

Leaders as Attachment Figures: Leaders' Attachment Orientations Predict Leadership-Related Mental Representations and Followers' Performance and Mental Health

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In 3 studies, the authors examined the contribution of leaders' attachment styles to their leadership motives and beliefs and to followers' outcomes. In Study 1, participants completed measures of attachment orientation, leadership motives, self-representations, and leadership style. Studies 2 and 3 were conducted within Israeli military units either during a leadership workshop or during intensive combat training. Israeli military officers and their soldiers (followers) reported on their attachment styles, and the soldiers reported on the officers' leadership qualities and on the soldiers' own performance and mental health. Leaders' attachment anxiety was associated with more self-serving leadership motives and with poorer leadership qualities in task-oriented situations. Leaders' attachment anxiety also predicted followers' poorer instrumental functioning. Leaders' attachment-related avoidance was negatively associated with prosocial motives to lead, with the failure to act as a security provider, and with followers' poorer socioemotional functioning and poorer long-range mental health. Results are discussed with respect to the value of attachment theory for the study of leadership.

Keywords: attachment, leadership, leader–follower relations, mental health, group performance

In a seminal article, Popper and Maysseless (2003) argued that adult attachment theory, which has been prominent in recent years as a theory of close relationships (see J. A. Feeney, 1999; Mikulincer & Shaver, 2003, 2007, for extensive reviews), may provide important insights into leadership processes and leader–follower relations. Indeed, the few studies that have pursued this application of attachment theory have consistently found associations between a leader's attachment orientation and his or her leadership style. In the studies reported here, we extend Popper and Maysseless's (2003) work and take important new steps in applying attachment theory to the analysis of leadership. Specifically, we examine whether and how a leader's attachment style is associated with motives to lead, mental representations of oneself as a leader, ability to function as a security-enhancing attachment figure, and followers' performance and mental health. We also explore possible effects of followers' attachment styles on leader–follower relations.

An Attachment Perspective on Leader–Follower Relations

In an elaboration and extension of Freud's (1961) metaphor of the leader as a father, Popper and Maysseless (2003) proposed that

leader–follower relations can be conceptualized in terms of attachment theory (Bowlby, 1973, 1980, 1969/1982). Originally, the concept of attachment was used to conceptualize child–parent relationships (e.g., Ainsworth, Blehar, Waters, & Wall, 1978). In such relationships, the child occupies the role of the needy, dependent relationship partner and the parents occupy the role that Bowlby (1969/1982) called a stronger and wiser caregiver or attachment figure. Bowlby (1988) claimed, however, that attachment theory and the concept of attachment are relevant to social-cognitive processes and social-relational behavior across the life span. In fact, following Bowlby's (1969/1982) lead, other scholars (e.g., Ainsworth, 1991; Hazan & Zeifman, 1994) have argued that attachment theory can be applied to any adult relationship that fulfills three criteria: the maintenance of proximity (because people prefer to be near an attachment figure, especially in times of stress or need), the provision of a safe haven (an attachment figure often relieves an attached individual's distress and provides comfort, encouragement, and support), and the provision of a secure base (an attachment figure increases an attached individual's sense of security, which in turn sustains exploration, risk taking, and self-development). Research has shown that close friendships and romantic relationships during late adolescence and adulthood often fulfill these three criteria (e.g., Doherty & Feeney, 2004; J. A. Feeney, 2004; Fraley & Davis, 1997).

Although a romantic partner often becomes an adult's principal attachment figure (Hazan & Zeifman, 1994), there may also be context-specific attachment figures—real or potential sources of comfort and support in specific milieus, such as therapists in therapeutic settings (Mallinckrodt, Gantt, & Coble, 1995) and

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leaders in organizational settings (Popper & Maysseless, 2003). Moreover, groups, institutions, and symbolic personages (e.g., God) can be treated as safe havens and secure bases (Kirkpatrick, 2005; Rom & Mikulincer, 2003). In leader–follower relations, leaders (e.g., managers, political and religious authorities, teachers, supervisors, and military officers) may occupy the role of the stronger and wiser caregiver and may provide a safe haven and secure base for their followers. In fact, descriptions of effective leaders in the scientific literature (e.g., House & Howell, 1992; Howell, 1988; Shamir, House, & Arthur, 1993) closely resemble descriptions of security-enhancing attachment figures. Effective leaders are sensitive and responsive to their followers' needs; provide advice, guidance, and emotional and instrumental resources to group members; support their followers' creativity, initiative, and autonomy; enhance their followers' self-worth and self-efficacy; support their followers' desire to take on new challenges and acquire new skills; affirm their followers' ability to deal with challenges; and encourage their followers' personal growth. In other words, leaders can be, and can be viewed as, sensitive and responsive caregivers who provide followers with a sense of security and a platform for personal growth and development (Maysseless & Popper, 2007).

In line with this conceptualization of leader–follower relations, the significance of the stronger and wiser caregiving role of leaders is likely to be accentuated in highly stressful contexts. In these conditions, research has shown that followers want to feel close to a leader who can protect them and who can provide the advice, guidance, and resources needed for effective personal performance (e.g., Bass, 1985; Howell, 1988; Shamir et al., 1993). Moreover, followers occupy a role that shares certain features with that of a dependent, vulnerable child, viewing the leader as a target for proximity seeking and as a potential provider of a safe haven and a secure base. According to Popper and Maysseless (2003), turning to a leader for support and guidance during threatening or challenging times reflects the activation of the attachment behavioral system, which includes the expression of needs for proximity and security and the formation of a symbolic attachment bond with the leader. In fact, just as attachment needs and behaviors are activated by stress and distress (Bowlby, 1969/1982; Mikulincer, Gillath, & Shaver, 2002), research has shown that the need for a strong leader tends to arise in times of personal or collective crisis, trauma, or uncertainty (e.g., Maysseless & Popper, 2007; Shamir, 1999).

An attachment perspective on leader–follower relations helps explain the effects of a leader on followers' mental functioning and behavioral effectiveness. A sensitive and responsive leader, like other security-enhancing attachment figures, can initiate in followers what Mikulincer and Shaver (2003, 2007), following Fredrickson (2001), called a broaden-and-build cycle of attachment security. This cycle includes a series, or cascade, of mental processes that facilitate personal growth and adjustment, including feelings of being esteemed and accepted, increased confidence in one's coping and interpersonal skills, and increased devotion of mental resources to creative exploration and skill acquisition. According to Popper and Maysseless (2003), creating a sense of attachment security in followers is a leader's main method of empowering them and increasing their self-esteem, autonomy, creativity, and well-being, which often has noticeable effects on their performance in the group. Moreover, providing a sense of security is a key component of the corrective, therapeutic changes a good

leader can sometimes bring about in psychologically troubled followers (Hill, 1984).

In contrast, a leader's inability or unwillingness to respond sensitively to followers' needs, as in other cases of attachment-figure unavailability (e.g., parental neglect), can produce insecurity and demoralization in followers. This insecurity intensifies followers' distress and vulnerability, raises doubts about their own efficacy, triggers psychological defenses, and interferes with performance, growth, and adjustment. Insecurity alters relations between leader and follower and gradually transforms what could have been a safe haven, secure base, and broaden-and-build experience for the follower into a dysfunctional, conflicted, and mutually hostile relationship that is self-defeating for both leader and follower. From an attachment perspective, the key factor in a leader's failure to empower followers is the development of insecure attachment bonds between them.

Attachment Orientations and Leadership

Popper and Maysseless's (2003) promising conceptual application of attachment theory to the domain of leadership has received little attention from researchers so far. Most of the early studies have focused on associations between a leader's attachment style—his or her pattern of relational expectations, emotions, and behaviors resulting from a particular attachment history (Fraley & Shaver, 2000)—and leadership style. Research, beginning with Ainsworth et al. (1978) and continuing through recent studies by social and personality psychologists (reviewed by Mikulincer & Shaver, 2003), indicated that individual differences in attachment style can be measured along two orthogonal dimensions: attachment-related anxiety and avoidance (Brennan, Clark, & Shaver, 1998). The first dimension, attachment anxiety, reflects the degree to which a person worries that a partner will not be available or adequately responsive in times of need. The second dimension, avoidance, reflects the extent to which a person distrusts his or her relationship partners' goodwill and strives to maintain autonomy and emotional distance from the partner. People who score low on both dimensions are said to be secure, or securely attached.

In a preliminary study of connections between attachment and leadership styles, Mikulincer and Florian (1995) assessed young Israeli military recruits' attachment styles at the beginning of 4 months of intensive combat training. At the end of training, the researchers asked recruits to provide leadership nominations ("Which recruits have what is needed to be good military officers?"). Whereas secure recruits were perceived as having the necessary qualities for effective leadership, attachment-anxious recruits were not. This result was replicated in a larger study of 402 Israeli soldiers undergoing 3 months of combat training, this time after controlling for other personality traits such as locus of control and general anxiety (Popper, Amit, Gal, Mishkal-Sinai, & Lisak, 2004).

In another series of three studies, Popper, Maysseless, and Castelnovo (2000) focused on the distinction between transactional and transformational leadership (e.g., Bass, 1985; Bass & Avolio, 1990) and asked whether a leader's attachment style influences his or her likelihood of becoming a transactional or a transformational leader. Transactional leaders are ones who encourage followers to perform assigned tasks by offering them

immediate rewards for performance; in contrast, transformational leaders are interested in empowering followers and promoting their personal growth and development (Bass & Avolio, 1990). Across three different samples, Popper et al. (2000) found that more secure leaders were rated by their instructors and their followers as possessing more transformational leadership qualities (e.g., placing followers' needs ahead of their own, treating each follower as a special and valuable individual). In addition, attachment insecurities (of both anxious and avoidant kinds) were associated with lower levels of transformational leadership. The researchers concluded that securely attached individuals have the potential to become transformational leaders.

Popper (2002) measured attachment style and two constructs comprised by another leadership taxonomy: personalized leadership versus socialized leadership (e.g., House & Howell, 1992; Howell, 1988). Personalized leaders put their own interests ahead of their followers' needs and pursue a dictatorial style of leadership that includes belittling followers and ascribing maximum importance to themselves. Socialized leaders, in contrast, use power to assist and empower others, align their own vision with followers' needs and aspirations, and respect followers' rights and feelings. Popper (2002) found that avoidant attachment was associated with lower levels of socialized leadership and higher levels of personalized leadership. That is, avoidance seemed to interfere with a nurturant, other-focused style of leadership. Similarly, Johnston (2000) found that insecurely attached managers were less likely than secure ones to delegate responsibility and power to subordinates and more likely to create centralized authority structures.

The Present Studies

These early studies are promising and significant steps in applying attachment theory to the study of leadership, but more work is needed to bring the two research areas—attachment and leadership—together in ways that shed light on attachment-related processes, on the one hand, and on leaders' and followers' motives and behaviors, on the other. Popper and his colleagues (Popper, 2002; Popper et al., 2000) have examined attachment-style differences in leadership attitudes (e.g., transformational leadership, personalized vs. socialized leadership) but have not collected information about attachment-style differences in leaders' motives, experiences, and behaviors during interactions with followers. Attachment style is likely to be related to the goals that guide behavior in social interactions and to mental representations of the self and others that affect social behavior (e.g., Collins & Read, 1994; Mikulincer & Shaver, 2003; Shaver & Mikulincer, 2002). Thus, individual differences in motives to lead and representations of oneself as a leader may help to account for observed links between attachment orientation and leadership.

A second limitation of previous studies is that no information was collected concerning the possible effects of leaders' attachment orientations on followers' experiences and functioning. As reviewed earlier, one of the major tenets of the attachment-theoretical approach to the study of leadership is that a leader's sensitivity and responsiveness to followers' needs have beneficial effects on followers' performance and development. There is good evidence that a person's ability and willingness to serve as a security-enhancing attachment figure is associated with his or her

attachment style (e.g., Collins & Feeney, 2000; Gillath, Shaver, & Mikulincer, 2005; Kuncze & Shaver, 1994). Hence, a leader's attachment style may predict the extent to which he or she becomes a security-enhancing attachment figure for followers, which in turn may influence followers' psychological functioning and job performance.

A third limitation of the reviewed studies is that they did not take into account the possible role that followers' attachment orientations play in explaining leader–follower relations. From an attachment perspective, the quality of an attachment relationship and the functioning of each partner in the relationship depend on both partners' attachment styles (e.g., Collins & Feeney, 2000; Mikulincer & Shaver, 2003, 2007). Although, as mentioned earlier, the relationship partner occupying the role of caregiver, attachment figure, or leader can have important effects on the mental states and the performance of people who are dependent on him or her, the way in which dependent, or subordinate, partners appraise the caregiver's intentions and actions can also affect the quality of their relationship. For example, a distrusting follower who appraises a leader's behavior as intrusive and who rejects the leader's guidance helps to create a poor relational climate that interferes with the leader's ability to lead effectively. A negative climate can also result from extremely needy and overly dependent followers being chronically dissatisfied with a leader's behavior. Followers' avoidant and anxious attachment orientations are therefore likely to influence their attitudes toward leaders who are implicitly viewed or explicitly viewed as attachment figures (Collins & Read, 1994; Mikulincer & Shaver, 2003).

The present studies represent further steps in applying attachment theory to the study of leadership. We examined possible associations between leaders' attachment styles and their motives to lead, their mental representations of themselves as leaders, their ability to function as security-enhancing attachment figures, and their followers' experiences and outcomes. We also explore whether and how followers' attachment styles are associated with appraisals of leaders' attitudes and abilities. In other words, we consider the potential contributions of both leaders and followers to the success or failure of leadership efforts.

Motives to Lead

According to Collins and Read (1994), people with different attachment styles differ in the goals they pursue in social interactions. Attachment-anxious people tend to adopt goals related to their unfulfilled needs for love and support and their desires to be accepted and reassured. Avoidant people's goals include being self-reliant and maintaining interpersonal distance. Previous research has identified these attachment-related interaction goals in various kinds of relationships (e.g., B. C. Feeney & Collins, 2003; Gillath, Shaver, Mikulincer, Nitzberg, Erez, & van IJzendoorn, 2005; Mikulincer, 1998; Mikulincer & Nachshon, 1991).

We hypothesized that these attachment-related individual differences in interaction goals would be reflected in a person's motives to lead. People scoring high on attachment anxiety were expected to seek the role of leader as a means of satisfying unmet needs for attention and acceptance. Leaders with an avoidant attachment style were expected to maintain their distance from followers and view leadership as an opportunity to demonstrate strength, toughness, and independence. We also hypothesized that

insecure leaders, whether anxious, avoidant, or both, would be less likely than secure leaders to be guided by prosocial, other-focused motives and less likely to attempt to meet followers' needs and promote their healthy development.

Representations of Self as Leader

Attachment theorists claim that attachment styles are closely associated with mental representations of self, called working models (e.g., Bartholomew & Horowitz, 1991; Collins & Read, 1994; Fraley & Shaver, 2000). With regard to attachment anxiety, there is evidence that more anxious people view themselves less positively than less anxious (more secure) people view themselves. For example, more anxious people have lower self-esteem (e.g., Bartholomew & Horowitz, 1991; Mickelson, Kessler, & Shaver, 1997) and more negative assessments of their competence and efficacy in many domains (e.g., Brennan & Morris, 1997; Cooper, Shaver, & Collins, 1998). Unlike anxious individuals' broad and undifferentiated negative self-views, the self-views of avoidant individuals depend on the domain being assessed. Avoidant individuals exhibit little self-criticism in achievement-related, instrumental domains but tend to appraise themselves unfavorably in socioemotional domains (e.g., Bringle & Bagby, 1992; Collins & Read, 1990; Pietromonaco & Carnelley, 1994).

We therefore hypothesized that people scoring higher on attachment anxiety would have more negative representations of themselves as leaders when dealing with their followers' instrumental performance or their followers' emotional needs. People scoring higher on avoidance were expected to report more negative representations of themselves as a leader when dealing with their followers' emotional needs but not when leading their followers to accomplish instrumental tasks.

The Effects of Leaders' and Followers' Attachment Styles on Follower Outcomes

Theoretically, leaders with a relatively secure attachment style (indicated by low scores on both attachment anxiety and avoidance) should be more confident and skillful than insecure leaders in occupying the role of the stronger and wiser caregiver and should thereby be better able to promote a sense of competence in their followers, which in turn should contribute to the followers' functioning and adjustment. Because accepting the role of leader transforms an individual, at least for a time, into a potential attachment figure and calls for effective caregiving behavior, the hypothesized positive effects of a leader's security can be explained by the interplay of what attachment theory calls the leader's attachment and caregiving behavioral systems (Collins & Feeney, 2000; Gillath, Shaver, & Mikulincer, 2005; Kunce & Shaver, 1994). There is evidence that secure individuals, when serving as parents, romantic partners, or community volunteers, can focus more fully and discerningly than less secure individuals on other people's needs, without being deflected by personal distress or a cynical lack of empathy (e.g., Collins & Feeney, 2000; Crowell & Feldman, 1991; Mikulincer, Shaver, Gillath, & Nitzberg, 2005). Secure people's positive mental representations of self and others seem to sustain sensitive, responsive, and effective caregiving. In contrast, insecure people, whether anxious, avoidant, or both, have difficulty organizing and enacting sensi-

tive, responsive care of others in times of need. Therefore, secure individuals are well equipped to occupy the role of security-enhancing leader, meeting their followers' needs for a safe haven and secure base, whereas insecure individuals are likely to have difficulty with this role.

Attachment-anxious people's self-preoccupied focus on personal threats and unsatisfied attachment needs drains mental resources away from attending and responding empathically to followers' needs. Moreover, anxious leaders may intrude on or attempt to coerce followers and may exaggerate their needs, even when the followers require no assistance (B. C. Feeney & Collins, 2003; Keller, 2003). In addition, anxiously attached people, who tend to present themselves as weak and vulnerable (e.g., Bartholomew & Horowitz, 1991), are not likely to be perceived by followers as effective, capable leaders.

Avoidant leaders' lack of comfort with closeness and interdependence, and their negative mental representations of others (e.g., Bartholomew & Horowitz, 1991), are likely to interfere with accurate and empathic perception of their followers' needs and concerns. In addition, because they often maintain tight control over the experience and expression of emotions (Fraley & Shaver, 1997, 1998), avoidant leaders are likely to concentrate on the task at hand rather than get involved with followers' emotional needs. Hence, avoidant leaders may succeed in getting followers to accomplish instrumental tasks, while failing to provide emotional support, empowerment, or optimal conditions for the followers' growth and development.

Followers' attachment insecurities can also interfere with leader-follower relations. Insecurely attached people tend to appraise their relationship partners, and perhaps even human beings in general, negatively (e.g., Baldwin, Fehr, Keedian, Seidel, & Thompson, 1993; Bartholomew & Horowitz, 1991; Collins & Read, 1990) and are therefore less comfortable and confident in seeking support from attachment figures (e.g., J. A. Feeney, 1998; Ognibene & Collins, 1998). Their discomfort with reliance on others may show itself in leader-follower relations in the form of distrust of a leader, criticism or rejection of the leader's efforts to provide a secure base, and dissatisfaction with the leader's performance.

Study 1

In Study 1, we examined the hypothesized associations between a leader's attachment style and three leadership-related constructs: motives to lead (seeking love and admiration, possessing prosocial or autonomy-related leadership motives), representations of the self as a leader (perceived self-efficacy in both task-focused and emotion-focused situations), and leadership style (personalized vs. socialized). For this study, we constructed self-report scales to measure the three leadership-related constructs and asked a sample of participants who held important leadership positions (military officers, managers) to complete the scales together with the Experiences in Close Relationships inventory (ECR; Brennan et al., 1998), a frequently used measure of attachment-related anxiety and avoidance. Our predictions were as follows:

1. Avoidant attachment would be associated with autonomy motives for leadership; attachment anxiety would be associated with self-enhancing motives (e.g., to gain social

approval and admiration). Both avoidance and anxiety would be inversely related to prosocial leadership motives.

2. Whereas attachment anxiety would be associated with lower leadership self-efficacy in both instrumental and emotion-focused situations, avoidance would be associated with lower leadership self-efficacy only in emotion-focused situations.
3. Both attachment anxiety and avoidance would be associated with more personalized and less socialized leadership orientations.

Method

Participants. Two hundred people volunteered to participate in the study without payment (84 officers in the Israeli Defense Forces, or IDF, with the rank of lieutenant-colonel or higher; 31 managers from the public sector; and 85 managers from the private sector). There were 23 women and 177 men, with ages ranging from 26 years to 58 years ($Mdn = 45$). IDF officers were asked to fill out the questionnaires in the course of a preretirement workshop. Business managers were located with the help of their organizations' management and human resources officers. Statistical tests revealed no significant differences in any of the assessed variables between IDF officers and managers in the public and private sectors. Leaders' age was not significantly related to any of the other variables.

Materials and procedure. The questionnaires were administered individually, in a randomly determined order for each participant. Attachment anxiety and avoidance were assessed with a Hebrew version of the ECR inventory (Brennan et al., 1998). Participants were asked to think about their close relationships, without focusing on one specific partner, and they rated the extent to which each item described their feelings in close relationships on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*). There were 18 items that tapped attachment anxiety (e.g., I worry about being abandoned), and 18 tapped avoidant attachment (e.g., I prefer not to show a partner how I feel deep down). The reliability and validity of the scale have been repeatedly demonstrated (see Brennan et al., 1998 and the many studies reviewed by Mikulincer & Shaver, 2007). In the current sample, Cronbach's alphas were high for both the anxiety items (.92) and the avoidance items (.82), and the two scores were not significantly correlated, $r(198) = .09$, confirming the intended orthogonality of the two dimensions.

Participants' motives to lead were assessed with a self-report questionnaire constructed especially for this study.¹ Items were generated from 15 semistructured interviews with well-known Israeli political, economic, and military leaders who were asked the following open-ended questions: "Generally speaking, what do you think drives people to want to lead?" "What do they gain from leadership roles and what do they risk?" "What drives you to leadership roles?" "How did the motivation to lead develop in you?" "Can you describe people or experiences that influenced your development in this direction?" and "As a child, what did you dream of becoming when you grew up?"

The tape-recorded interviews were transcribed, and statements expressing explicit motives to lead (e.g., "the pleasure of feeling

control over people") or expressing such motives implicitly (e.g., "I was thrown out of school because I was a Jew; I went through all kinds of humiliation and will now do anything to prevent myself and my children from being in a position of weakness") were extracted and used as suggestions for generating scale items. We extracted 40 nonoverlapping statements expressing different motives to lead. They were presented to three judges—organizational psychologists familiar with leadership theory and research—who identified unclear or ambiguous statements, which we then dropped, and who designated items that could be productively combined to eliminate redundancy. This process yielded a final list of 34 items assessing motives to lead. Participants were asked to read the 34 items and rate the extent to which each one characterized their own motives. Ratings were made on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*).

A principal components analysis followed by varimax rotation yielded five factors with eigenvalues greater than 1.0, which together accounted for 63% of the variance in the items. The first factor (accounting for 30% of the explained variance) included 12 items (all with loadings $> .40$) concerning self-serving or self-enhancing motives related to self-protection and social admiration (e.g., "to win respect and admiration"; "to prove to myself that I'm worthy"; "to feel that people want to be near me"). The second factor (17% of the explained variance) included 8 items tapping prosocial motives such as advancing social goals and contributing to others' welfare (e.g., "to bring about changes in society"; "to encourage others to do challenging tasks"; "to improve others' well-being"). The third factor (7% of the variance) included 5 items tapping the need for control and the use of leadership to satisfy this need (e.g., "to have a sense of control over procedures"; "to do things according to my ideas"). The fourth factor (5% of the variance) included 5 items assessing task-oriented motives and the successful accomplishment of instrumental tasks (e.g., "to get a group to complete a task"; "to help people to perform better in their roles"). The fifth factor (4% of the variance) included 4 items tapping the desire for freedom, self-reliance, and the avoidance of dependence on others (e.g., "to be independent"; "to decide alone"). Cronbach's alphas for the five factor-based scales were high, ranging from .73 to .93, so scores on the five scales were computed for each participant by averaging items that loaded above .40 on a particular factor.

Each participant's leadership style was assessed with a 30-item self-report scale created especially for this study. The scale assesses socialized and personalized leadership styles using items generated from theoretical descriptions of these two styles (e.g., Bass, 1985; House & Howell, 1992; Howell, 1988; Popper, 2002). Participants were asked to read the items and rate the extent to which they agreed with each one on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

A principal components analysis followed by varimax rotation yielded two factors with eigenvalues greater than 1.0, accounting for 55% of the variance. The first factor (accounting for 39% of the explained variance) included 19 items (with loadings $> .40$), assessing nurturing and parental aspects of what Howell (1988) called a socialized leadership orientation (e.g., "I devote effort to the personal development of my followers"; "I am especially

¹ All of the questionnaires are available upon request from the authors.

attentive to followers' rights and feelings"; "I encourage followers to express their feelings"). The second factor (16% of the variance) included 11 items tapping what Howell (1988) called a personalized leadership orientation—a destructive, dictatorial style of leadership that includes belittling followers and ascribing maximum importance to oneself (e.g., "I make most of the decisions by myself and then pass them to followers"; "Followers draw their strength more from the leader than from the group"; "Delegating authority to followers would encourage them to take advantage of it"). Cronbach's alphas for the two factor-based scales were high (.93 and .95, respectively), allowing two scores to be calculated for each participant by averaging items loading above .40 on a particular factor.

Participants' sense of leadership self-efficacy was assessed with a self-report scale constructed especially for this study. It consisted of 18 items describing leadership situations extracted from the interviews described above and from the leadership literature (e.g., Bass, 1985; House & Howell, 1992; Howell, 1988). Participants were asked to rate the extent to which they believed they could cope effectively with each of the situations described in the questionnaire. Ratings were made on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*).

A principal components analysis followed by varimax rotation yielded two factors with eigenvalues greater than 1.0, accounting for 49% of the variance. The first factor (accounting for 37% of the explained variance) included 10 items (with loadings > .40) and referred to perceived self-efficacy in situations involving followers' emotional needs and leader–follower relations or emotional bonds (e.g., "dealing with followers' personal problems"; "helping followers deal with failures"; "attempting to foster personal relations with followers"). The second factor (12% of the explained variance) included 8 items (with loadings > .40) that measure perceived self-efficacy in situations calling for the achievement of instrumental goals or completion of group tasks (e.g., "getting a task accomplished"; "convincing people to stay at work even when they want to leave"; "improvising quick solutions to problems encountered during task performance"). Cronbach's alphas for the two factors were high (.89 and .84, respectively), allowing two scores to be calculated for each participant by averaging items loading above .40 on a particular factor.

Results and Discussion

Before testing our hypotheses, we examined associations among the three sets of leadership constructs. In line with the conceptualization of the two leadership styles, Pearson correlations indicated that (a) the socialized leadership orientation was significantly associated with prosocial motives to lead and higher leadership self-efficacy in emotion-focused and task-focused situations, with r s ranging from .20 to .45, $ps < .01$; and (b) the personalized leadership orientation was significantly associated with self-enhancing and control-related motives to lead, with r s ranging from .21 to .47, $ps < .01$. Pearson correlations between leadership self-efficacy scores and motives to lead also strengthened our confidence in the construct validity of the new scales. Whereas leadership self-efficacy in emotion-focused situations was significantly correlated with more prosocial and less self-focused motives (r s of .46 and $-.31$, $ps < .01$), leadership self-efficacy in task-focused situations was significantly associated

with task-oriented and control-related motives (r s of .32 and .36, $ps < .01$).

To test our main hypotheses, we conducted a series of multiple regression analyses examining the unique and joint contributions of attachment anxiety and avoidance to the prediction of the three sets of leadership constructs.² These analyses revealed that attachment insecurity scores contributed significantly ($ps < .01$) to explaining all the leadership variables and accounted for between 5.7% and 17.2% of their variance (see F s and R^2 s in Table 1).

With regard to motives to lead, regression coefficients revealed that whereas attachment anxiety made a significant, unique contribution to the endorsement of self-enhancing leadership motives, control-related motives, and self-reliance motives, avoidance made a significant, unique contribution to the endorsement of self-reliance motives and to lower scores on the prosocial and task-oriented motives (see the standardized regression coefficients in Table 1). With regard to leadership styles, attachment anxiety was significantly associated with the personalized orientation, and avoidance was significantly associated with lower scores on the socialized orientation (see Table 1). Regression analyses performed on leadership self-efficacy scores revealed that attachment anxiety was significantly associated with lower self-efficacy in task-focused situations, and avoidance was significantly associated with lower self-efficacy in emotion-focused situations (see Table 1).

Overall, the findings support our predictions that leaders' attachment insecurities would go hand-in-hand with self-focused motives to lead (self-enhancing, control-related, self-reliance motives) rather than other-focused (prosocial) or task-focused motives, that attachment insecurities would foster a personalized rather than a socialized leadership style, and that these insecurities would exacerbate leaders' doubts about their ability to handle leadership roles. The findings also begin to distinguish the specific forms of leadership associated with each kind of attachment insecurity (anxiety or avoidance). Leaders scoring higher on attachment anxiety tended to endorse more self-focused motives to lead and a more personalized leadership orientation; they also expressed more doubts about their efficacy in task-focused, instrumental leadership roles. Leaders who scored higher on avoidant attachment were more likely to endorse self-reliance motives (motives that fit with their reluctance to engage in interdependent interactions), to dismiss prosocial leadership motives and the socialized leadership orientation, and to have doubts about their ability to lead in emotion-focused situations.

Although the findings fit well with our predictions, two of them require special attention. First, more anxious participants reported greater control-related motives. This result might reflect attachment-anxious people's desire to use leadership roles to gain a degree of power and control, which would counter their chronic sense of helplessness. Second, more avoidant participants reported lower task-oriented motives. This finding is at odds with past studies (e.g., Mikulincer & Florian, 1997) showing that avoidant people feel relatively comfortable in task-oriented situations. Although we do not have additional findings that can explain this unexpected result, it may be the case that the degree of interdependence required for team task performance interferes with

² None of the interactions between anxiety and avoidance were statistically significant in any of the three studies.

Table 1
Standardized Regression Coefficients, F Tests, and Strength of the Contributions of Attachment Anxiety and Avoidance to Motives to Lead, Leadership Orientations, and Perceived Self-Efficacy as a Leader (Study 1)

| Leadership variable | β attachment anxiety | β attachment avoidance | $F(2, 197)$ | R^2 |
|----------------------------|----------------------------|------------------------------|-------------|-------|
| Motives to lead | | | | |
| Self-enhancing motives | .41** | -.14 | 20.16** | 17.1 |
| Prosocial motives | .02 | -.26** | 6.74** | 6.5 |
| Control-related motives | .26** | .03 | 7.55** | 7.2 |
| Task-oriented motives | .10 | -.29** | 9.02** | 8.5 |
| Self-reliance motives | .18** | .21** | 9.39** | 8.8 |
| Leadership orientations | | | | |
| Personalized orientation | .31** | .08 | 12.44** | 11.3 |
| Socialized orientation | .12 | -.23** | 5.88** | 5.7 |
| Perceived self-efficacy | | | | |
| Task-focused situations | -.23** | -.05 | 6.05** | 5.8 |
| Emotion-focused situations | -.13 | -.22** | 7.81** | 7.4 |

** $p < .01$

avoidant people's preference for self-reliance and independence. During task performance, avoidant leaders are required to cooperate with their followers, must accept the interdependent nature of task performance, and cannot distance themselves from followers without creating conflicts. Further research is needed to evaluate this post hoc interpretation of our results.

Study 1 was preliminary in a number of ways; it was merely a first step in exploring attachment-related aspects of leadership. In Study 1, the same person reported on attachment and leadership, increasing the likelihood that shared method variance might account for some of the associations among the variables, thereby limiting the validity and the generalizability of the findings. Moreover, the association between attachment and leadership was assessed only at the psychological level. Although interesting and important in themselves, the findings do not allow us to say whether attachment-related biases in the construal of leadership are manifested in leaders' actual behavior, can be perceived by followers, and have effects on followers' functioning and well-being. These are obviously important issues because our theoretical analysis implies that leaders' attachment orientations have important, real-world consequences for both leaders and followers. We deal with these issues in Studies 2 and 3.

Study 2

In Study 2, we had three important goals. The first was to replicate the observed associations between leaders' attachment orientations and their construal of leadership while attempting to overcome the main limitation of Study 1, which was that leaders provided self-reports of both attachment and leadership variables. In Study 2, we asked experienced military officers to complete the ECR inventory. We then approached the soldiers (followers) in each of the officers' units and asked the soldiers to report on their officer's leadership style and efficacy in task-focused and emotion-focused situations (using the scales developed in Study 1). This allowed us to determine whether the findings of Study 1 could be replicated, this time using the followers' appraisals of their leader's behavior instead of the leaders' own appraisals.

A second goal in Study 2 was to examine possible effects of followers' attachment styles on their appraisals of their leaders. Assessing these potential biases is important because they might influence the way followers think about their leaders and hence blur the effects of the leaders' own attachment orientations on their performance as leaders. In Study 2, we dealt with this possibility by examining the unique and interactive effects of both officers' and soldiers' attachment anxiety and avoidance on soldiers' appraisals of their officers' leadership orientation and efficacy.

A third goal in Study 2 was to examine the effect of an officer's attachment style on the cohesiveness of his unit, one of the most important qualities of group functioning (e.g., Hogg, 1992; Mullen & Cooper, 1994), and on followers' instrumental and socioemotional functioning. Our main hypothesis was that officers' attachment insecurities (i.e., higher scores on the anxiety and avoidance dimensions) would be associated with lower group cohesion and poorer soldier functioning. We also explored whether these associations were mediated by a leader's personalized leadership style and by poor leadership efficacy. To test these predictions, we asked soldiers to rate the cohesiveness of their unit and their own instrumental and socioemotional functioning within the unit.

Method

Participants. Study 2 was conducted during a leadership workshop at the IDF School for Leadership Development. The sample included 549 soldiers in regular military service from 60 military units who were participating in the workshop, along with their 60 direct officers. All of them were men. Soldiers' ages ranged from 18 to 21 years ($Mdn = 19$) and officers' ages ranged from 20 to 24 years ($Mdn = 22$). Military units ranged in size from 6 to 14 soldiers ($Mdn = 9$). Soldiers had worked with their officer for periods ranging from 6 to 12 months, and they had seen him in many stressful situations. All of the participants volunteered to take part in the study without payment.

Materials and procedure. All scales were completed in group settings during the leadership workshop and were presented in different random orders to different participants. Soldiers com-

pleted scales assessing their own attachment style and the quality of their functioning within their military unit and completed evaluations of their officer's leadership style, his leadership efficacy, and the cohesiveness of the unit. Officers completed only the scales assessing their own attachment orientation.

Soldiers' and officers' attachment orientations were assessed with the ECR inventory described in Study 1. For the soldiers, Cronbach's alphas for the avoidance and anxiety items were .84 and .90, respectively. Among officers, alphas were .81 for avoidance and .87 for anxiety. Two scores were calculated for each soldier and each officer by averaging their scores on the 18 avoidance items and the 18 anxiety items. The correlation between anxiety and avoidance was significant, albeit modest, for the soldiers, $r(545) = .23, p < .01$, but insignificant and near zero, $r(58) = .04$, for the officers. No significant association was found between an officer's attachment scores and his soldiers' attachment scores (averaged within each unit), $r_s < .07$.

Soldiers' appraisals of their officer's leadership style were assessed with the 30-item scale developed in Study 1. In the Study 2 version of the scale, soldiers were asked to think about their direct officer and to rate the extent to which each of the items described him. A factor analysis of this version of the scale replicated the factor structure of the self-report version used with leaders in Study 1. Specifically, there were two main factors (with eigenvalues > 1.0) explaining 46% of the item variance. The first factor (accounting for 34% of the explained variance) included the 19 items tapping the socialized leadership orientation (all loadings $> .40$); the second factor (12% of the variance) included the 11 items tapping the personalized leadership orientation (all loadings $> .40$). Cronbach's alphas were .94 for the socialized orientation scale and .78 for the personalized orientation scale. Two scores were calculated for each soldier by averaging items loading high on a particular factor.

Soldiers' appraisals of their officer's leadership efficacy were assessed with the 18-item scale developed in Study 1. In the version used in Study 2, soldiers were asked to think about their direct officer and to rate the extent to which each of the items described him. A factor analysis of this version replicated the factor structure of the self-report version used by the leaders in Study 1. Specifically, there were again two main factors (with eigenvalues > 1.0) explaining 62% of the item variance. Whereas the first factor (50% of the explained variance) included the 10 items tapping leadership efficacy in emotion-focused situations (loadings $> .40$), the second factor (12% of the explained variance) included the 8 items tapping leadership efficacy in task-focused situations (loadings $> .40$). Cronbach's alphas were .93 for officer's efficacy in emotion-focused situations and .89 for officer's efficacy in task-focused situations. Two scores were calculated for each soldier by averaging items that loaded high on a particular factor.

Soldiers' appraisals of the cohesiveness of their military unit were assessed with a 10-item scale developed by Rom and Mikulincer (2003). The scale is based on Stokes's (1983) and Rosenfeld and Gilbert's (1989) conceptualizations of group cohesion and refers to commitment, cooperation, coordination, and consensus. Sample items include the following: "In my unit, we work together," "In my unit, we help each other," and "In my unit, there is a high level of consensus." Participants rated the extent to which each item described their military unit. Ratings were made on a

7-point scale ranging from 1 (*not at all*) to 7 (*very much*). In the Study 2 sample, Cronbach's alpha was .93 for the 10-item scale.

Soldiers' evaluations of their instrumental and socioemotional functioning within the military unit were assessed with a 14-item scale developed by Barry and Stewart (1997). Seven items formed an instrumental functioning subscale (e.g., "I take the work seriously"; "I contribute to the quality of my unit's performance"), and 7 items formed a socioemotional functioning subscale (e.g., "I help members of the unit to work together"; "I stimulate the expression of thoughts and feelings within the unit"). Participants rated the extent to which each item characterized their functioning on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*). Cronbach's alphas were acceptable for the 7 instrumental functioning items (.70) and the 7 socioemotional functioning items (.76).

Results and Discussion

Data analysis. Following the recommendations of Kenny, Mannetti, Pierro, Livi, and Kashy (2002), we analyzed the data using hierarchical linear modeling (HLM; Bryk & Raudenbush, 1992). The data conform to a two-level model. The lower (soldier) level represents the data from the individual soldiers, who were nested within their military units. At this level, we assessed individual soldiers' attachment scores (anxiety, avoidance) and their perceptions of their officers' leadership style and efficacy, their appraisal of their unit's cohesiveness, and their ratings of their own instrumental and socioemotional functioning within the unit. At the upper (unit) level, the data refer to the officers of the military units to which the soldiers were assigned. At this level, we assessed the officers' attachment scores (anxiety, avoidance). To facilitate the interpretation of results, variables at the upper, or military unit, level (the officer's attachment scores) were transformed to Z scores, and variables at the lower, or soldier, level were centered, for each soldier, on their unit's mean.

In HLM, the two levels of each analysis are addressed simultaneously in a hierarchically nested data set, which in our case had individual soldiers nested within military units (each with its respective officer). This statistical procedure provided independent coefficients for the relations among constructs at the lower level (within-unit associations between soldiers' attachment scores and appraisals of their officer's leadership style and efficacy, the unit's cohesion, and their own functioning) and modeled these relations at the upper level (between-unit effects) with maximum likelihood estimation. Following this procedure, we examined (a) the association between the soldiers' attachment orientations and their appraisals of their officers, the unit cohesion, and the soldiers' own functioning across units; (b) the effects of the officers' attachment orientations on the soldiers' appraisals of their officers, the unit cohesion, and the soldiers' own functioning; and (c) the contribution of the officers' attachment orientations to the within-group associations between the soldiers' attachment orientations and the soldiers' appraisals of their officer, the unit cohesion, and the soldiers' own functioning.

To make clear how we used HLM, we present, below, the equations used for predicting the soldiers' appraisals of their instrumental functioning. At the soldier level (the lower level) of the analysis, we predicted soldiers' perceptions of their instrumental functioning from the soldiers' own attachment scores, using the following equation:

$$INS_{ij} = b_{0j} + b_{1j} ANX_{ij} + b_{2j} AVO_{ij} + e_{ij}, \quad (1)$$

where INS_{ij} refers to a soldier's appraisal of his instrumental functioning in a given unit (i.e., the i th participant in the j th unit); b_{0j} refers to that unit's average appraisal of instrumental functioning across all unit members; ANX_{ij} and AVO_{ij} are the attachment scores of that soldier in that unit; b_{1j} and b_{2j} are the regression coefficients indicating the degree of change in the appraisal of instrumental functioning produced by a one-unit change in each of the attachment scores for a given soldier; and e_{ij} is error.

In examining unit-level (i.e., upper-level) effects, we computed a constant (b_{0j}) and slope terms (b_{1j} , b_{2j}) for each military unit. The constant term (or intercept) for each military unit, b_{0j} , is represented as

$$b_{0j} = a_0 + a_1 OANX_j + a_2 OAVO_j + u_{0j}, \quad (2)$$

where a_0 refers to the sample-wide mean appraisal of the soldiers' instrumental functioning; $OANX_j$ and $OAVO_j$ are the attachment scores (anxiety, avoidance) of the officer of unit j ; a_1 and a_2 are the regression coefficients indicating the degree of change in the soldiers' appraisal of their instrumental functioning produced by a one-unit change in each of the attachment scores of the officer; and u_{0j} is error.

The slope of the association between soldiers' attachment anxiety and their appraisal of instrumental functioning, b_{1j} , is

$$b_{1j} = c_0 + c_1 OANX_j + c_2 OAVO_j + u_{1j}, \quad (3a)$$

where c_0 represents the average effect of soldiers' attachment anxiety on their appraisal of instrumental functioning in the entire sample (across military units); $OANX_j$ and $OAVO_j$ are the attachment scores (anxiety, avoidance) of the officer of unit j ; c_1 and c_2 are the regression coefficients indicating the degree of change in the association (slope) between soldiers' attachment anxiety and the appraisal of their instrumental functioning within a military unit produced by changes in each of the attachment scores of the officer of that unit; and u_{1j} is error.

The slope of the association between soldiers' attachment avoidance and their appraisal of instrumental functioning, b_{2j} , is

$$b_{2j} = d_0 + d_1 OANX_j + d_2 OAVO_j + u_{2j}, \quad (3b)$$

where d_0 represents the average effect of soldiers' attachment avoidance on their appraisal of instrumental functioning in the entire sample (across military units); $OANX_j$ and $OAVO_j$ are the attachment scores (anxiety, avoidance) of the officer of unit j , d_1 and d_2 are the regression coefficients indicating the degree of change in the association (slope) between soldiers' attachment avoidance and the appraisal of their instrumental functioning within a military unit, produced by changes in each of the attachment scores of the officer of that unit; and u_{2j} is error.

These equations allowed us to examine questions at both the soldier level and the military unit level. The soldier-level question, "Did soldiers' attachment anxiety and avoidance affect their instrumental functioning?" was assessed with the sample-average slopes, c_0 and d_0 , from Equations 3a and 3b. The military-unit-level question, "Did an officer's attachment anxiety and avoidance affect soldiers' instrumental functioning?" was assessed with the intercept terms a_1 and a_2 from Equation 2. A third question was asked about the interaction between the upper and lower levels: "Did the associations between soldiers' attachment scores and their instrumental functioning vary in magnitude as a function of the officer's attachment anxiety and avoidance?" The terms c_1 , c_2 , d_1 and d_2 in Equations 3a and 3b provided the appropriate tests to answer this question. These terms reflected the extent to which the officers' attachment scores significantly moderated the within-unit associations between the soldiers' attachment scores (anxiety, avoidance) and their instrumental functioning.

Soldiers' appraisals of their officer's leadership style. The HLM analyses revealed that both officers' and soldiers' attachment scores contributed to soldiers' appraisals of their officer's leadership style (see Table 2). At the military unit level, the observed effects of the officer's attachment scores replicated and extended the findings of Study 1 (see coefficients in Table 2). First, the higher the officer's self-reported attachment anxiety, the

Table 2
Hierarchical Linear Modeling Coefficients Predicting Soldiers' Ratings From Their Own and Their Officers' Attachment Scores (Study 2)

| Effects | Appraisals of officer's style | | Appraisals of officer's efficacy | | Appraisals of unit cohesion | Self-reports of functioning | |
|----------------------|-------------------------------|--------|----------------------------------|--------|-----------------------------|-----------------------------|--------|
| | Personal | Social | Emotion | Task | | Task | Social |
| Officer's attachment | | | | | | | |
| Anxiety | .20* | .15 | .10 | -.34** | -.10 | -.45** | .29** |
| Avoidance | .11 | -.35** | -.42** | -.08 | -.41** | -.03 | -.40** |
| Soldier's attachment | | | | | | | |
| Anxiety | -.04 | .07 | .03 | .03 | -.12** | -.02 | -.03 |
| Avoidance | .21** | -.23** | -.26** | -.23** | -.16** | -.10** | -.10** |
| Interaction terms | | | | | | | |
| OANX × SANX | -.08 | .01 | .03 | -.01 | .05 | .03 | -.04 |
| OANX × SAVO | -.01 | -.01 | .07 | -.03 | -.01 | .04 | .02 |
| OAVO × SANX | .06 | .03 | .06 | .04 | .08 | .06 | .01 |
| OAVO × SAVO | -.01 | .02 | .07 | .04 | .05 | -.01 | -.04 |

Note. OANX = officer's anxiety; OAVO = officer's avoidance; SANX = soldier's anxiety; and SAVO = soldier's avoidance.
** $p < .01$

higher his level of personalized leadership, as reported by the soldiers in his unit. Second, the higher the officer's self-reported avoidant attachment orientation, the lower his level of socialized leadership, as reported by the soldiers in his unit. The HLM analyses also revealed subjective biases in soldiers' appraisals of their officer's leadership style: The more avoidant the soldier, the more he appraised the officer as using a personalized leadership style and the less he appraised the officer as using a socialized style (see Table 2). The HLM analyses revealed no significant interactions between soldiers' and officers' attachment scores (see Table 2).

Soldiers' appraisals of their officer's leadership efficacy. The HLM analyses also revealed that both officer's and soldiers' attachment scores contributed significantly to soldiers' appraisals of their officer's leadership efficacy (see Table 2). At the military unit level, the effects of officer's attachment orientation replicated and extended the findings of Study 1 (see Table 2). First, the higher the officer's avoidant attachment score, the lower his leadership efficacy in emotion-focused situations, as assessed by his followers. Second, the higher the officer's attachment anxiety, the lower his leadership efficacy in task-focused situations, again as assessed by his followers. At the soldier level, there were significant effects of soldiers' avoidant attachment orientation: The higher the soldiers' avoidance scores, the lower were their appraisals of their officer's ability to lead in both task-focused and emotion-focused situations (see Table 2). There were no significant interactions between soldiers' and officers' attachment scores (see Table 2).

Soldiers' appraisals of their military unit's cohesion. As can be seen in Table 2, the higher the officer's avoidant attachment score, the less cohesive was his military unit, according to the unit members' ratings. At the soldier level, there were effects of the soldiers' attachment anxiety and avoidance: The more insecure the soldiers (on both attachment dimensions), the less cohesive they thought their unit was. None of the interactions between soldiers' and officers' attachment scores was significant (see Table 2).

Soldiers' ratings of their own functioning. With regard to soldiers' ratings of their own instrumental functioning, the HLM analysis yielded a significant effect of their officer's attachment anxiety: The higher the officer's anxiety, the lower was his soldiers' self-rated instrumental functioning (see Table 2). This analysis also yielded a significant effect of soldiers' avoidance: The higher their avoidance, the lower they rated their own instrumental functioning (see Table 2). No other effects on instrumental functioning were significant.

With regard to soldiers' ratings of their own socioemotional functioning, the HLM analysis yielded significant effects in the opposite directions for the officer's attachment anxiety and avoidance. Greater self-rated officer avoidance was significantly, negatively associated with soldiers' self-rated socioemotional functioning, whereas greater self-rated officer attachment anxiety was significantly, positively associated with soldiers' self-rated socioemotional functioning (see Table 2). There was also a significant effect for the soldiers' own avoidant attachment style: The higher their level of avoidance, the lower was their self-rated socioemotional functioning (see Table 2). No other effects on socioemotional functioning were significant.

Mediation analyses. Having shown that officers' attachment scores were significantly related to soldiers' appraisals of their

officer's leadership orientation and efficacy as well as the soldiers' own appraisals of their military unit's cohesion and their own functioning, we were able to examine the mediational hypothesis that an officer's leadership orientation and efficacy mediated the effects of the officer's attachment insecurities on group cohesion and on unit members' functioning. However, before testing this mediational hypothesis, we examined whether soldiers' appraisals of their officer's leadership orientation and efficacy were associated with the soldiers' appraisal of their military unit's cohesion and their own functioning. In fact, before mediation can be demonstrated, soldiers' appraisals of their officer's leadership orientation and efficacy need to be significantly associated not only with the predictor variables—officer's attachment scores—but also with the outcome variables: military unit cohesion and soldiers' functioning.

With regard to soldiers' appraisals of their military unit's cohesion and their own socioemotional functioning, Pearson correlations revealed significant associations with appraisals both of their officer's socialized leadership orientation and of their officer's leadership efficacy in emotion-focused situations, with r s ranging from .24 to .31, p s < .01. The higher the soldiers' appraisals of their officer's socialized leadership orientation and efficacy in emotion-focused situations, the higher were their appraisals of their unit's cohesion and their own socioemotional functioning. Appraisals of the officer's personalized leadership orientation and efficacy to lead in task-focused situations were not significantly associated with the soldiers' appraisals of their military unit's cohesion or their own socioemotional functioning, so these variables could not be viewed as mediators of the effects of officer's attachment orientation.

We therefore conducted HLM analyses examining the unique effects of officer's attachment scores (anxiety, avoidance) on soldiers' appraisal of military unit cohesion and their own socioemotional functioning, while controlling for the contribution of soldiers' appraisals of officer's socialized leadership orientation and efficacy in emotion-focused situations. The results indicated that these variables served as partial mediators of the effects of the officer's avoidant attachment. Specifically, although the unique effects of the officer's avoidance on the soldiers' appraisals of military unit cohesion and their own socioemotional functioning were still significant, their strength was weakened (from $\gamma = -.41$ to $\gamma = -.30$, for appraisals of unit cohesion; from $\gamma = -.40$ to $\gamma = -.32$, for reports of socio-emotional functioning) after controlling for soldiers' appraisals of officer's socialized leadership orientation and efficacy in emotion-focused situations.

The HLM analysis also revealed that soldiers' appraisals of their officer's socialized orientation and leadership efficacy in emotion-focused situations did not mediate the effects of their officer's attachment anxiety on their own self-rated socioemotional functioning. The unique effect of the officer's attachment anxiety on the soldiers' ratings of their socioemotional functioning was essentially the same before and after controlling for the soldiers' appraisals of their officer's socialized orientation and efficacy in emotion-focused situations (γ s of .29 and .28).

With regard to soldiers' appraisals of their own instrumental functioning, Pearson correlations yielded a significant association only with appraisals of officer's leadership efficacy in task-focused situations, $r(547) = .36, p < .01$. The higher the soldiers' appraisals of their officer's efficacy in task-focused situations, the

higher their appraisals of their own instrumental functioning. No other variables were significantly associated with soldiers' appraisals of their own instrumental functioning, so no other variables could be viewed as mediators of the effects of the officer's attachment orientation.

We therefore conducted an HLM analysis examining the unique effects of the officer's attachment scores (anxiety, avoidance) on the soldiers' appraisal of their own instrumental functioning, while controlling for the contribution of the soldiers' appraisals of their officer's leadership efficacy in task-focused situations. The results indicated that this variable acted as a partial mediator of the effects of the officer's anxious attachment. Specifically, although the unique effect of the officer's anxiety on the soldiers' reports of their own instrumental functioning was still significant, its strength was weakened after controlling for the soldiers' appraisals of their officer's leadership efficacy in task-focused situations (from $\gamma = -.45$ to $\gamma = -.36$).

Conclusions. These complex but theoretically sensible results extend the findings of Study 1 to the interpersonal realm, showing that the associations between attachment orientation and leadership variables detected in leaders' self-reports were replicated in followers' appraisals. Specifically, soldiers in units led by an officer scoring high on avoidant attachment tended to appraise him as exhibiting a less socialized leadership style and to report serious doubts about his leadership efficacy in emotion-focused situations. Soldiers of an officer scoring high on attachment anxiety tended to appraise him as exhibiting a more personalized leadership style and to report serious doubts about his leadership efficacy in task-focused situations. Thus, both leaders and followers noticed the same kinds of leadership qualities when leaders had a particular pattern of scores on the attachment anxiety and avoidance dimensions. The findings also reveal the serious negative consequences that a leader's avoidance can have on his followers' functioning. Specifically, an officer's avoidance had a negative effect on the soldiers' appraisals of their military unit's cohesion and on the soldier's own socioemotional functioning. However, these negative effects were not entirely mediated by avoidant officers' less socialized leadership orientations and lower efficacy in dealing with emotion-focused situations. It seems that an officer's avoidance had a direct effect (or an effect mediated by unmeasured variables) on the soldiers' functioning.

With regard to leaders' attachment anxiety, the findings reveal a more complex pattern of effects on followers' functioning. On the one hand, we observed the predicted negative effect of officer's attachment anxiety on soldiers' instrumental functioning, which was partially mediated by their appraisal of the anxious officer as less efficacious in task-focused situations. On the other hand, we found an unexpected positive effect of officer's attachment anxiety on soldiers' socioemotional functioning. Interestingly, this unexpected finding was not mediated by leadership constructs. We deal with this unexpected finding in the General Discussion section.

Beyond the effects of the leaders' attachment orientations, there were also the effects of the followers' own attachment orientations. Whereas the soldiers' attachment anxiety had a negative effect only on their appraisal of group cohesion, the soldiers' avoidance had pervasive effects on all of the assessed variables. Specifically, soldiers' avoidant attachment orientation was associated with more negative appraisals of their officer's personalized leadership qualities and more negative assessments of his ability to lead in both

task-focused and emotion-focused situations. This pattern of appraisal fits well with avoidant individuals' well-documented negative mental representations of others (e.g., Bartholomew & Horowitz, 1991; Collins & Read, 1990). In addition, soldiers' avoidant attachment scores were associated with more negative appraisals of group cohesion and poorer functioning within the group. These negative appraisals fit well with Rom and Mikulincer's (2003) findings concerning the relatively poor functioning of avoidant soldiers within their units. In fact, it is interesting to see how well the findings correspond across the two sets of studies and across leaders and followers in the present studies. It is also interesting that soldiers' avoidance did not interact with their officers' avoidance. The two effects were statistically independent and made joint contributions to soldiers' functioning. This means that the poorest contributions of soldiers to the emotional climate and cohesion of their unit were observed when soldiers high on avoidance were paired with an officer who was also high on avoidance.

Study 3

In Study 3, we further examined the effects of a leader's attachment style on the followers' construal of leadership and on their well-being. Study 3 differed from Study 2 in four major ways. First, rather than focusing on leadership style and efficacy, we examined a novel leadership construct derived directly from attachment theory: a leader's ability to serve as a security-providing attachment figure (i.e., the leader's ability and willingness to be available in times of need and to accept and care for his or her followers rather than rejecting and criticizing them). Second, rather than assessing followers' functioning within a group, we examined their reports of mental health. Third, rather than assessing leadership and personal functioning variables in a relatively safe and calm setting (a leadership workshop), we assessed them during a highly stressful period of combat training that might be expected to have serious effects on followers' mental health. During such a period, a leader's functioning as a security provider may be especially important for followers' emotional well-being. Fourth, rather than collecting all of the data at the same time, in a cross-sectional design, we used a prospective short-term longitudinal design in which leaders' and followers' attachment orientations were assessed at the beginning of a stressful period, and changes in mental health were assessed 2 months and 4 months later, while the stress was continuing.

In Study 3, we approached IDF recruits and their direct officers at the beginning of a 6-month period of intensive combat training—one of the most highly demanding and stressful experiences in the lives of young adult Israelis—and we asked them to describe their attachment styles. At the same time, soldiers were asked to complete a self-report measure of baseline mental health. After 2 months, the soldiers reported on their mental health again and provided appraisals of their officer as a security provider. We predicted that an officer's attachment anxiety and avoidance would be associated with poorer appraisals by his soldiers of his ability and willingness to provide a sense of security during combat training and also with deterioration in the soldiers' mental health and well-being during the 2 months of combat training.

Method

Participants. The sample consisted of 541 male Israeli soldiers who were 18 years old and who were from 72 different military units of the IDF.³ All were beginning their 3-year regular service in the IDF and undergoing 6 months of intensive combat training. Before beginning this training, all participants underwent the IDF's rigorous screening, which included measures of physical health, mental ability, and social functioning and adjustment, and all were found to be suitable for service in combat units. All of the soldiers were single, most of them (82%) resided in urban areas, and most (85%) had completed high school. The sample also included the 72 direct officers that commanded the 541 soldiers' units during combat training. All of the officers were men aged 20 to 25 years ($Mdn = 22$). The sizes of their military units ranged from 6 to 13 soldiers ($Mdn = 7$). Both soldiers and officers participated in the study without payment.

Materials and procedure. After receiving permission from military authorities, we approached the soldiers and officers at their military bases, briefly explained the purpose of the study, and solicited their voluntary participation. Only a handful of soldiers declined. Both soldiers and officers were asked to write their identification number on the form so that questionnaires from different occasions could be matched up for analysis. They were assured (honestly) that their responses would not be disclosed to military authorities and would not influence their future in the army. Soldiers were questioned twice: during the first 3 days of combat training (Time 1) and again 2 months later (Time 2), while training continued. At Time 1, soldiers completed scales assessing attachment style and mental health. At Time 2, they reported on their current mental health and provided appraisals of their officer's performance as a security-providing figure. Officers were approached individually and only once, at the beginning of the combat training period, and were asked to complete a brief scale measuring their attachment style.

Soldiers' and officers' attachment anxiety and avoidance were assessed at Time 1 with Hazan and Shaver's (1987) prototype descriptions of how people typically feel in close relationships—a predecessor of the ECR scales used in Studies 1 and 2. Participants received a description of the avoidant prototype and a description of the anxious prototype (see Hazan & Shaver, 1987, for detailed wording) and were asked to rate the extent to which each description described their own thoughts, feelings, and behavior in close relationships. Ratings were made on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*). This brief measure was used because of the constraints imposed by conducting research on military bases at a demanding time and because of our need to gain officers' cooperation with the study. According to this measure, the correlation between anxiety and avoidance was moderate and significant among soldiers, $r(539) = .36, p < .01$, but near zero and not significant among officers, $r(70) = .04$. Correlations between officer's attachment scores and soldiers' attachment scores (averaged within a unit) were small and not significant, $r_s < .05$.

Soldiers' mental health was assessed at both times (Time 1, Time 2) with a brief version of the Mental Health Inventory (MHI; Florian & Drory, 1990; Veit & Ware, 1983). We included 15 items in this brief version, each answered on a 6-point scale ranging from *complete confirmation* (6) to *complete rejection* (1) of the item's

applicability to the participant over the preceding 2 weeks. The MHI consists of 6 positive-state items indicating psychological well-being (e.g., "I feel relaxed and calm"; "I enjoy things that I do") and 9 negative-state items indicating psychological distress ("I feel depressed"; "I feel tense"). Cronbach's alphas were high for the 15 items at both times (.93 at Time 1, .94 at Time 2), after we reverse-scored the distress items. We therefore computed a total mental health score for each soldier at each time point by averaging the 15 items (as recommended by Veit & Ware, 1983). Scores at the two time points were significantly correlated, $r(539) = .39, p < .01$, indicating some stability in emotional well-being, or mental health, but with sufficient change to allow us to assess effects of the independent variables.

Soldiers' appraisals, at Time 2, of their officer's provision of a sense of security during training were assessed with a 20-item scale created especially for this study. The scale was constructed based on previous scales designed to measure parenting and caregiving (e.g., Carnelley, Pietromonaco, & Jaffe, 1996; Kuncze & Shaver, 1994) and on in-depth interviews of officers and soldiers. Items tap the degree to which soldiers perceived their officer as an accepting figure who was accessible in times of need, who showed concern for his soldiers, and who placed trust in them (e.g., "My officer realizes when I'm upset or worried about something"; "When I'm troubled or upset, my officer is ready to listen and help me"; "My officer is supportive of my own efforts to solve problems"). Participants were asked to rate the extent to which each of the 20 items described their direct officer's behavior during combat training. Ratings were made on a 7-point scale ranging from 1 (*not at all*) to 7 (*very much*). Cronbach's alpha for the 20 items was high (.94). A total score was computed for each soldier by averaging the 20 items.

Results and Discussion

The data were analyzed using the same HLM techniques and equations described in Study 2. Specifically, we examined (a) the unique effects of the officer's attachment anxiety and avoidance on the soldiers' ratings of mental health as well as the soldiers' appraisals of their officer's provision of security (at the military unit level); (b) the unique effects of the soldiers' attachment anxiety and avoidance on their own ratings of mental health and their appraisals of their officer's functioning (soldier level); and (c) the interactive effects of the officer's and soldiers' attachment scores. The parameters of these analyses were the same as the ones described in Study 2.

Soldiers' appraisals of their officer's functioning as a security-providing figure. As shown in Table 3, HLM analyses yielded significant unique effects of the officer's avoidant attachment style on the soldiers' appraisals of the officer's performance as a secu-

³ Originally, 634 soldiers from 78 different military units and their direct officers completed the questionnaires at the beginning of training. In the second wave of measurement (2 months later), we lost 93 soldiers because of logistical problems, the dissolution of 6 units, and soldiers dropping out of training. No significant differences were found between these 93 soldiers and the remaining 541 soldiers in their attachment orientations or mental health at the beginning of the training period. Therefore, only the 541 soldiers who completed scales in both waves of measurement were included in the sample.

Table 3
Hierarchical Linear Modeling Coefficients Predicting Soldiers' Ratings From Their Own and Their Officers' Attachment Scores (Study 3)

| Effects | Officer's functioning as a secure base | Mental health at Time 1 | Changes in mental health at Time 2 |
|----------------------|--|-------------------------|------------------------------------|
| Officer's attachment | | | |
| Anxiety | -.01 | .01 | -.01 |
| Avoidance | -.52** | .01 | -.16** |
| Soldier's attachment | | | |
| Anxiety | -.06** | -.07** | -.01 |
| Avoidance | -.04* | -.01 | -.04* |
| Interaction terms | | | |
| OANX × SANX | .02 | -.01 | -.02 |
| OANX × SAVO | .01 | .01 | .01 |
| OAVO × SANX | .01 | .01 | -.06** |
| OAVO × SAVO | -.01 | -.02 | -.04* |

Note. OANX = officer's anxiety; OAVO = officer's avoidance; SANX = soldier's anxiety; and SAVO = soldier's avoidance.

* $p < .05$. ** $p < .01$.

urity provider. The higher the officer's avoidance (reported by him), the less his soldiers viewed him as an accepting, available, sensitive, and responsive figure. As in Study 2, the HLM analyses also revealed subjective biases in soldiers' appraisals of their officer (see Table 3). Soldiers' attachment anxiety and avoidance were significantly associated with lower appraisals of their officer's performance as a security provider. No other effects on officer appraisals were significant.

Soldiers' mental health. Before examining whether officers' attachment orientations had a significant effect on changes in soldiers' reported mental health during combat training (changes from Time 1 to Time 2), we conducted a preliminary analysis of soldiers' differences in mental health at the beginning of training (Time 1) as a function of both soldiers' and officers' attachment scores. This HLM analysis revealed a frequently observed association between attachment anxiety and mental health (see Mikulincer & Shaver, 2003, 2007, for reviews): The higher the soldiers' attachment anxiety, the lower their reported mental health at the beginning of combat training (see Table 3). Soldier's avoidance was not significantly related to mental health at Time 1. It is important to note that there were no significant military unit-level effects of the officer's attachment scores on the soldiers' ratings of mental health at Time 1 (see Table 3), as there should not have been, given that the soldiers hardly knew their officers at this early point in training.

To examine the contribution of soldiers' and officers' attachment scores to changes in soldiers' ratings of mental health from Time 1 to Time 2, we carried out the following computations. First, we performed a regression analysis to predict mental health at Time 2 from mental health at Time 1. Second, we calculated, for each soldier, the residual component of mental health at Time 2 not explained by mental health at Time 1 (actual scores at Time 2 minus predicted score based on Time 1 score). Third, we performed an HLM analysis on these residual scores to determine the extent to which officers' and soldiers' attachment scores explained variations in soldiers' mental health at Time 2 that were not explained by baseline ratings at Time 1. In other words, this

analysis examined the contributions of the officers' and soldiers' attachment scores to changes in soldiers' mental health during 2 months of combat training.

The HLM analysis yielded significant, unique effects for both officers' and soldiers' attachment scores. At the military-unit level, the higher the officer's avoidance, the more his soldiers' mental health deteriorated during combat training (see Table 3). At the soldier level, soldiers' attachment avoidance was significantly associated with greater decline in mental health during combat training (see Table 3). However, these main effects were qualified by significant interactions between officers' avoidance and soldiers' anxiety and between officers' avoidance and soldiers' avoidance (see Table 3). That is, soldiers' attachment scores significantly moderated the effects of the officers' avoidant attachment style.

To examine the source of the significant interaction, we followed Aiken and West's (1991) suggestions and computed regression slopes, for changes in soldiers' mental health as a function of officers' avoidant attachment, separately for two values of soldiers' attachment scores—one standard deviation above and below the means of soldiers' anxiety and avoidance scores. The slope of changes in soldiers' mental health regressed on officers' attachment avoidance was significant (i.e., different from zero) when soldiers' attachment anxiety or avoidance was one standard deviation above the mean, with bs of -0.22 and $-.020$, respectively, $ps < .01$, but was not significant when soldiers' attachment anxiety or avoidance was one standard deviation below the mean, with bs of -0.10 and -0.12 . In other words, officers' avoidance caused a significant deterioration in soldiers' mental health during combat training mainly among insecurely attached soldiers, whether they were relatively anxious, avoidant, or both.

Mediational analyses. Having shown that officers' attachment scores significantly contributed to soldiers' appraisals of their officer's functioning as a security-provider, as well as to changes in soldiers' mental health during combat training, we were able to explore the possible role of the officer's security provision in mediating the effects of the officer's attachment avoidance on changes in the soldiers' mental health. Before testing this mediational hypothesis, however, we examined whether soldiers' appraisals of their officer's functioning as a security-providing figure were related to changes in soldiers' mental health. The association between soldiers' appraisal of their officer's functioning as a security provider and changes in soldiers' mental health between Times 1 and 2 was significant, $r(539) = .20$, $p < .01$. The more the soldiers viewed their officer as accepting and available, the better was the soldiers' mental health between Times 1 and 2. It is important to note that soldiers' appraisals of their officer's functioning as a security provider were not significantly associated with their ratings of mental health at Time 1, $r(539) = -.01$.

We conducted an HLM analysis examining the unique effects of officer's attachment scores on changes in soldiers' mental health while controlling for the contribution of soldiers' appraisals of their officer's functioning as a security provider. Findings indicated that this variable mediated the effects of the officer's avoidant attachment. Specifically, the introduction of soldiers' appraisals of their officer's functioning as a security provider weakened the effect of officer's avoidance from $\gamma = -.16$ to $\gamma = -.05$. In fact, the previously reported significant effect of the

officer's avoidance on changes in the soldiers' mental health was no longer significant when soldiers' appraisals of their officer's functioning as a security provider were controlled.

Additional analyses. Although the findings support our mediational hypotheses, we should acknowledge that we did not systematically collect information about other individual-difference measures that might be related to leaders' attachment orientations (e.g., mental health, self-esteem, interpersonal skills). Therefore, it is hard to know whether leaders' attachment orientations account for our findings over and above these other unmeasured variables. However, at Time 1, we collected relevant data concerning officers' mental health. The officers had completed the brief version of the MHI, from which a total mental health score could be computed by averaging the 15 items (Cronbach's $\alpha = .89$). As expected, officers' attachment insecurities were associated with poor mental health: $r(70) = -.41, p < .01$, for attachment anxiety, and $r(70) = -.36, p < .01$, for avoidant attachment. However, HLM analyses performed on soldiers' appraisals of their officer's functioning as a security provider and on changes in soldiers' mental health, with officer's attachment orientations and mental health as predictors, did not notably change the significant effects of officer's avoidant attachment described in Table 3, γ s of $-.50$ and $-.18, ps < .01$. That is, the observed effects of officer's avoidant attachment on soldiers' appraisals and mental health were not explained by the officers' mental health at Time 1. Nevertheless, in further research, whether other individual-difference variables related to avoidant attachment (e.g., sociability, interpersonal skills) can explain our other findings should be examined.

Two other methodological parameters of the study—the fact that soldiers reported on both their officer's provision of security and on their own mental health and the fact that these assessments were conducted at the same time—also leave the findings open to alternative interpretations. For example, officer's avoidant attachment orientation may have had a direct, negative effect on soldiers' mental health during combat training, and this deterioration in mental health may have somehow caused soldiers to appraise their officer as less accepting or less available. If so, it would be incorrect to conclude that an officer's avoidance per se caused him to be less accepting and less available; instead, this association might reflect a subjective bias on the part of soldiers whose mental health deteriorated during training for some other reason.

To evaluate this alternative interpretation, we took the following steps. First, we approached the higher-ranking officers who were in charge of the soldiers' direct officers and asked them to rate the functioning of these direct officers as security providers (using the same scale soldiers used for rating the same officers). In this way, we obtained reports of officers' functioning as security providers that were independent of soldiers' mental health. We succeeded in obtaining these independent ratings for 69 of the 72 direct officers, and the resulting analyses allowed us to reject the alternative interpretation. First, significant correlations were found between these new ratings and soldiers' ratings of their officer's performance as a security provider (averaged scores within a unit), $r(67) = .57, p < .01$. Second, the correlations between an officer's avoidance and his commander's ratings of him as a security provider replicated the association obtained when the soldiers' appraisals of the officer were used: The higher the officer's avoidance, the lower his commander rated him as an accepting, available, sensitive, and responsive person and leader, $r(67) = -.36,$

$p < .01$. These findings indicate that the direct officers' leadership qualities, which we found to be associated with their attachment styles, were visible to both their followers and their commanders.

In the second step of our follow-up analyses, we approached soldiers 2 months after the Time 2 assessment (i.e., 4 months after their combat training began; Time 3) and asked them to rate their mental health one more time. We succeeded in contacting 60 of the 72 military units, and all 434 of the soldiers in these units agreed to complete the MHI again. No significant differences were found on any of the measures between these 434 soldiers and the others at Time 1 or Time 2. For each of the 434 soldiers, we computed a mental health score at Time 3 ($\alpha = .91, rs$ of $.30$ and $.35, ps < .01$, with mental health at Time 1 and Time 2), calculated the residual score that remained unexplained by mental health at Time 1, and conducted an HLM analysis examining the effects of the officers' and soldiers' attachment scores on this residual score.

The HLM analysis replicated the significant main effect of the officer's avoidance, $\gamma = -.15, p < .01$, observed for changes in mental health between Times 1 and 2. Specifically, the higher the officer's avoidance, the more the soldier's mental health deteriorated between Times 1 and 3. Interestingly, this analysis revealed that the significant interactions observed at Time 2 were no longer significant, γ s $< .01, ps > .10$. That is, whereas an officer's avoidance led to a deterioration in the soldiers' mental health by Time 2 mainly among insecurely attached soldiers, 2 months later, this deterioration was no longer moderated by the soldiers' attachment scores. At Time 3, we observed a pervasive negative effect of officer's avoidance on the mental health of soldiers, regardless their own attachment styles.

Conclusions. Overall, the findings supported our predictions and were easy to integrate with the findings of Studies 1 and 2. An officer's avoidant attachment orientation is associated with his poor performance as a security provider (i.e., a good attachment figure) and seems to have negative effects on his unit members' mental health during a demanding and stressful combat training period. These findings once again emphasize the importance of a leader's attachment style for understanding his followers' experience of him and changes in their mental health.

General Discussion

Taken together, the three studies clearly demonstrate the usefulness of attachment theory as a framework for studying leadership and the contribution of leaders to their followers' experiences and performance. All three studies confirmed that a leader's attachment style is related to leadership-related motives and self-representations and to the ability and willingness to serve as a supportive and caring leader. It is important to note that these associations were found in leaders' self-reports, followers' appraisals of their leaders' behavior, and commanders' appraisals of the leaders' behavior, implying that attachment-related leadership qualities are evident in behavior and are noticed by followers and superiors. Moreover, Studies 2 and 3 revealed that attachment-related differences in leadership style are related to followers' instrumental and socioemotional functioning within their group and do contribute to followers' mental health, above and beyond the contribution of followers' own attachment styles. To a remarkable degree, the findings parallel what attachment scholars who study parent-child relationships have referred to as the nongenetic

intergenerational transmission of attachment patterns (e.g., van IJzendoorn, 1995), by which caregivers' attachment insecurities impair sensitive and effective caregiving and have detrimental effects on children's felt security and mental health. It is especially clear in the case of our studies that the contribution of a leader (i.e., attachment figure) to followers was not mediated by genetic inheritance—a possibility that is rarely ruled out in the case of parental effects on children.

Our findings create a rich portrait of the kinds of leadership associated with each kind of attachment insecurity (anxiety or avoidance). Attachment-anxious leaders seem preoccupied with their own needs for approval, love, and security, revealing their lack of confidence in their own leadership abilities. Avoidant leaders seem to view their role as an opportunity to demonstrate their self-reliance and superiority, ignoring the supportive and socioemotional aspects of leadership. Avoidant leaders are viewed by their followers as emotionally unavailable and disapproving—that is, as not able or not willing to provide a safe haven and secure base. It is interesting to see how well these findings generalize across different measures of leadership and how consistent they are with previous findings showing that more avoidant leaders score lower on transformational and socialized forms of leadership (Popper, 2002; Popper et al., 2000).

These attachment-related patterns of leadership parallel the attachment-related behavior patterns previously noted in parent-child relationships (e.g., Adam, Gunnar, & Tanaka, 2004; Bosquet & Egeland, 2001; Crowell & Feldman, 1991) and in adult romantic relationships (e.g., Carnelley et al., 1996; Collins & Feeney, 2000; Kunce & Shaver, 1994). These parallels suggest that the effects of attachment style are similar across different kinds of relationships. As in other dyadic relationships, attachment-anxious leaders have difficulty providing task-oriented, instrumental support; difficulty helping others (whether children, romantic partners, or followers) formulate effective problem-solving plans and strategies; and difficulty focusing empathically on other people's, rather than their own, needs. It seems likely that their anxious self-focus (Mikulincer & Shaver, 2003) and lack of self-confidence, combined with the strong wish that their followers love, accept, and admire them, interferes with other important leadership goals (e.g., managing effective group performance).

Avoidant leaders' negative models of others (Bartholomew & Horowitz, 1991), together with their dismissal of their own and their followers' emotions and their preference for interpersonal distance (Hazan & Shaver, 1987), seem to interfere with these leaders' ability to nurture and support their followers. This avoidant pattern of leadership during combat training is consistent with past findings showing that avoidant people fail to provide effective care and guidance, particularly when their children or romantic partners are upset and most in need of support and reassurance (e.g., Edelstein et al., 2004; Simpson, Rholes, & Nelligan, 1992).

Studies 2 and 3 also revealed that a leader's avoidant attachment style is negatively related to the followers' functioning in their groups and to the followers' mental health. In Study 2, the leaders' avoidance was inversely related to the followers' sense of group cohesion and to the followers' socioemotional functioning. It seems likely that avoidant leaders alienate and demoralize followers and reduce unit members' enthusiasm for each other and for their group tasks. In Study 3, leaders' avoidance, measured at the

beginning of the training period, was associated with a decline in followers' mental health over 2 and 4 months of training. These results resonate with the repeatedly observed detrimental effects of parents' attachment insecurities on their infants' and adolescent children's mental health (e.g., Berant, Mikulincer, & Shaver, in press; Bosquet & Egeland, 2001; Cowan, Cohn, Cowan, & Pearson, 1996; DeKlyen, 1996; Kobak & Ferenz-Gillies, 1995; Marchand, Schedler, & Wagstaff, 2004). As in the case of insecure parents, avoidant leaders' lack of emotional availability and lack of sensitivity during stressful times can damage followers' mental health. These findings support the perhaps otherwise controversial metaphor of leaders as parents and highlight the importance of a leader's secure attachment style for followers' mental health.

Study 3 also indicated that followers' attachment scores moderated the association between the leader's avoidance and the followers' mental health. Specifically, the leaders' avoidance was associated with a significant decline in the followers' mental health during the initial 2 months of combat training mainly among insecurely attached followers, whether they were anxious, avoidant, or both. Secure followers (i.e., those who scored low on attachment anxiety, avoidance, or both) were able to maintain their mental health despite being under the command of an avoidant leader. Speaking in theoretical terms, we can say that followers who had internalized a secure base earlier in development and who were able to mentally bring one with them from home were able to escape the detrimental effects of an avoidant leader's lack of nurturance and poor socialized leadership skills. It therefore seems that secure followers are less dependent on a safe haven and a secure base provided by their leader and can find alternative sources of comfort, reassurance, and protection. These relatively secure followers can establish actual contact with other attachment figures (e.g., by calling them on the telephone or sending an e-mail message) or by activating comforting memories, thoughts, and images of these figures (Mikulincer & Shaver, 2004). They can therefore soothe themselves during a stressful period despite an avoidant leader's lack of emotional support. Further research is needed to examine these alternative sources of support and protection.

The interaction we found in Study 3 fits with a Person \times Situation perspective on attachment-related processes (Mikulincer & Shaver, 2003). That is, a person's attachment orientation interacts with a specific attachment-related context (e.g., an avoidant leader) to determine how a person adjusts to that context. In particular, our findings highlight both the vulnerability of insecure people when forced into a relationship with a cool, distant, and emotional unresponsive leader and the resilience of secure people in the presence of such a leader.

It is important to emphasize, however, that this beneficial buffering effect of follower security was evident mainly when mental health was assessed only 2 months after combat training began. After 4 months of combat training, a leader's avoidance was related to a deterioration of the followers' mental health, regardless of the followers' attachment styles. In other words, as time passed and the stresses continued, the negative contribution of a leader's avoidance to the followers' mental health overrode the initial buffering effect of the followers' attachment security. This finding helps explain why, even in societies and subcultures in which most children grow up with security-providing parents, when stressful conditions and poor leadership rise above a certain threshold,

almost everyone feels endangered, insecure, and distressed. It is worth remembering, however, that our data were obtained during a highly stressful period in which followers were under the complete control of their leader in a situation in which their physical welfare depended in part on obeying the leader's commands.

We also need to recognize that a full examination of a Person \times Situation perspective on attachment-related processes requires the assessment of cognitive appraisals of the stressful situation. Previous studies have revealed the moderating effects of self-reported or observer-rated stress on attachment processes (e.g., Mikulincer, Florian, & Weller, 1993; Simpson, Rholes, & Nelligan, 1992; Simpson, Rholes, Orina, & Grich, 2002). Unfortunately, we did not assess leaders' and followers' appraisals of stress, so we could not examine their possible moderating role. However, given the context in which we conducted Study 3 (intensive combat training), stress might be sufficiently high in most leaders and followers to nullify the emergence of interactive effects of attachment-related stress appraisals and attachment orientations. Nevertheless, in further research these appraisals should be assessed and the extent to which they moderate the effects of leaders' and followers' attachment orientations on followers' mental health and task performance should be systematically examined.

With regard to a leader's attachment anxiety, our studies yielded a complex pattern of findings. On one hand, leaders' attachment anxiety was negatively associated with followers' instrumental functioning. It seems likely that a leader's attachment anxiety interferes with the efficient and successful completion of group tasks, which in turn erodes the followers' confidence in their own instrumental functioning. In other words, an anxious leader's doubts about his own abilities are echoed in his followers' doubts about successful task completion. This finding implies that a leader's anxious attachment style can initiate an amplifying cycle of poor performance and poor productivity. The anxious leader's doubts about his or her own instrumental abilities may impair followers' performance and productivity, which in turn exacerbates the leader's doubts and further undermines followers' performance. In future research, the possible amplifying feedback loop between leaders' and followers' dysfunctional behavior should be examined.

Interestingly, Study 2 revealed an unexpected positive association between leaders' attachment anxiety and followers' socioemotional functioning. It seems possible, therefore, that an anxious leader's emphasis on emotional closeness and interdependence helps followers become emotionally involved and interpersonally close. (It is also possible, although in our minds less likely, that followers' attempts to maintain good socioemotional functioning may be a defensive reaction to the anxieties, worries, and uncertainties of an anxious leader.) Unfortunately, followers' favorable socioemotional functioning under these conditions seems to be achieved at the expense of instrumental performance. Perhaps an attachment-anxious leader directs followers' attention and resources toward socioemotional issues and away from instrumental task completion. Further research is needed to explore the various alternative explanations.

In attempting to integrate the observed effects of leaders' insecurities on followers' experiences and performance, we conclude that anxious leaders' negative models of self as ineffective in dealing with life's problems (Bartholomew & Horowitz, 1991) and these leaders' tendency to direct attention toward distress-related

thoughts and feelings and away from problem solving (Shaver & Mikulincer, 2002) get in the way of followers' problem-solving efforts and effective task performance. Avoidant leaders' critical devaluing, their hostile attitudes toward others (Bartholomew & Horowitz, 1991), and their tendency to ignore others' feelings and needs (Gillath, Shaver, & Mikulincer, 2005) undermine their followers' well-being, particularly when their followers are in need of support and comfort. Although we did not have a specific measure of leaders' attachment security, our findings concerning leaders who score relatively low on attachment anxiety and/or avoidance provide a useful picture of the more secure leaders. They seem to be more effective in providing emotional and instrumental support to their followers and in functioning as a security provider. Moreover, they contribute positively to their followers' instrumental and socioemotional functioning and help to sustain their followers' mental health during stressful combat training.

Studies 2 and 3 revealed some interesting and theoretically interpretable biases in followers' appraisals of their leaders. The more avoidant a follower, the more he appraised his leader as being a personalized rather than a socialized leader and the more critical were his appraisals of the leader's ability to lead in both task-focused and emotion-focused situations. This pattern of appraisals fits well with avoidant individuals' well-documented negative mental representations of others (Bartholomew & Horowitz, 1991; Mikulincer & Shaver, 2003). Interestingly, no significant interaction was found between followers' and leaders' attachment scores, implying that avoidant followers tend to have more negative than average views of their leaders, even when the leaders are secure and display a socialized pattern of leadership that is acknowledged by less avoidant soldiers.

Overall, our findings highlight the detrimental effects of a leader's attachment insecurities on the leader's quality of leadership and the followers' emotional and instrumental functioning. Moreover, the findings suggest a joint contribution of leaders' and followers' attachment styles. It should be kept in mind, however, that our studies were conducted in military contexts. Future studies should attempt to replicate and extend the findings in other organizational settings and should include women. These studies should focus on possible boundary conditions within which leaders' attachment orientations can affect leader-follower relationships and followers' task performance and mental health. For instance, do leaders' attachment orientations matter primarily during stressful and demanding periods? Do their effects occur in the case of leaders who do not interact face-to-face with most of their followers (e.g., corporate CEOs)? Are the effects of a leader's attachment orientation moderated by his or her degree of formal or informal power? From an attachment perspective, the security-providing role of a leader is likely to be accentuated when conditions are stressful and when the leader has some degree of power to become a strong, wise caregiver. Nevertheless, in further research, the conditions under which insecurely attached leaders may still be effective because their security-providing role is not so relevant should be systematically explored.

Systematic longitudinal research is needed to examine leader-follower processes in more detail. Future studies should address a host of still-unanswered questions, such as whether and how secure followers can defend against the deleterious effects of an insecure leader; whether and how a group can protect its members from such deleterious effects; whether and how insecurely at-

tached followers dysfunctionally resist, to their own detriment, a secure leader's beneficial influence attempts; and whether and how a secure leader can provide corrective experiences that move insecure followers toward increased security and personal growth. A deeper understanding of these processes can help organizational psychologists create interventions that improve leader-follower relations. They may also provide insights into the important processes of political leadership.

Researchers should identify the personal, interpersonal, and sociocultural factors that cause followers to accept the authority of insecure leaders and to comply with their destructive influences. Researchers should also explore the attachment-related techniques that self-serving leaders use to manipulate insecurely attached followers and to convince them to commit destructive acts against themselves or others. These maneuvers are evident in Stern's (2003) description of the ways leaders manipulate followers in violent terrorist groups. Leaders bring insecure people into line with the aims of the group by alternately heightening their sense of insecurity (by reactivating memories and thoughts of rejection and humiliation and exacerbating the sense of helplessness) and then reducing it through group solidarity exercises, praise from cult leaders, and applause for feats of violence against threatening enemies. In this way, followers can identify with the grandiosity of a destructively charismatic leader who promises security, safety, and permanent approval (martyrdom) to compensate for a sense of weakness and vulnerability.

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Received November 7, 2006

Revision received March 8, 2007

Accepted March 9, 2007 ■