seek contact and comfort). Although this makes good theoretical sense, our data are not fully consistent with this idea. Specifically, Fraley and Shaver's model implies that people high in anxiety will tend to seek comfort if they are also low in avoidance. However, when we examined the interaction of the two attachment dimensions (anxiety and avoidance), we found that they did not significantly predict support-seeking behavior in our sample. We caution, however, that our ability to detect interactions such as these depends in part on having adequate numbers of participants who are high in anxiety and low in avoidance. An inspection of our distributions of scores on various attachment measures included in this study indicated that the vast majority of our participants were relatively secure. In addition, our relatively small sample size limits our

statistical power to detect interaction effects such as these. Thus, the interaction of attachment-related anxiety and avoidance merits further study with larger and more diverse samples.

Caregiving behavior. Overall, partners who were higher in attachment-related anxiety were poorer caregivers during the interaction: They provided less instrumental support, were less responsive, and displayed more negative support behaviors. Levels of anxiety also moderated the association between support-seeking and caregiving behavior. Specifically, caregivers who were higher in anxiety provided relatively low levels of support when their partner displayed less effective support-seeking efforts but relatively high levels when their partner's needs were clear.

These findings, which are consistent with prior self-report studies (Carnelley et al., 1996; Feeney, 1996; Kuncze & Shaver, 1994), provide the first behavioral evidence that attachment-related anxiety is associated with less effective caregiving. But what specific mechanisms explain this effect? Unfortunately, little is known about the factors associated with effective (or ineffective) caregiving. We suspect that adults who worry about being rejected, and who are themselves overly dependent on others, may find it difficult to set aside their own attachment needs and provide the kind of sensitive support that is necessary for being a responsive caregiver (Feeney, 1996; Kuncze & Shaver, 1994). The fact that anxious adults in the present study were able to provide effective support when their partner's needs were clear suggests that they have the skills needed to provide support but may lack the motivational or attentional resources for doing so on a consistent basis. Other research points to some potential skill deficits. Adults who are higher in attachment-related anxiety are less skilled at decoding nonverbal messages (Feeney, Noller, & Callan, 1994), display less "topical" reciprocity (a sign of responsive listening) in response to another's self-disclosure (Mikulincer & Nachshon, 1991), and are less likely to hold a prosocial interpersonal orientation (Van Lange, Otten, De Bruin, & Joireman, 1997).

Contrary to our expectations, and to prior observational research (Fraley & Shaver, 1998; Simpson et al., 1992), caregiver's degree of avoidance did not predict caregiving behavior. Once again, we suspect that our laboratory exercise may have limited our ability to detect the predicted patterns. From a more theoretical perspective, it may also be that avoidance is not uniformly handicapping with respect to providing social support to others. Individuals who are high in avoidance may feel comfortable providing short-term problem-solving assistance in response to the types of daily stressors that were discussed by our couples, but they may be resistant to discussing topics that are more emotionally charged and perhaps less amenable to short-term problem solving. Thus, avoidant individuals may be capable of being good caregivers (in that they possess some of the necessary skills) but may lack the motivation

¹⁷ Our belief that our laboratory paradigm may have limited our ability to detect differences in support-seeking behavior is bolstered by self-report data not included in the current article. Support seekers completed a self-report scale that assessed the degree to which they generally ask directly (vs. indirectly) for support when they need it. As predicted, support seekers who were higher in anxiety were less likely to report a direct support-seeking style ($r = -.29, p < .05$; Collins & Feeney, 1998).

to provide care in some contexts.¹⁸ It is also possible that we failed to distinguish between different forms of avoidant attachment. Self-report studies (e.g., Kuncie & Shaver, 1994) have shown that fearful avoidance (high avoidance and high anxiety) is associated with overinvolved caregiving activity, whereas dismissing avoidance (high avoidance and low anxiety) is associated with a relative lack of caregiving activity. To the extent that our avoidant attachment dimension included both types of avoidant individuals who were behaving in opposite ways, we may have obscured some potentially important associations. However, once again, note that the interaction of the two attachment dimensions did not significantly predict caregiving behavior in our sample.

Caregiving and Relationship Functioning

Our latent variable correlational analysis indicated that couples who described their relationship as happier and more satisfying engaged in interactions that were more caring and supportive overall. Although our data do not permit us to draw causal inferences, our theoretical model assumes that relationship quality is both an important predictor of caregiving efforts and an important long-term outcome of supportive relationships. With respect to the first issue, we found that caregivers who were more satisfied with their relationship displayed more effective caregiving during the interaction. We have argued that one reason for this effect is that caregivers who feel a greater sense of attachment and commitment to their relationship will be more concerned about their partner's well-being and more motivated to respond to their partner's needs. We found some evidence for this idea when we asked caregivers to rate how important they thought their partner's problem was and how much sympathy they felt for their partner. Even after controlling for the seriousness of the problem, caregivers in more satisfying relationships rated their partner's problem as more important ($pr = .31, p < .01$) and reported feeling more sympathy for their partner ($pr = .30, p < .01$).¹⁹ Thus, it appears that individuals in better functioning relationships are more likely to view their partner's problems as legitimate or "shared" concerns that are worthy of their time and attention, perhaps because their relationships are more close, communal, and interdependent (Aron et al., 1991; Clark & Mills, 1979; Rusbult & Van Lange, 1996).

We also found that support seekers who rated their relationship as more satisfying had partners who displayed more responsive caregiving during their interactions. From an attachment theoretical perspective, this finding is consistent with the idea that caregiving processes play a key role in the development of secure, well-functioning intimate relationships in adulthood. Just as parental caregiving is essential to felt security in childhood, feelings of safety and security in adult intimate relationships may depend in large part on the belief that one's partner will be responsive to one's needs and will continue to be accepting and loving through difficult times. In this way, support-relevant interactions provide individuals with a critical testing ground for drawing inferences about their partner's love and commitment and should be vital to the development and maintenance of trust (Holmes, 1991) and intimacy (Reis & Patrick, 1996) between partners.

Perceptions of the Support Interaction

A final aim of this study was to investigate the links between objective and subjective perceptions of support. Results revealed

that participants' perceptions of their interaction were strongly correlated with behavioral ratings made by outside observers but that romantic partners also shared a view of their experience that was not shared by observers. At the same time, each partner had a unique (nonshared) perception that was shaped by factors outside the interaction; support seekers' perceptions were biased by their relationship satisfaction, and caregivers' perceptions were biased by their chronic working models of attachment.

Taken together, these findings have a number of important implications for research and theory on social support processes. For example, these data offer strong evidence that, at least in the context of a single behavioral episode, subjective evaluations of support were clearly rooted in objective social experience. Support seekers felt more supported when their partners offered more instrumental and emotional support, showed clear signs of responsiveness (active listening and communicating understanding), and engaged in less negative support (blaming, dismissing, and escaping). These findings are noteworthy because social support researchers have long been concerned with the fundamental relation between objective and subjective perceptions of support. Past studies have shown that global perceptions of support are only weakly linked to received support, suggesting that subjective perceptions of support are more closely tied to personality than to social experience (see Dunkel-Schetter & Bennett, 1990, for a review). The current study demonstrates that support perceptions can be traced to specific behavioral exchanges and are not purely social constructions (see also Cutrona, Hessling, & Suhr, 1997; Lakey et al., 1996).

At the same time, our data provide evidence that participants' subjective (unique) construals of their interaction were colored by factors outside the interaction. Although support seekers' unique perceptions were unrelated to their chronic attachment models,

¹⁸ Our belief that our laboratory paradigm may have limited our ability to detect differences in caregiving is bolstered by self-report data not included in the current article. Our couples were asked to complete Kuncie and Shaver's (1994) caregiving scale, which assessed partners' general caregiving style in their relationship. Caregivers reported on their own behavior, and support seekers reported on their partner's behavior toward them. As expected, caregivers who were higher in avoidance rated themselves lower in sensitivity to their partner's needs ($r = -.37, p < .01$) and lower in the tendency to provide comfort and proximity in response to their partner's distress ($r = -.54, p < .001$). Moreover, their partners (the support seekers in this study) agreed with this assessment by rating them lower on both of these dimensions of caregiving ($r = -.24, p < .05$, for sensitivity; $r = -.38, p < .01$, for proximity). Thus, the ineffective caregiving that is typical of those high in avoidance may not have been displayed in our observed interaction.

¹⁹ Did these feelings and perceptions predict caregiving behavior? Caregivers who rated their partner's problem as more important and who felt more sympathy toward their partner were seen by our observers as more caring overall ($r = .23, p < .05$, and $r = .30, p < .01$, respectively). Did these feelings and perceptions mediate the link between relationship satisfaction and caregiving behavior? Consistent with a mediational hypothesis, a hierarchical regression analysis (with a composite measure of sympathy and perceived importance) indicated that the direct effect of relationship quality on overall caregiving ($\beta = .24, p < .05$) was no longer significant ($\beta = .16, ns$) when sympathy-importance was added to the equation, but sympathy-importance remained a significant predictor ($\beta = .25, p < .05$).

they were strongly related to their beliefs and expectations about their current relationship (a relationship-specific working model; Collins & Read, 1994). Those who were more satisfied with their relationship and who had greater confidence in their partner's love and commitment perceived their partner's behavior during the interaction as much more supportive and caring. Critically, this pattern was obtained after controlling for ratings made by caregivers and independent observers and thus reflects the unique perspective of the support seeker. This finding, which is the first to demonstrate clear perceptual biases in the context of specific support interactions, is consistent with past research showing that support perceptions are, at least in part, a function of existing schemas and expectations (e.g., Lakey & Cassady, 1990; Pierce, Sarason, & Sarason, 1992). At a broader level, these results provide the first evidence for "positive illusions" (Martz et al., 1998; Murray, Holmes, & Griffin, 1996) in the context of *dyadic interaction*. Prior questionnaire research has shown that individuals in more satisfying relationships tend to rate their partner's characteristics more favorably than their partners rate themselves. Our data replicate and extend this work by showing that individuals in better quality relationships construed their partner's behavior more favorably than partners did themselves and even more favorably than did outside observers.²⁰

In contrast to support seekers, caregivers' unique perceptions were unrelated to their relationship-specific working models, but they were associated with their chronic attachment models. Caregivers who had more pessimistic attachment expectations (those higher in attachment-related anxiety and avoidance) tended to perceive their interactions less favorably; they evaluated their own behavior as less supportive and felt that their partner had been less satisfied with their interaction. Once again, this pattern emerged after controlling for shared variance with support seekers and independent observers. These findings provide evidence of social construal biases associated with working models of attachment that, until now, have been observed only in self-report studies (e.g., Collins, 1996; Collins & Allard, 1999).

Finally, from a methodological perspective, our findings illustrate the value of assessing social support from multiple perspectives. Although objective behavioral ratings have clear advantages, it would be unwise to assume that outside observers, alone, are sufficient for understanding dyadic interaction. In our data, for example, it was clear that romantic partners shared a unique view of their interaction that was not perceived (or perhaps not understood) by outside observers. In addition, although support seekers' perceptions of support were rooted in objective features of their interaction, their subjective experience of support was the strongest and most proximal predictor of their mood after the interaction.

Methodological Issues and Concluding Comments

Considered collectively, the results of this study provide encouraging initial support for an attachment theory perspective on social support processes in intimate relationships. Nevertheless, our study has some limitations that should be acknowledged. First, although support seekers were instructed to think about a stressful event, we cannot be sure that they were experiencing emotional distress or that their attachment behavioral systems were activated during the interaction. This may explain our relatively weak find-

ings for attachment style differences in support-seeking behavior. In addition, because participants were assigned to specific roles and were aware that they were being videotaped, support seekers may have felt obligated to disclose at least some information, and caregivers may have felt obligated to provide at least some support. In addition, because our study involved a relatively homogeneous sample of college dating couples, we cannot necessarily generalize our results to older couples involved in more established relationships or across social class and cultures. Although we believe that our theoretical model is applicable to other samples and support contexts, our results are most useful for understanding how young adults help one another cope with daily stressors and hassles.

Another potential limitation resides in our measurement of adult attachment style. There is debate in the literature about whether self-report or interview methods are most appropriate for assessing adult attachment styles (Bartholomew & Shaver, 1998). Although new measures of adult attachment are being developed, these issues remain unresolved and await future investigation. One direction for future research would be to distinguish the support-seeking and caregiving behaviors characteristic of the four attachment prototypes described by Bartholomew (1990). We followed the precedent established by many attachment researchers in terms of analyzing data with regard to two underlying attachment dimensions (anxiety and avoidance). Nevertheless, as we have noted, the use of dimensions may obscure important qualitative differences between attachment groups. Bartholomew et al. (1997) provided an excellent discussion of the specific support-seeking strategies that should be linked to specific attachment patterns, and their analysis offers a valuable point of departure for future research.

With respect to our overall conceptual framework, our model was not intended to identify the full range of factors that affect support and caregiving processes. Our goal was to elaborate how social support interactions may be examined from an attachment perspective, and our model is a simplification of what are surely very complex dyadic processes. For instance, we expect that many components of the model will have reciprocal effects on other components, and these interactions, of course, extend over time. In addition, although attachment style is an important individual-

²⁰ Because support seekers' perceived social support and relationship quality were both assessed via self-report, the association between their unique perceptions of their interaction and their relationship quality may be due, in part, to shared method variance. Although it is not possible for us to entirely rule out this alternative explanation, several aspects of our data limit its plausibility. First, the support seeker's attachment style, which was also assessed via self-report, was also partialled out of the regression equation. Thus, it is unlikely that a global response bias (such as a generalized positivity bias) can easily explain our findings. Second, support seekers' perceptions of their interaction were strongly associated with ratings made by objective observers, and support seekers' reports of relationship functioning were strongly correlated with reports provided by their partner (as indicated by our latent variable model). These data provide evidence for the validity of these self-reported constructs. Finally, caregivers' unique perceptions of their interactions were not associated with their ratings of relationship quality. Thus, it seems unlikely that method variance systematically affected the reports of support seekers but not the reports of caregivers.

difference variable that has obvious theoretical ties to support and caregiving processes, other individual differences are also relevant (e.g., Cutrona et al., 1997; Downey & Feldman, 1996; Pasch, Bradbury, & Sullivan, 1997) and would be incorporated into a broader model. Barbee and Cunningham's (1995) model of interactive coping is one such model that identifies a broad range of factors that may influence support-seeking and caregiving behaviors.

Finally, because we used a cross-sectional, correlational design, we cannot draw any conclusions about causality or make any unqualified assumptions about long-term support and caregiving processes. In addition, because we conducted a large number of hypothesis tests, concerns may be raised about inflated Type I error. Although we feel confident that our theory-driven analytic approach reduces the likelihood that our results are due to chance, our confidence in our findings will, of course, be bolstered by replication.

In conclusion, our study highlights the interpersonal, transactional nature of social support processes in intimate relationships and draws attention to the importance of studying the joint contributions of the attachment and caregiving systems. We have shown that support interactions are shaped not only by normative processes but also by the interpersonal skills and expectations of both the support seeker and the caregiver. A capacity for intimacy and a sense of confidence that one is valued by others appear to be vital both for recruiting social support and for providing sensitive care to others. This study also illustrates the value of studying social support in the context of intimate relationships. Support-seeking and caregiving interactions are embedded in ongoing close relationships, and the ways in which partners seek comfort from each other and help one another cope with stress are likely to be shaped by broader relationship features such as commitment, interdependence, and trust, just to name a few. We hope this study inspires other scholars to continue integrating these two domains, which have remained surprisingly independent but have much to offer each other. Finally, the results of this study help illuminate the ways in which supportive intimate relationships contribute to feelings of security in adulthood, which may provide a bridge to understanding the specific mechanisms through which relationships promote health and well-being over time. If effective support seeking and caregiving are essential to relationship functioning (as our data suggest), then these findings may also help explain why insecure adults are at risk for developing poorly functioning intimate relationships.

References

- Acitelli, L. K. (1996). The neglected links between marital support and marital satisfaction. In R. Pierce, B. R. Sarason, & I. G. Sarason (Eds.), *Handbook of social support and the family* (pp. 83–103). New York: Plenum.
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.
- Arbuckle, J. L. (1997). *AMOS users' guide Version 3.6*. Chicago: Small-Waters Corporation.
- Aron, A., Aron, E. N., Tudor, M., & Nelson, G. (1991). Close relationships as including other in the self. *Journal of Personality and Social Psychology*, 60, 241–253.
- Barbee, A. P. (1990). Interactive coping: The cheering-up process in close relationships. In S. Duck (Ed.), *Social support in relationships* (pp. 47–65). Newbury Park, CA: Sage.
- Barbee, A. P., & Cunningham, M. R. (1995). An experimental approach to social support communications: Interactive coping in close relationships. *Communication Yearbook*, 18, 381–413.
- Bartels, K. M., & Frazier, P. A. (1994). *The relations among perceived social support, adult attachment, and well-being*. Unpublished manuscript, University of Minnesota, Minneapolis.
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 7, 147–178.
- Bartholomew, K., Cobb, R. J., & Poole, J. (1997). Adult attachment patterns and social support processes. In G. R. Pierce, B. Lakey, I. Sarason, & B. Sarason (Eds.), *Sourcebook of social support and personality* (pp. 359–378). New York: Plenum.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61, 226–244.
- Bartholomew, K., & Shaver, P. R. (1998). Methods of assessing adult attachment: Do they converge? In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 25–45). New York: Guilford Press.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107, 238–246.
- Blain, M. D., Thompson, J. M., & Whiffen, V. E. (1993). Attachment and perceived social support in late adolescence: The interaction between working models of self and others. *Journal of Adolescent Research*, 8, 226–241.
- Bolger, N., Foster, M., Vinokur, A. D., & Ng, R. (1996). Close relationships and adjustment to a life crisis: The case of breast cancer. *Journal of Personality and Social Psychology*, 70, 283–294.
- Bollen, K., & Lennox, R. (1991). Conventional wisdom on measurement: A structural equation perspective. *Psychological Bulletin*, 110, 305–314.
- Bowlby, J. (1973). *Attachment and loss: Separation, anxiety and anger*. New York: Basic Books.
- Bowlby, J. (1982). *Attachment and loss: Attachment* (2nd ed.). New York: Basic Books.
- Bowlby, J. (1988). *A secure base*. New York: Basic Books.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York: Guilford Press.
- Bretherton, I. (1985). Attachment theory: Retrospect and prospect. *Monographs of the Society for Research in Child Development*, 50, 3–35.
- Carnelley, K. B., Pietromonaco, P. R., & Jaffe, K. (1996). Attachment, caregiving, and relationship functioning in couples: Effects of self and partner. *Personal Relationships*, 3, 257–278.
- Clark, M. S., & Mills, J. (1979). Interpersonal attraction in exchange and communal relationships. *Journal of Personality and Social Psychology*, 37, 12–24.
- Clark, M. S., & Mills, J. (1993). The difference between communal and exchange relationships: What it is and is not. *Personality and Social Psychology Bulletin*, 19, 684–691.
- Cohen, S., & Syme, S. L. (1985). *Social support and health*. San Diego, CA: Academic Press.
- Collins, N. L. (1996). Working models of attachment: Implications for explanation, emotion, and behavior. *Journal of Personality and Social Psychology*, 71, 810–832.
- Collins, N. L., & Allard, L. M. (1999). *Working models of attachment and social construal processes in romantic relationships*. Manuscript submitted for publication.
- Collins, N. L., Dunkel-Schetter, C., Lobel, M., & Scrimshaw, S. C. M. (1993). Social support in pregnancy: Psychosocial correlates of birth

- outcomes and postpartum depression. *Journal of Personality and Social Psychology*, 65, 1243–1258.
- Collins, N. L., & Feeney, B. C. (1998). *Attachment style differences in support seeking and caregiving*. Unpublished raw data.
- Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*, 58, 644–663.
- Collins, N. L., & Read, S. J. (1994). Cognitive representations of adult attachment: The structure and function of working models. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships: Vol. 5. Attachment processes in adulthood* (pp. 53–90). London: Jessica Kingsley.
- Cutrona, C. E. (1996). *Social support in couples: Marriage as a resource in times of stress*. Thousand Oaks, CA: Sage.
- Cutrona, C. E., Cohen, B. B., & Igram, S. (1990). Contextual determinants of the perceived supportiveness of helping behaviors. *Journal of Social and Personal Relationships*, 7, 553–562.
- Cutrona, C. E., Hessling, R. M., & Suhr, J. A. (1997). The influence of husband and wife personality on marital social support interactions. *Personal Relationships*, 4, 379–393.
- Cutrona, C. E., & Suhr, J. A. (1992). Controllability of stressful events and satisfaction with spouse support behaviors. *Communication Research*, 19, 154–174.
- Davis, M. H., Morris, M. M., & Kraus, L. A. (1998). Relationship-specific and global perceptions of social support: Associations with well-being and attachment. *Journal of Personality and Social Psychology*, 74, 468–481.
- DeLongis, A., Folkman, S., & Lazarus, R. S. (1988). The impact of daily stress on health and mood: Psychological and social resources as mediators. *Journal of Personality and Social Psychology*, 54, 486–495.
- Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology*, 70, 1327–1343.
- Dunkel-Schetter, C., & Bennett, T. L. (1990). Differentiating the cognitive and behavioral aspects of social support. In B. R. Sarason, I. G. Sarason, & G. R. Pierce (Eds.), *Social support: An interactional view* (pp. 267–296). New York: Wiley.
- Dunkel-Schetter, C., Blasband, D. E., Feinstein, L. G., & Herbert, T. B. (1992). Elements of supportive interactions: When are attempts to help effective? In S. Spacapan & S. Oskamp (Eds.), *Helping and being helped: Naturalistic studies. The Claremont symposium on applied psychology* (pp. 83–114). Newbury Park, CA: Sage.
- Eckenrode, J., & Wethington, E. (1990). The process and outcome of mobilizing social support. In S. Duck & R. C. Silver (Eds.), *Personal relationships and social support* (pp. 83–103). Newbury Park, CA: Sage.
- Feeney, J. A. (1996). Attachment, caregiving, and marital satisfaction. *Personal Relationships*, 3, 401–416.
- Feeney, J. A., Noller, P., & Callan, V. J. (1994). Attachment style, communication and satisfaction in the early years of marriage. In K. Bartholomew & D. Perlman (Eds.), *Attachment processes in adulthood: Vol. 5. Advances in personal relationships* (pp. 269–308). London: Jessica Kingsley.
- Fraley, R. C., & Shaver, P. R. (1998). Airport separations: A naturalistic study of adult attachment dynamics in separating couples. *Journal of Personality and Social Psychology*, 75, 1198–1212.
- Fraley, R. C., & Waller, N. G. (1998). Adult attachment patterns: A test of the typological model. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 77–114). New York: Guilford Press.
- Gonzalez, R., & Griffin, D. (1997). On the statistics of interdependence: Treating dyadic data with respect. In S. Duck (Ed.), *Handbook of personal relationships* (2nd ed., pp. 271–302). New York: Wiley.
- Hobfoll, S. E., & Lerman, M. (1988). Personal relationships, personal attributes, and stress resistance: Mothers' reactions to their child's illness. *American Journal of Community Psychology*, 16, 565–589.
- Holmes, J. G. (1991). Trust and the appraisal process in close relationships. In W. H. Jones & D. Perlman (Eds.), *Advances in personal relationships: A research annual* (Vol. 2, pp. 57–104). London: Jessica Kingsley.
- Ickes, W. J., & Simpson, J. A. (1997). Managing empathic accuracy in close relationships. In W. J. Ickes, (Ed.), *Empathic accuracy* (pp. 218–250). New York: Guilford Press.
- Kobak, R. R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and perception of self and others. *Child Development*, 59, 135–146.
- Kunce, L. J., & Shaver, P. R. (1994). An attachment-theoretical approach to caregiving in romantic relationships. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships* (Vol. 5, pp. 205–237). London: Jessica Kingsley.
- Lakey, B., & Cassidy, P. B. (1990). Cognitive processes in perceived social support. *Journal of Personality and Social Psychology*, 59, 337–343.
- Lakey, B., McCabe, K. M., Fiscaro, S., & Drew, J. B. (1996). Environmental and personal determinants of support perceptions: Three generalizability studies. *Journal of Personality and Social Psychology*, 70, 1270–1280.
- Lehman, D. R., & Hemphill, K. J. (1990). Recipients' perceptions of support attempts and attributions for support attempts that fail. *Journal of Social and Personal Relationships*, 7, 563–574.
- Lepore, S. J., Silver, R. C., Wortman, C. B., & Wayment, H. A. (1996). Social constraints, intrusive thoughts, and depressive symptoms among bereaved mothers. *Journal of Personality and Social Psychology*, 70, 271–282.
- Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development*, 50, 66–104.
- Major, B., Zubek, J. M., Cooper, M. L., Cozzarelli, C., & Richards, C. (1997). Mixed messages: Implications of social conflict and social support within close relationships for adjustment to a stressful life event. *Journal of Personality and Social Psychology*, 72, 1349–1363.
- Martz, J. M., Verette, J., Arriaga, X. B., Slovik, L. F., Cox, C. L., & Rusbult, C. E. (1998). Positive illusion in close relationships. *Personal Relationships*, 5, 159–181.
- McGraw, K. O., & Wong, S. P. (1996). Forming inferences about some intraclass correlation coefficients. *Psychological Methods*, 1, 30–46.
- Mikulincer, M., & Florian, V. (1995). Appraisal of and coping with a real-life stressful situation: The contribution of attachment styles. *Personality and Social Psychology Bulletin*, 21, 406–414.
- Mikulincer, M., Florian, V., & Weller, A. (1993). Attachment styles, coping strategies, and posttraumatic psychological distress: The impact of the gulf war in Israel. *Journal of Personality and Social Psychology*, 64, 817–826.
- Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-disclosure. *Journal of Personality and Social Psychology*, 61, 321–331.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996). The benefits of positive illusions: Idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology*, 70, 79–98.
- Murray, S. L., Holmes, J. G., MacDonald, G., & Ellsworth, P. C. (1998). Through the looking glass darkly? When self-doubts turn into relationship insecurities. *Journal of Personality and Social Psychology*, 75, 1459–1480.
- Ognibene, T. C., & Collins, N. L. (1998). Adult attachment styles, perceived social support, and coping strategies. *Journal of Social and Personal Relationships*, 15, 323–345.
- Pasch, L. A., Bradbury, T. N., & Davila, J. (1997). Gender, negative

- affectivity, and observed social support behavior in marital interaction. *Personal Relationships*, 4, 361–378.
- Pasch, L. A., Bradbury, T. N., & Sullivan, K. T. (1997). Social support in marriage: An analysis of intraindividual and interpersonal components. In G. R. Pierce, B. Lakey, I. G. Sarason, & B. R. Sarason (Eds.), *Sourcebook of social support and personality* (pp. 229–256). New York: Plenum.
- Pierce, G. R., Sarason, B. R., & Sarason, I. G. (1992). General and specific support expectations and stress as predictors of perceived supportiveness: An experimental study. *Journal of Personality and Social Psychology*, 63, 297–307.
- Pierce, G. R., Sarason, B. R., & Sarason, I. G. (1996). *Handbook of social support and the family*. New York: Plenum.
- Priel, B., & Shamai, D. (1995). Attachment style and perceived social support: Effects on affect regulation. *Personality and Individual Differences*, 19, 235–241.
- Reis, H. T., & Patrick, B. C. (1996). Attachment and intimacy: Component processes. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 523–563). New York: Guilford Press.
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. Duck & D. F. Hay (Eds.), *Handbook of personal relationships: Theory, research, and interventions* (pp. 367–389). Chichester, England: Wiley.
- Rusbult, C. E., & Buunk, B. P. (1993). Commitment processes in close relationships: An interdependence analysis. *Journal of Social and Personal Relationships*, 10, 175–204.
- Rusbult, C. E., & Van Lange, P. A. M. (1996). Interdependence processes. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 564–596). New York: Guilford Press.
- Sarason, B. R., Sarason, I. G., & Gurung, R. A. R. (1997). Close personal relationships and health outcomes: A key to the role of social support. In S. Duck (Ed.), *Handbook of personal relationships* (2nd ed., pp. 547–573). New York: Wiley.
- Sarason, I. G., Sarason, B. R., & Pierce, G. R. (1994). Social support: Global and relationship-based levels of analysis. *Journal of Social and Personal Relationships*, 11, 295–312.
- Shaver, P. R., Collins, N. L., & Clark, C. L. (1996). Attachment styles and internal working models of self and relationship partners. In G. J. O. Fletcher & J. Fitness (Eds.), *Knowledge structures in close relationships: A social psychological approach* (pp. 25–61). Mahwah, NJ: Erlbaum.
- Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology*, 62, 434–446.
- Van Lange, P. A. M., Otten, W., De Bruin, E. M. N., & Joireman, J. A. (1997). Development of prosocial, individualistic, and competitive orientation: Theory and preliminary evidence. *Journal of Personality and Social Psychology*, 73, 733–746.
- Vaux, A. (1988). *Social support*. New York: Praeger.
- Wallace, J. L., & Vaux, A. (1993). Social support network orientation: The role of adult attachment style. *Journal of Social and Clinical Psychology*, 12, 354–365.

Appendix A

Correlation Matrix, Means, and Standard Deviations for Path Analysis

Variable	1	2	3	4	5
1. Seeker's stress	—				
2. Seeker's behavior	.185	—			
3. Caregiver's behavior	.091	.456	—		
4. Seeker's perception	-.128	.128	.434	—	
5. Seeker's mood (residualized)	-.091	.079	.220	.529	—
<i>M</i>	15.903	10.188	14.011	5.543	0.000
<i>SD</i>	2.711	5.239	7.300	1.154	0.849

Note. *N* = 93 couples.

Appendix B

Correlation Matrix, Means, and Standard Deviations for Latent Variables Analysis

Variable	1	2	3	4	5
1. Seeker's perception	—				
2. Caregiver's perception	.459	—			
3. Observed caregiving	.434	.259	—		
4. Seeker's quality	.448	.155	.171	—	
5. Caregiver's quality	.397	.321	.206	.565	—
<i>M</i>	5.543	5.643	14.011	0.002	-0.006
<i>SD</i>	1.154	1.049	7.300	14.667	14.594

Note. *N* = 93 couples.

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