

An Attachment Perspective on Interpersonal and Intergroup Conflict

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In recent years, attachment theory (Bowlby, 1973, 1980, 1982, 1988), which was originally formulated to describe and explain infant-parent emotional bonding, has been applied, first, to the study of adolescent and adult romantic relationships and, then, to the study of group dynamics and intergroup relationships. In the present chapter we expand the theory as it applies to adults by discussing attachment-related processes involved in (a) the ways people think, experience, and cope with interpersonal conflicts; (b) maladaptive forms of conflict resolution within romantic and marital relationships; and (c) intergroup hostility and aggression. We will begin by presenting an overview of attachment theory and our theoretical model of the activation and psychodynamics of the adult attachment behavioral system (Mikulincer & Shaver, 2007a), along with an overview of some of the intrapsychic and interpersonal manifestations of the senses of attachment security and insecurity (attachment anxiety and avoidance). We will then focus on attachment theory's characterization of individual differences in adaptive and maladaptive forms of experiencing interpersonal conflicts and coping with them. Next, we will review findings concerning the ways in which attachment security and the major forms of insecurity affect various forms of conflict resolution in close relationships. Finally, we will review recent findings concerning ways in which the senses of attachment security and insecurity (anxiety and avoidance) shape a person's attitudes and behavior toward out-groups and reduce or intensify intergroup conflict.

Overview of Adult Attachment Theory

According to Bowlby (1982), human beings are born with an innate psychobiological system (the *attachment behavioral system*) that motivates them to seek proximity to supportive others (*attachment figures*) in times of need. This system, which emerged over the course of evolution, accomplishes basic regulatory functions (protection from threats and alleviation of

distress) and increases the likelihood of survival of human infants, who are born with immature capacities for locomotion, feeding, and defense. Although the attachment system is most critical during the early years of life, Bowlby (1988) assumed that it is active over the entire life span and is manifested in thoughts and behaviors related to support seeking.

Bowlby (1973) also described important individual differences in the functioning of the attachment system. Interactions with attachment figures who are available in times of need, sensitive to one's attachment needs, and responsive to one's bids for proximity facilitate the optimal functioning of the system. According to Bowlby (1988), these kinds of positive interactions promote the formation of a sense of attachment security – a sense that the world is safe, that attachment figures are helpful when called upon, and that it is possible to explore the environment curiously and engage effectively and enjoyably with other people. Moreover, positive expectations about others' availability and positive views of the self as competent and valued (which Bowlby called *internal working models*) are formed, and affect-regulation strategies are organized around these positive beliefs. However, when attachment figures are not reliably available and supportive, a sense of security is not attained, negative internal working models are formed (e.g., worries about others' intentions and doubts about self-worth), and strategies of affect regulation other than appropriate proximity seeking (*secondary attachment strategies*, conceptualized in terms of two dimensions, *avoidance and anxiety*) are adopted.

In studies of adolescents and adults, tests of these theoretical ideas have generally focused on a person's *attachment orientations* – the systematic pattern of relational expectations, emotions, and behavior that results from a particular history of attachment experiences (Fraley & Shaver, 2000; Shaver & Mikulincer, 2002). Initially, research was based on Ainsworth, Blehar, Waters, and Wall's (1978) typology of attachment patterns in infancy – secure, anxious, and

avoidant – and Hazan and Shaver's (1987) conceptualization of parallel adult styles in romantic relationships. However, subsequent studies (e.g., Brennan, Clark, & Shaver, 1998; Fraley & Waller, 1998) revealed that attachment orientations are best conceptualized as regions in a two-dimensional space. The first dimension, attachment *anxiety*, reflects the degree to which a person worries that relationship partners will not be available in times of need and is afraid of being rejected or abandoned. The second dimension, attachment-related *avoidance*, reflects the extent to which a person distrusts relationship partners' goodwill and strives to maintain behavioral independence and emotional distance from partners. People who score low on both dimensions are said to be secure, or to have a secure attachment style. The two dimensions can be measured with reliable and valid self-report scales and are associated in theoretically predictable ways with various aspects of personal adjustment and relationship quality (see Mikulincer & Shaver, 2007a, for a review).

Attachment orientations are initially formed in interactions with primary caregivers during early childhood, as a large body of research has shown (Cassidy & Shaver, 2008), but Bowlby (1988) claimed that memorable interactions with others throughout life can alter a person's working models and move the person from one region of the two-dimensional space to another. Moreover, although a person's attachment orientation is often conceptualized as a single global orientation toward close relationships, it is actually rooted in a complex network of cognitive and affective processes and mental representations, which includes many episodic, context-related, and relationship-specific as well as general attachment representations (Mikulincer & Shaver, 2003). In fact, many studies indicate that a person's attachment orientation can change depending on context and recent experiences (Mikulincer & Shaver,

2007b). This makes it possible to study the effects of experimentally primed security and insecurity.

A Model of Attachment-System Functioning in Adulthood

In summarizing the hundreds of empirical studies of adult attachment processes, we (Mikulincer & Shaver, 2003, 2007a) created a flowchart model of the activation and dynamics of the attachment system. The model includes three major components: (a) monitoring and appraising threatening events, (b) monitoring and appraising the availability of external or internalized attachment figures, and (c) monitoring and appraising the viability of seeking proximity to an “attachment figure” as a means of coping with attachment insecurity and distress. It also includes excitatory and inhibitory pathways that result from recurrent use of secondary attachment strategies, and these feedback pathways affect the monitoring of threatening events and attachment figures’ availability.

Mikulincer and Shaver (2007a) assumed that the monitoring of unfolding events results in activation of the attachment system when a potential or actual threat is sensed (unconsciously) or perceived (consciously). That is, during encounters with physical or psychological threats, either in the environment or in the flow of internal free associations, the attachment system is activated and the primary attachment strategy is set in motion. This strategy leads adults to turn to internalized representations of attachment figures or to actual supportive others, and to maintain symbolic or actual proximity to these figures. Recent studies have shown that thoughts related to proximity seeking as well as mental representations of internalized attachment figures tend to be activated even in minimally threatening situations (Mikulincer, Birnbaum, Woddis, & Nachmias, 2000; Mikulincer, Gillath, & Shaver, 2002). However, although age and development result in an

increased ability to gain comfort from symbolic representations of attachment figures, no one of any age is completely free of reliance on others (Bowlby, 1982, 1988).

Activation of the attachment system forces a decision about the availability of attachment figures (the second module of our model). An affirmative answer to the implicit or explicit question “Is an attachment figure available and likely to be responsive to my needs?” heightens the sense of attachment security and facilitates the use of constructive emotion-regulation strategies. These strategies are aimed at alleviating distress, maintaining supportive intimate relationships, and bolstering a person’s sense of love-worthiness and self-efficacy. Moreover, they sustain what Shaver and Mikulincer (2002), following Fredrickson (2001), call a “broaden and build” cycle of attachment security, which expands a person’s resources for maintaining coping flexibility and emotional stability in times of stress, broadens the person’s perspectives and capacities, and facilitates the incorporation of mental representations of security-enhancing attachment figures into the self. This broaden-and-build process allows relatively secure individuals to maintain an authentic sense of personal efficacy, resilience, and optimism even when social support is temporarily unavailable (Mikulincer & Shaver, 2007a).

Perceived unavailability of an attachment figure results in attachment insecurity, which compounds the distress aroused by the appraisal of a situation as threatening. This state of insecurity forces a decision about the viability of further (more active) proximity seeking as a protective strategy (the third module of the model). The appraisal of proximity as feasible or essential – because of attachment history, temperamental factors, or contextual cues – results in energetic, insistent attempts to attain proximity, support, and love. These attempts are called *hyperactivating strategies* (Cassidy & Kobak, 1988) because they involve up-regulation of the attachment system, including constant vigilance and intense concern until an attachment figure is

perceived to be available and supportive. Hyperactivating strategies include attempts to elicit a partner's involvement, care, and support through clinging and controlling responses (Shaver & Mikulincer, 2002); overdependence on relationship partners as a source of protection (Shaver & Hazan, 1993); and perception of oneself as relatively helpless with respect to emotion regulation (Mikulincer & Shaver, 2003). Hyperactivating strategies are characteristic of people who score relatively high on the attachment anxiety dimension (Mikulincer & Shaver, 2007a).

The appraisal of proximity seeking as non-viable can result in inhibition of the quest for support and active attempts to handle distress alone (which Bowlby, 1988, labeled *compulsive self-reliance*). These secondary strategies of affect regulation are called *avoidant deactivating strategies* (Cassidy & Kobak, 1988), because their primary goal is to keep the attachment system deactivated so as to avoid frustration and further distress caused by attachment-figure unavailability. This goal leads to the denial of attachment needs; avoidance of closeness, intimacy, and dependence in close relationships; maximization of cognitive, emotional, and physical distance from others; and strivings for autonomy and independence. With practice and experience, these deactivating strategies often broaden to include literal and symbolic distancing of oneself from distress whether it is directly attachment-related or not. Deactivating strategies are characteristic of people scoring relatively high on avoidant attachment (Mikulincer & Shaver, 2007a).

In short, each attachment strategy has a major regulatory goal (insisting on proximity to an attachment figure or on self-reliance), which goes along with particular cognitive and affective processes that facilitate goal attainment. These strategies affect the formation and maintenance of close relationships as well as the experience, regulation, and expression of negative emotions, such as anxiety, anger, or sadness (Mikulincer & Shaver, 2007a). Moreover, the

strategies affect the ways in which a person experiences and handles conflictual situations with other individuals (including a romantic partner or spouse) or groups. This is the main focus of the following sections of this chapter.

Attachment Orientations and Interpersonal Conflicts

When analyzing the possible links between the functioning of the attachment system and the ways in which a person experiences and regulates conflicts with other people, it is important to remember that the attachment system was “designed,” during evolution, as an interpersonal regulatory device. According to Bowlby (1982), perceived threats and dangers make salient the goal of gaining proximity to and support from an attachment figure, and this encourages people to learn, organize, and implement behavioral plans aimed at attaining safety and security. Importantly, Bowlby (1982) also assumed that the attachment system operates in a “goal-corrected” manner. That is, a person evaluates the progress he or she is making toward achieving support and comfort from a partner and corrects intended actions if necessary to attain these goals. Therefore, effective functioning of the attachment system includes the use of partner-tailored proximity-seeking strategies that take into account a partner’s needs and preferences (creating what Bowlby, 1973, called a “goal-corrected partnership”). This facilitates satisfying, harmonious interactions that might otherwise devolve into intrusive, coercive, or conflictual exchanges rooted in coordination failures and mismatched needs and goals. Moreover, smooth functioning of the attachment system helps people rapidly and effectively restore relationship harmony whenever they and their partner have incompatible needs and goals that can result in painful interpersonal conflicts.

According to Mikulincer and Shaver (2007a), competent management of interpersonal conflicts is originally learned during interactions between infants and their primary caregivers,

mainly when infants search for a caregiver's protection or support. During such episodes, children must not only express their needs for proximity and support in order to gain a sense of security; they must also learn to manage occasional goal conflicts between them and their caregivers, because these may interfere with continued support. Although the foundation of this ability is assumed to be an innate aspect of the attachment system (given the goal-corrected nature of the system's operation), interactions with sensitive and responsive caregivers who can flexibly adapt their goals and responses to children's attempts to deal with goal conflicts allow children to learn effective conflict management skills and practice and refine them. In contrast, interactions with a rejecting figure who rigidly maintains his or her own goals regardless of children's attempts to tailor their bids for proximity to this figure's preferences cast a pall over early efforts to regulate interpersonal conflicts. Unresponsive attachment figures force a child to acquire alternative conflict management skills that may seem adaptive in their original context (e.g., inhibiting expression of one's needs when a parent responds badly to need expression) but can cause trouble later on, when a person encounters new relationship partners with different salient needs and preferences.

Mikulincer and Shaver (2007a) hypothesized that relatively secure adolescents and adults are likely to emphasize the challenging rather than the threatening aspects of interpersonal conflicts and believe they can deal effectively with them. These positive beliefs about conflict and conflict management are rooted in secure individuals' views of others as "well intentioned and kind hearted" (Hazan & Shaver, 1987) and their view that they are capable of handling life's problems (e.g., Mikulincer & Florian, 1998). Moreover, their constructive approach to emotion regulation (Shaver & Mikulincer, 2007) may help them communicate openly but not threateningly during conflict, negotiate with others in a collaborative manner, and apply effective

conflict-resolution strategies, such as compromising and integrating their own and their partner's needs and behaviors. In so doing, secure individuals are likely to move their relationships back from inevitable conflicts to states of harmony.

Insecure people are likely to appraise interpersonal conflicts in more threatening terms and apply less effective conflict-resolution strategies. For anxious people, conflicts threaten their wish to gain approval, support, and security; they arouse fear of rejection and trigger hyperactivating affect-regulation strategies. The people are likely to appraise conflict in catastrophic terms, display intense negative emotions, ruminate obsessively, and hence fail to attend to and understand what their relationship partner is trying to tell to them. This egocentric, fearful stance is likely to interfere with calm, open communication, negotiation, and the use of compromising and integrating strategies that depend on keeping a partner's needs and perspective in mind. Anxious individuals are likely either to try to dominate the interaction (in an effort to get their own needs met) or accede submissively to a partner's demands in order to avoid rejection.

Avoidant individuals are likely to view conflicts as aversive primarily because conflicts interfere with autonomy and call for expressions of love and care or need and vulnerability. Avoidant people are likely to downplay the significance of conflict while minimizing the importance of their partner's complaints; distance themselves cognitively or emotionally from the conflict; or try to avoid interacting with their partner. When circumstances do not allow escape from conflict, avoidant individuals are likely to attempt to dominate their partner, in line with their need for control, negative models of others, and confidence in their own views. This defensive stance is likely to interfere with negotiation and compromise.

The hypothesized links between attachment orientations and responses to interpersonal conflict have been examined in several correlational studies. In these studies, participants completed self-report scales measuring attachment orientations as well as scales assessing subjective appraisals of conflicts (e.g., Pistole & Arricale, 2003), conflict management skills (e.g., Taubman Ben-Ari, Findler, & Mikulincer, 2002), the use of constructive conflict-management tactics (e.g., Carnelley, Pietromonaco, & Jaffe, 1994), or the use of aggression and conflict-escalation tactics (e.g., Creasey & Hesson-McInnis, 2001). Other studies have used Rahim's Organization Conflict Inventory (ROCI; Rahim, 1983) to assess reliance on integrating, compromising, dominating, obliging, and avoiding strategies during interpersonal conflicts (e.g., Corcoran & Mallinckrodt, 2000; Levy & Davis, 1988).

These studies indicate that people who score relatively high on attachment anxiety or avoidance appraise conflicts in more threatening terms and believe they are less capable of dealing with conflicts. Moreover, they report having relatively poor conflict-management skills (e.g., understanding their partner's perspective), being unlikely to rely on compromising and integrative strategies, and being relatively likely to escalate conflicts (using coercion or outright fighting) or leave a conflict unresolved. Research also indicates that attachment anxiety is associated with concerns about closeness during conflicts (Pistole & Arricale, 2003) and strong conflict-related distress (e.g., Creasey & Hesson McInnis, 2001). In addition, anxiously attached individuals react to the priming of rejection concerns with less flexibility in conflict management strategies (Beinstein Miller, 1996), suggesting that their fear of rejection, when heightened experimentally, interferes with constructive approaches to conflict resolution.

There are also many studies documenting the links between self-reports of attachment insecurities and conflict-management problems within dating and marital relationships (e.g.,

Feeney, 1994; Heene, Buysse, & Van Oost, 2005; Roberts & Noller, 1998). Specifically, attachment insecurities have been associated with reports of less expression of affection and empathy during conflicts, less frequent reliance on compromising strategies, more frequent use of coercive or withdrawal strategies, more frequent engagement in verbal and physical aggression, and higher levels of post-conflict distress. At the couple level, Senchak and Leonard (1992) found that couples in which one or both partners were insecurely attached reported more withdrawal and aggression during conflicts than couples in which both partners were secure.

There is also evidence that insecure people's conflict-management difficulties are evident to observers of couple members' behavior during laboratory discussions of unresolved conflicts. For example, Kobak and Hazan (1991) used a Q-sort measure of marital attachment and found that husbands and wives who were less secure in their marriage were more likely to display facial expressions of rejection while discussing a disagreement. In addition, insecure husbands were less likely to provide support during the discussion. Similarly, Simpson, Rholes, and Phillips (1996), Feeney (1998), and Campbell, Simpson, Boldry, and Kashy (2005) found that self-reports of attachment insecurities were associated with expressions of distress during a conflict discussion with a dating partner. Feeney (1998) also found that self-reports of attachment insecurities were associated with fewer displays of warmth and affection during conflict discussions.

Relying on the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985) to assess adult attachment orientations, several studies have provided evidence for the expected association between insecurities and destructive behaviors during conflicts with a romantic partner (e.g., Babcock, Jacobson, Gottman, & Yerington, 2000; Creasey & Ladd, 2005; Crowell et al., 2002). Specifically, individuals categorized as insecure based on the AAI have been coded

as displaying less positive affect than their secure counterparts during conflict discussions and more frequent expressions of contempt, withdrawal, and stonewalling.

There is also evidence linking self-reports of attachment insecurities with heightened physiological reactivity to relationship conflicts. Powers, Pietromonaco, Gunlicks, and Sayer (2006) asked couples to spend 15 minutes discussing an unresolved conflict. Salivary cortisol levels (an index of physiological reactivity) were assessed before, during, and after the discussion. Results indicated that attachment insecurities were associated with greater physiological reactivity to the discussion, and that gender moderated the effects of the specific kind of attachment insecurity (anxiety or avoidance). Whereas avoidant but not anxious women showed heightened cortisol reactivity, anxious but not avoidant men evinced this kind of response in reaction to the discussion. According to Powers et al. (2006), these gender differences can be explained in terms of gender-related norms concerning conflicts. Previous studies have indicated that whereas women are expected to take an active, leading role during conflicts (e.g., to articulate relationship concerns), men are assigned a less active role (e.g., Christensen & Heavey, 1990). As a result, the discussion may be particularly stressful for avoidant women, who prefer to distance themselves from relationship problems, and for anxious men, who tend to express distress and take a controlling position in the discussion.

Studies have also found that self-reports of attachment anxiety are associated with intensification of the negative consequences of conflict discussions. For example, Simpson et al. (1996) found that anxiously attached people reported a stronger decline than secure people in love and commitment after discussing a major relationship problem with a dating partner. Gallo and Smith (2001) also found that anxious wives, compared with secure wives, reacted to a discussion about a relationship disagreement with more negative appraisals of their husbands. In

Campbell et al.'s (2005) diary study of daily conflicts between dating partners, more anxious participants reported more conflictual interactions across 14 consecutive days and reacted to days of intense conflict with a sharper decline in relationship satisfaction and a more pessimistic view of the relationship's future.

Insecure people's deficiencies in handling interpersonal conflicts are also evident in studies assessing attachment-related variations in domestic violence. This kind of violence often results from repeated failures to solve interpersonal conflicts and prevent conflict escalation – deficiencies we expect to be associated with attachment insecurity. However, despite both anxious and avoidant people's problems in handling interpersonal conflicts, studies have revealed that attachment anxiety is more strongly associated with domestic violence than is avoidant attachment (e.g. Dutton, Starzomski, Saunders, & Bartholomew, 1994; Henderson, Bartholomew, Trinke, & Kwong, 2005). For example, Dutton et al. (1994) studied 160 court-mandated men convicted of wife assault and found that self-reports of attachment anxiety were associated with more frequent and severe acts of coercion and partner abuse during couple conflicts. Secure attachment was negatively associated with most features of domestic violence even in this self-selected, court-mandated population.

The link between attachment anxiety and domestic violence is evident in two other kinds of studies. First, studies comparing attachment orientations of violent and non-violent samples have found that partners who engage in domestic violence are more anxiously attached, on average, than partners who do not resort to violence (e.g., Bookwala & Zdaniuk, 1998). Second, studies in unrestricted samples of adolescents and young adults have consistently found that young men and women who score higher on attachment anxiety are likely to report more engagement in couple violence (e.g., Roberts & Noller, 1998). Importantly, these associations

cannot be explained by other relationship or personality variables and seem to be mediated by reliance on by ineffective conflict management strategies.

With regard to avoidant attachment, some researchers have suggested that avoidant individuals withdraw from conflict rather than become so emotional that they attack a relationship partner (e.g., Mikulincer & Shaver, 2007a). Bartholomew and Allison (2006) found, however, that avoidant people sometimes became violent when involved in an escalating series of conflicts, especially with an anxiously attached partner who demanded involvement. Similarly, Holtzworth-Munroe, Stuart, and Hutchinson (1997) found that avoidance was associated with wife battering, and Rankin, Saunders, and Williams (2000) found that it was associated with more frequent and severe acts of domestic violence on the part of a sample of African American men arrested for partner abuse. In addition, Collins, Cooper, Albino, and Allard (2002) reported that avoidance measured during adolescence predicted relationship violence six years later.

Attachment Orientations and Intergroup Conflict

The link between attachment insecurities and destructive responses to conflict is also evident in the field of intergroup relations. In this context, tensions, frictions, and conflicts between groups is a constant and pervasive source of intergroup hostility, which is directly manifested in out-group derogation (i.e., the tendency to perceive members of other cultural or ethnic groups in less favorable terms than members of one's own group; see Brewer & Brown, 1998, for a review), prejudice, and discrimination against out-group members. When intergroup relations become tense and conflictive, these hostilities can result in violence, rape, and killing of out-group members – even genocide (Staub & Bar-Tal, 2003). Although several economic and political factors are involved in the escalation of intergroup violence (e.g., economic instability,

totalitarian regimes), the ways in which individuals experience and handle intergroup tensions and conflicts can explain individual differences in intergroup hostility and aggression. With this in mind, we (Mikulincer & Shaver, 2001) hypothesized that attachment insecurities, which are characterized by conflict-management deficiencies, would be associated with destructive responses to intergroup conflict and thereby with more hostility and aggression toward out-group members.

Social Identity Theory (Tajfel & Turner, 1986) assumes that outgroup derogation serves a self-protective function: maintenance of self-esteem (“We,” including I, are better than “them”). This defensive tendency seems likely to be especially characteristic of insecurely attached people. Securely attached individuals can maintain a stable and authentic sense of self-worth by virtue of feeling loved and accepted by others and possessing special and valuable qualities (Mikulincer & Shaver, 2005). They should have less need to fear and disparage out-group members. In his account of human behavioral systems, Bowlby (1982) stated that activation of the attachment system is closely related to innate fear of strangers and that secure attachments mitigate this innate reaction and foster a more tolerant attitude toward unfamiliarity and novelty.

In a series of five studies, we (Mikulincer & Shaver, 2001) found strong evidence for these theoretical ideas. First, higher scores on a self-report measure of attachment anxiety were associated with more hostile responses to a variety of out-groups (as defined by secular Israeli Jewish students): Israeli Arabs, Ultra-orthodox Jews, Russian immigrants, and homosexuals. Second, experimental heightening of the sense of attachment security (subliminal presentation of security-related words such as love and proximity; evocation via guided imagery of the components of security-enhancing interpersonal interactions; and visualization of the faces of security-enhancing attachment figures) eliminated negative responses to out-groups. These

effects were mediated by threat appraisals and were found even when participants' sense of personal value was threatened or their in-group had been insulted by an out-group member. That is, experimentally augmented attachment security reduced the sense of threat created by encounters with outgroup members and seemed to eliminate hostile responses to outgroup members.

Building on these studies, Mikulincer and Shaver (2007b) found that increasing people's sense of attachment security reduced actual aggression between contending or warring social groups. Specifically, Israeli Jewish undergraduates participated in a study together with another Israeli Jew or an Israeli Arab (in each case, the same confederate of the experimenter) and were subliminally and repeatedly exposed (for 20 milliseconds on each trial) to the name of their own security-enhancing attachment figure, the name of a familiar person who was not viewed as an attachment figure, or the name of an acquaintance. Following the priming procedure, participants were informed that they would evaluate a food sample and that they had been randomly selected to give the confederate hot sauce to evaluate. They also learned indirectly that the confederate strongly disliked spicy foods. (This procedure has been used in other studies of interpersonal aggression; e.g., McGregor et al., 1998.) The dependent variable was the amount of hot sauce allocated to the confederate.

When participants had been subliminally primed with the name of someone who was not an attachment figure, they delivered a larger amount of hot sauce to the Arab confederate than to the Jewish confederate, a sign of intergroup aggression. But security priming eliminated this difference: Participants whose sense of security had been enhanced delivered equal (relatively low) amounts of hot sauce to both the Arab and the Jewish confederate. In addition, participants scoring higher on attachment anxiety gave more hot sauce to the outgroup member (Israeli Arab)

than to the ingroup member (Israeli Jew). Thus, it seems that people who are either dispositionally secure or induced to feel more secure in a particular setting are better able than their insecure counterparts to tolerate intergroup differences and to refrain from intergroup aggression.

Although these studies indicate that attachment insecurities are associated with stronger intergroup derogation and aggression, they did not include assessments of the cognitive processes that underlie such conflict-escalation responses. According to Bar-Tal, Kruglanski, and Klar (1989), these destructive responses are driven by what they called conflict schemas or mental sets. In their view, people who hold a cooperation set anticipate constructive interactions with out-group members and cooperative and satisfactory conflict-resolution discussions, which, in turn, moves them away from hostile and aggressive responses to out-groups. In contrast, people who hold a conflict set anticipate hostile and competitive interactions with out-group members and unpleasant and antagonistic conflict-resolutions, which, in turn, promote intergroup hostility and aggression. These mental sets may be brought about by either person factors (e.g., prosocial orientation; Carnevale & Probst, 1998) or situational factors (e.g., De Dreu & Nijstad, 2008). Based on findings reviewed earlier, attachment orientations may be one of these factors, with attachment insecurities, either dispositional or contextually enhanced, increasing the likelihood of adopting a conflict mental set and secure attachment increasing endorsement of a cooperation set.

To examine this issue, we followed up a recent series of studies by De Dreu and Nijstad (2008) on mental sets and creative thought. In one of these studies, participants were asked to indicate the extent to which a particular object varying in its degree of prototypicality (e.g., car or elevator) is an example of a particular category (e.g., vehicle). In this task, inclusion rather

than exclusion of the weak prototypical objects (e.g., elevator) reflects broad cognitive categories and flexible cognitive processing (Rosch, 1975), which are assumed to foster creative thought (e.g., Amabile, 1983). De Dreu and Nijstad (2008) hypothesized that a conflict set leads individuals to focus their attention on conflict-related issues and to dismiss or ignore conflict-irrelevant issues. As a result, a conflict set will involve broader and more inclusive thinking about conflict, but will result in narrow-minded, black-and-white thinking about conflict-irrelevant issues. Indeed, the findings indicated that a conflict mental set was associated with more inclusion of weak prototypical exemplars of conflict-related categories but less inclusion of weak prototypical exemplars of neutral categories.

Based on this finding, we conducted an exploratory two-session laboratory study involving 80 Israeli Jewish university students (53 women and 27 men) and hypothesized that the pattern of category inclusion responses reflecting a conflict mental set would be more characteristic of insecurely than of securely attached people and would be mitigated by security priming (subliminally presenting the name of a security-enhancing attachment figure). The first session was designed to assess participants' attachment orientations and acquire specific names of security-enhancing figures and other close persons to be used later as primes in the second session. In that first session, participants completed the ECR inventory (Brennan et al., 1998), a measure of attachment anxiety and avoidance, plus two computerized measures of the names of attachment figures and other close persons who were not attachment figures. The first of these two computerized measures was a Hebrew version of the WHOTO scale (Fraley & Davis, 1997), in which participants were asked to type in a Microsoft EXCEL worksheet the names of their security-enhancing attachment figures. The scale included 6 items (e.g., Who is the person you would count on for advice? Who is the person you can always count on?), and, for each item,

participants wrote the name of the person who best served the targeted attachment-related function. In the second measure, participants were asked to write the names of their father, mother, brothers, sisters, best friend, current romantic partner, grandfathers, and grandmothers without making any reference to the attachment functions they did or did not serve. We assumed that because some of these people's names were not provided as primary attachment figures, they probably did not meet the strict requirements for that role.

In the second session, conducted two weeks later by a different experimenter, participants (all of them Israeli Jews) were invited to have a conversation with an Israeli Arab student about the Middle-East conflict. However, before the conversation, participants were asked to perform two cognitive tasks. In the first task – a 30-trial computerized word-relation task – participants were randomly assigned to one of two conditions: security or neutral priming. In the security priming condition ($n = 40$), participants were subliminally exposed (for 20 milliseconds) to the name of their most security-enhancing attachment figure (based on the first session of the study). In the neutral priming condition ($n = 40$), they were subliminally exposed to the name of a familiar person who was not selected as an attachment figure.

Following the priming procedure, participants in both priming conditions performed the second cognitive task: a category inclusion task. This task was identical to the one used by De Dreu and Nijstad (2008). Specifically, participants received four neutral categories and three conflict-related categories (randomly ordered), and for each category they rated three objects in terms of their prototypicality using a 10-point scale ranging from 1 (*not at all*) to 10 (*very prototypical*). The four neutral categories (with strong, intermediate, and weak exemplars) were vehicle (bus, airplane, camel), vegetable (carrot, potato, garlic), clothes (skirt, shoes, handbag), and furniture (couch, lamp, telephone). The three conflict-related categories (with strong,

intermediate, and weak exemplars) were weapon (gun, jet fighter, screwdriver), army (Cavalry, Al Qaida, hooligans), and ammunition (bullet, dynamite, paving stones). Statistical analyses were performed on the prototypicality ratings of weak exemplars. No significant effects were found for ratings of strong and intermediate exemplars. For each participant, we computed two total scores: (a) inclusiveness of neutral categories (average of ratings for the weak exemplars of the four neutral categories, Cronbach alpha = .71) and (b) inclusiveness of conflict categories (average of ratings for the weak exemplars of the three conflict categories, alpha = .74).

To test our predictions, we conducted 2-step hierarchical regression analyses with participants' scores on the ECR attachment anxiety and avoidance scales and security priming (a contrast variable contrasting security priming, 1, with neutral priming, -1) as the independent variables. In the first step of these analyses, we entered attachment anxiety and avoidance (Z-scores) and security priming as a block to examine the unique main effects of these predictors. In the second step, the 2-way interactions between security priming and each of the ECR scores were entered as additional predictors. These regressions were performed separately for inclusiveness of conflict-related categories and inclusiveness of neutral categories.

For inclusiveness of conflict-related categories, the regression analysis revealed significant main effects of attachment anxiety, $\beta = .35, p < .01$, avoidant attachment, $\beta = .24, p < .05$, and security priming, $\beta = -.27, p < .05$. As expected, the higher the attachment anxiety and avoidance, the higher the prototypicality ratings of weak exemplars of conflict-related categories. Moreover, as compared with neutral priming, security priming reduced the prototypicality ratings of weak exemplars of conflict-related categories. The interaction effects were not significant. That is, whereas attachment insecurities seemed to involve broader and more

inclusive thinking about conflict, security priming seemed to reduce the inclusiveness of conflict-related categories.

For inclusiveness of neutral categories, the regression analysis revealed significant main effects of attachment anxiety, $\beta = -.28, p < .01$, and security priming, $\beta = .36, p < .01$. As expected, the higher the attachment anxiety, the lower the prototypicality ratings of weak exemplars of neutral categories. Moreover, as compared with neutral priming, security priming increased the prototypicality ratings of weak exemplars of neutral categories. Also, the interaction between security priming and attachment anxiety was significant, $\beta = .31, p < .01$. Examination of the significant interactions (using Aiken & West's, 1991, procedure) revealed that attachment anxiety was associated with lower inclusiveness of neutral categories in the neutral priming condition (-1), $\beta = -.59, p < .01$, but not in the security priming condition (+1), $\beta = .03$. These slopes indicate that security priming was able to mitigate anxiously attached participants' tendency to think about neutral categories in less broad and inclusive terms – a tendency Mikulincer and Sheffi (2000) had observed previously using other neutral categories and other tasks assessing creative thoughts.

These results provide encouraging preliminary evidence that attachment insecurities are associated with a conflict mental set and that even a temporary sense of attachment security reduces the likelihood of adopting such mental sets during encounters with outgroup members. Further research is needed to determine (a) whether insecurely attached individuals' conflict mental sets are activated during encounters with out-group members or tend to be chronically activated during even neutral interpersonal interactions, and (b) whether these mental sets underlie insecurely attached individuals' hostile and aggressive reactions to out-group members.

Concluding Remarks

Attachment theory, which was originally developed to explain infant-caregiver attachment and different attachment patterns in infant-caregiver relationships that seem to result from different kinds of caregiving, has been extended, first, to the realm of adult couple relationships and now to relationships in organizations (e.g., Shaver & Mikulincer, 2008) and to intergroup relations. Both correlational and experimental studies indicate that interpersonal conflicts are handled worse by people with an insecure attachment style, whether anxious or avoidant, and are handled better by people with a secure style. We consider it highly significant that intergroup conflicts might be reduced by helping conflicting parties to feel more secure, not just in the intergroup relationships where the conflicts are occurring, but also in their close relationships, which attachment theory views as the source of security and insecurity. Our experiments, while fairly simple, suggest that this is a causal process – that is, that security enhancement precedes a movement toward more prosocial attitudes and behaviors (Mikulincer & Shaver, 2007b). The effects of such security most likely stem from fairly deep, in some cases not verbally accessible feelings. They thus add to all of the work in social psychology that focuses more intently on forms of verbal negotiation, rationally induced changes in cognitions, and various forms of exposure to members of out-groups. Our studies suggest that there may be many contributions to constructive conflict resolution, including ones that depend on evolved behavioral systems that may at first seem to have little to do with interpersonal conflicts.

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