

# **Home Leaving to Military Service: Attachment Concerns, Transfer of Attachment Functions From Parents to Peers, and Adjustment**

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*The home-leaving transition of male adolescents in Israel, where most 18-year-olds leave home to perform a 3-year mandatory military service, was examined. Transfer of attachment functions from parents to peers across the transition and adjustment to the basic-training period were investigated. Adolescents (N = 143) filled out questionnaires 3 months before conscription and 6 months later, following their basic training. Before conscription, participants were in the midst of the process of transfer, and attachment insecurity was associated, as expected, with less transfer. Contrary to expectation, high fear of closeness was associated with increased transfer of proximity seeking from parents to peers across the transition. This contributed to better adjustment, offsetting the negative effect of low hardiness. Anxiety over abandonment was negatively associated with adjustment, with low hardiness mediating part of this effect. Results are discussed in light of developmental changes in relationships with primary caregivers during the home-leaving transition.*

*Keywords: attachment styles; home-leaving transition; transfer of attachment functions; adolescence; adjustment; military service*

This study examined the home-leaving transition of young men in Israel, where the large majority of the 18-year-old cohort leaves home to perform a 3-year mandatory military service. Specifically, the roles that attachment styles play in this transition were examined. Two major aspects were explored: the transfer of attachment functions from parents to peers across the transition and how these young men adapt to the transition and to the basic-training period in the initial phase of their military service.

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A major normative aspect of the passage from adolescence to adulthood includes physical separation from one's parents to live away from home (Goldscheider & Davanzo, 1986; Moore, 1987). The move requires adaptation and adjustment by the adolescent and also entails normative changes in interpersonal relationships, specifically transformation in the relationships with parents and the development of other close relationships, which may come to supersede parental relationships in some psychological functions (Ainsworth, 1993; Hazan & Zeifman, 1994). Several theoretical frameworks (Chodorow, 1989; Gilligan, 1982), as well as empirical research (Wintre & Yaffe, 2000), suggest that young men's negotiation of this transition may differ from that of young women. This study focused on young men's leaving-home transition and explored it in a unique context (Lieblich, 1989)—that of the Israeli society in which the great majority of the 18-year-old cohort of Jewish men (92%) leave their parents' home for a 3-year period of mandatory service in the Israel Defense Forces (IDF). The most researched context of the transition away from home has been the college. But in the United States, military service constitutes the second most common locus of what Goldscheider and Davanzo (1986) called residential semiautonomy. Furthermore, beside Israel, there are other countries where young men (usually at age 18) are inducted to serve mandatory military service, usually of a year's duration (e.g., the Netherlands, Switzerland, Sweden, and Germany).

Drawing on Bowlby's (1969/1982) attachment theory, several studies showed that positive current family relations are linked to better adjustment to college, higher college grade point averages, and better peer relationships in college (Frank, Pirsch, & Wright, 1990; Hoffman & Weiss, 1987; Holahan, Valentier, & Moos, 1995; Kenny & Rice, 1995; Lopez, 1991; Rice, Cole, & Lapsley, 1990; Wintre & Yaffe, 2000). Home leaving has also been found to be associated with positive changes in the parent-adolescent relationship (Sullivan & Sullivan, 1980; Thornton, Orbuch, & Axinn, 1995), including a heightened sense of autonomy along with warmer affection and better communication with parents.

Recent research has also documented the importance of perceived current parental relationships for sons' adjustments to military service in Israel. It is interesting to note that Wintre and Ben-Knaz (2000) showed that authoritatively reared children experienced greater stress following the 3-month basic training when compared with soldiers from authoritarian backgrounds. In contrast, Mayseless and Hai (1998) found that parental warmth and maternal granting of autonomy were related to better adjustment in the military. Furthermore, and pertinent to the aims of the current study, as with the high school to college transition, the home-leaving transition to military service also entails positive changes in relationships with parents in terms of greater

warmth and greater autonomy (Maysseless & Hai, 1998). The focus of this investigation was on the transfer of attachment functions from parents to peers across the transition and on adjustment to the transition, specifically to the basic-training period in the initial phase of the military service.

Note that the studies that examined the high school to college transition included samples of adolescents who chose to leave home and where both parents and adolescents had in some way chosen the separation and were probably emotionally prepared for it (Dubas & Petersen, 1996). This may restrict the range of individual differences that was examined. In contrast, in Israel, the timing of the leave taking from one's parents is highly dependent on one's age (by law, 18-year-old Israelis are drafted to mandatory military service) and is not affected by one's psychological readiness or one's relationships with one's parents (Lieblich, 1989). Thus, the full range of individual differences may be observed.

### **Attachment Theory**

Bowlby's (1969/1982) attachment theory and the theoretical and empirical developments that followed (Cassidy & Shaver, 1999) provide a relevant theoretical basis and rich bedrock of research to highlight individual differences in adjustment and changes in relationships with parents across the leaving-home transition. The theory of attachment assumes a universal need to form attachment with another person (an attachment figure) deemed stronger and wiser who can protect the child and increase the child's chances of survival. Attempts to increase proximity and maintain contact with an attachment figure are activated when the child feels distressed or alarmed or when the child perceives a threat as to the availability of the attachment figure. Three major attachment patterns reflecting differences in affect regulation strategy and internal working models have been identified in infancy, childhood, and adulthood: secure, avoidant, and ambivalent (Solomon & George, 1999).

Secure adults were described as able to balance relatedness and self-reliance; avoidant adults were described as exhibiting excessive self-reliance, whereas ambivalent adults were described as exhibiting excessive dependency and ambivalence (see a review in Shaver & Clark, 1994). Bartholomew (1990) expanded the three-style model and distinguished two avoidance styles. The first, dismissing, was characterized by denial of distress and by comfort with the absence of close relationships. The strategy of these persons seems to include a defensive reliance on the self and avoidance of close contact with others. The second style, defined as fearful, was characterized by acknowledgement of distress and discomfort because of the

absence of close relationships. This conceptualization was based on a model with two dimensions: anxiety over abandonment (also termed model of self) and avoidance (also termed model of others). Secure adults have low anxiety and low avoidance; they perceive themselves as worthy of love, they are not afraid to be abandoned, and they approach others for comfort in times of distress. Preoccupied adults (equivalent to the ambivalent individuals) have high anxiety regarding abandonment yet approach others for comfort (low avoidance); indeed, they are conspicuous in their overdependence on others and in their ambivalent feelings regarding the relationship. Dismissing adults have low anxiety and shy away from close relationships with others (high avoidance). Finally, fearful adults have high anxiety and high avoidance. This conceptualization was validated by a multimethod and multisource approach (Griffin & Bartholomew, 1994a, 1994b).

Using sophisticated statistical tools, Fraley and Waller (1998) have demonstrated that individual differences in adult attachment organization are best captured, at both the manifest and the latent levels, by the two major underlying dimensions referred to by Griffin and Bartholomew (1994a, 1994b): (a) anxiety over abandonment and (b) avoidance. Other researchers have employed similar dimensional assessments of attachment in adulthood, (e.g., Collins & Read, 1990; Simpson, 1990) and have shown that these two dimensions, anxiety and avoidance (being a bipolar dimension, it was sometimes termed comfort with closeness), are the key dimensions underlying individual differences in adult attachment (e.g., Bartholomew & Shaver, 1998; Brennan, Clark, & Shaver, 1998; Feeney, Noller, & Hanrahan, 1994). These two dimensions will be employed in this study.

In terms of behavioral strategy, it should be noted (Griffin & Bartholomew, 1994a, 1994b) that the avoidance dimension is associated with distancing or withdrawal on one end and clinging at the other end. In contrast, anxiety over abandonment in itself is not expected to be associated with one specific behavioral strategy because depending whether it is experienced in the context of high avoidance (fearful attachment style) or low avoidance (preoccupied attachment style), it can be associated with either withdrawal from or clinging to attachment figures. Anxiety over abandonment is mostly associated with aspects of the self such as self-efficacy and self-esteem (Griffin & Bartholomew, 1994a, 1994b).

### **Transfer of Attachment Functions**

Although in childhood the primary attachment figures are usually the parents, adolescents are developmentally expected to form intimate relationships with individuals other than their parents (Smollar & Youniss, 1989).

These individuals may include close friends and ultimately an intimate, distinct romantic tie (Furman, 1999; Shulman & Collins, 1997). These close ties are expected to supersede some of the parental affectional functions and to eventually serve as attachment figures (Ainsworth, 1993; Allen & Land, 1999; Weiss, 1993). Namely, peers are expected to be added as attachment figures and may also come to replace parents as primary attachment figures. This is not to say that parents are relinquished as attachment figures nor that the relationship with them becomes unimportant (Allen & Land, 1999; Collins, 1997); rather, close relationships with parents continue to be a major marker of young adulthood (e.g., Buhrmester & Furman, 1987; Trinke & Bartholomew, 1997). However, the normative developmental processes entail "changes in the meaning and functions of these relationships" (Collins, 1997, p. 10). It has been suggested that within a hierarchy of attachment figures, peers (either close friends or romantic partners) eventually come to occupy the top places and replace parents in this capacity (Ainsworth, 1993; Allen & Land, 1999; Weiss, 1993). For example, in Trinke and Bartholomew's study (1997) with college students, 45% of the respondents ranked a best friend or a romantic partner highest in the hierarchy.

In an attempt to conceptualize this process of transfer, Hazan and Zeifman (1994) suggested that three attachment functions that parents fulfill for their young child progressively shift from parents to other close relationships during middle childhood and adolescence. They proposed that the proximity-seeking function (i.e., the child's need to stay near the parent) is first transferred from parents to peers. This is followed by the transfer of the safe-haven function (i.e., turning to the parent for comfort, support, and reassurance), and finally the secure-base function (i.e., using the parent as a base from which to engage in exploration). Using a cross-sectional methodology, they found that the proximity-seeking component was transferred in childhood, the safe-haven in adolescence and young adulthood, and the secure-base component was transferred in early adulthood, mostly in the context of close long-term relationships.

Similarly, and again using a cross-sectional methodology, Fraley and Davis (1997) found that the majority of their 20-year-old college students used their parents as primary attachment figures but were in the process of transferring attachment-related functions from parents to peers (best friends or romantic partners) in the sequence predicted. They further found that trust and intimacy between individuals and their peers were positively associated with the transfer of attachment from parents to peers. In addition, attachment security was associated with stronger tendency to use a peer (a best friend or a romantic partner) as an attachment figure. This was in line with the assumption that someone with a predisposition to form supportive and trustworthy

relationships with others will be better willing and able to forge an attachment relationship with a friend or a romantic partner.

It is interesting to note that this finding accords with an important and somewhat counterintuitive prediction. Given that transfer is normatively expected during late adolescence and young adulthood because secure adolescents are better equipped to form intimate relationships with others and because they feel more at ease in doing so (in light of their sense of secure base), security of attachment with parents is expected to be associated with an easier formation of close, trustworthy, and intimate relationships with peers and hence with an earlier transfer of attachment functions from parents to peers during this age period (Allen & Land, 1999; Fraley & Davis, 1997).

With a somewhat older sample of college students ( $M$  age = 21), Trinke and Bartholomew (1997) again found that respondents tended to orient toward peers more readily for safe-haven than for secure-base functions and toward parents in the opposite manner. They further found that parents (mostly mothers) ranked quite high as attachment figures, yet for some of their respondents, (45%) peers ranked the highest.

### **Attachment and Adjustment**

Although most of the application of attachment theory in adulthood looks at person's close relationships (romantic relationships, friendships, parenting), the different attachment styles have also been employed to highlight individual differences in adjustment and in coping with stressful situations (Mikulincer & Florian, 1998). Attachment styles were deemed relevant to issues of coping and adjustment, given the view discussed above that these patterns reflect strategies to cope with negative affect (Cooper, Shaver, & Collins, 1998). Specifically, it was argued that experiences with responsive and available caregivers enhance a person's inner resources, such as feelings of personal worth, self-efficacy, coping skills, and the capacity to withstand adversity (Cooper et al., 1998; Kenny & Rice, 1995; Mikulincer & Florian, 1995). Mikulincer and Florian (1998), using Hazan and Shaver's (1994) three-attachment-styles model, describe a series of studies that demonstrated that secure adults evinced a stronger sense of control, higher self-efficacy, and better capacity to turn for help when in need and that they coped better with various misfortunes than did insecure adults. By contrast, in these studies, ambivalent adults showed the lowest self-efficacy; the highest propensity to use nonoptimal, emotion-focused coping; and experienced higher levels of distress despite turning to others for help. Finally, avoidant adults, using a distancing strategy, tended not to turn to others for help and did not cope as well as secure adults, though not to the same extent as ambivalent adults.

### The Current Study

The first aim of the present study was to replicate the findings of Fraley and Davis (1997) and Trinke and Bartholomew (1997) regarding the process of transfer of attachment functions.

1. First, it was hypothesized that 18-year-old young men would be in the process of transfer, showing more proximity seeking and more use of the other as a safe haven with their peers than with their parents. However, because most of these young men had not yet experienced the kind of close, long-term relationships needed to transfer the secure-base function, parents were expected to serve as the major source of a secure base.
2. Second, because attachment insecurity is associated with less than optimal skills to form close, intimate, and committed relationships with peers, it was hypothesized that anxiety over abandonment and avoidance (both indicators of attachment insecurity) would be associated with less transfer from parents to peers. In line with the developmental process of transfer (referred to above), this effect was expected to be most apparent with the secure-base function.

The second aim of the present study was to extend previous research by observing changes in the process of transfer by means of a short longitudinal design. Specifically, the home-leaving transition of young men in Israel for military service and their adjustment to the basic-training period were examined. Home leaving for the military and the associated changes in parental and peer relationships may be inherently stressful. First, separation from home and friends and the need to adjust to a new environment may be stressful in themselves, as numerous studies looking at the transfer from home to college indicated (e.g., Holahan et al., 1995; Larose & Boivin, 1998; Wintre & Yaffe, 2000).

Second, the specific environment of military service, and especially the experiences during basic training, may add to the feeling of stress. The army is a highly demanding, rigid, and authoritarian ecology where the young recruit, especially during the basic-training period, is constantly required to obey orders and is under the very close control of his commanders (Gal, 1986). In a relatively short period of time, the young recruits are required to make major changes to accommodate to the new context. Young recruits are further exposed to considerable physical and psychological demands that push them to the limit of their capacities. Indeed, the basic-training period has been examined as a real-life stress by other researchers (Mikulincer & Florian, 1995) and may be construed as a stressful separation that activates the individual's respective attachment strategy for affect regulation.

Consequently, it was hypothesized that home leaving for military service would bring about (activate) the prototypical reaction of each attachment dimension. Assuming (following Fraley & Davis, 1997) that for these young men, parents still constituted their major attachment figures, the following was expected:

3. High avoidance, which is correlated with a distancing strategy, was expected to be associated with turning away from parents (avoiding them). (Incidentally, being a dimensional construct, this hypothesis also means that low avoidance correlates with turning toward parents across the transition.) High anxiety, in contrast, was not expected to be correlated with specific changes because it can be associated with either withdrawal from or clinging to attachment figures. Thus, avoidance was expected to be the major predictor of turning away from parents across the leaving-home transition.

A third aim of the present study was to examine the association between attachment dimensions and adjustment and to extend previous research by looking at mediating processes.

4. In general, insecurity (either avoidance or anxiety) was expected to be associated with lower levels of adjustment.

As outlined above, previous conceptualizations (e.g., Bowlby, 1969/1982; Cooper et al., 1998; Mikulincer & Florian, 1998) highlighted several mediating variables that could contribute to the worse adjustment associated with insecurity. First, the extent to which a person turns to attachment figures (i.e., parents) during any stressful situation (e.g., home-leaving transition) to satisfy attachment functions should affect that person's capacity to withstand adversities and to cope with them. In general, the more a person is able to turn to attachment figures for satisfaction of attachment functions, the better the coping (Bowlby, 1969/1982). Thus, people who avoid attachment figures while under stress are expected to cope less effectively and to show lower levels of adjustment.

Similarly, in line with previous conceptualizations (Mikulincer & Florian, 1998), the person's inner ego resources, which in this study were assessed using the construct of *hardiness* (Kobasa, 1979), were expected to mediate the association between attachment and adjustment. The concept of hardiness originated with Kobasa's (1979) work proposing that people who experienced high levels of stress but remained healthy had a different personality structure from that of people who became ill under stress. The construct of hardiness was suggested as accounting for some of these differences and was

defined as the capacity to withstand hardship and cope well with adversity. As expected, previous research has shown that secure individuals have higher levels of hardiness (Mikulincer & Florian, 1995). Thus, hardiness was expected to mediate the better adjustment associated with attachment security. The following two predictions were therefore made:

- 5a. It was expected that the individual's inner resources (i.e., hardiness) would contribute to a better adjustment and would mediate the effects of attachment insecurity (both anxiety and avoidance) on adjustment.
- 5b. Furthermore, it was expected that turning away from attachment figures (avoiding them), and hence receiving less gratification of attachment functions from them, would negatively affect adjustment. Given the previous hypothesis that only avoidance would be associated with distancing, this mediating role was expected to be apparent for only the avoidance dimension and not for anxiety.

## METHOD

### Procedure and Overview

The present study involved a short longitudinal design with measurement conducted at two points in time: Time I, 3 months before conscription, and Time II, 6 months later, following the basic-training period. The study included males only. In both phases, participants filled out questionnaires. At Time I, 367 participants filled out a package of questionnaires that included the attachment questionnaire, the attachment functions questionnaire (WHOTO), the Hardiness Scale, and a background-information questionnaire during a session of psychological testing regularly conducted at IDF induction centers. Four testing days were selected, and all the young men who were tested at the induction center on those days filled out the questionnaires of the present study that were embedded in the general and larger booklet of questionnaires that they received.

At Time II, a subgroup of 143 young men participated, consisting of those in the original group who had been assigned to serve in the Israeli Navy. The others in that group had been assigned to other arms of the IDF. The inclusion of this subgroup and not the others was because of logistic problems, which allowed us access only to the seamen. Participants who did and did not participate at Time II were not significantly different in terms of responses on the attachment questionnaire, the Hardiness Scale, the WHOTO, or in any of the

background variables. At Time II, participants again filled out the WHOTO and a measure of adjustment to the military.

### **Participants**

The 143 young men who participated at both times were the participants in the present study. They were all 18 years old, in good health, and selected by the IDF to serve in combat units. This selection is primarily based on health considerations. Ninety-four percent of them were born in Israel, most of them from middle-class (90%) and intact (85%) families. Mean age of mothers was 43 years; for fathers, 47 years. About 40% of the sons were first born. None of the background variables were significantly associated with responses on the questionnaires.

### **Measures**

The 22-item Attachment Concerns Questionnaire (Mayselless, 1995; Mayselless, Danieli, & Sharabany, 1996) is designed to assess adult attachment concerns in close relationships. It was adapted from Collins and Read's (1990) questionnaire and is similar to ones used by other investigators (e.g., Feeney & Noller, 1990; Simpson, 1990). The measure originally included five scales based on conceptual considerations and factor analyses (Mayselless, 1995; Mayselless et al., 1996; Scher & Mayselless, 1997). The first three are similar to those used by Collins and Read (1990): fear of being dependent (six items) (e.g., "It is difficult for me to let myself be dependent on other people"); fear of closeness (four items) (e.g., "To a certain extent, I don't feel comfortable being close to others"); fear of abandonment (four items) (e.g., "I often worry that others will not want to stay with me"). Two scales were added to the original questionnaire of Collins and Read (1990): caregiving (four items) (e.g., "Usually I feel comfortable with people who need my help and are open with me"); control in interpersonal relationships (two items) (e.g., "Sometimes I happen to be in a situation where I 'run' other people's lives").

The entire questionnaire was administered, but for the present study, only two scales were used: Following Collins and Read (1990), fear of closeness (Cronbach's  $\alpha = .63$ ) was employed to capture the avoidance dimension, and fear of abandonment (Cronbach's  $\alpha = .68$ ) was used to capture the anxiety dimension. The present internal consistencies of the scales are only moderate, but the magnitude resembles the internal consistencies obtained with similar scales in other studies (e.g., Collins & Read, 1990; Simpson, 1990). The participants completed this questionnaire using a 6-point Likert-type

scale ranging from 1 = *very true* 6 = *very untrue* during the measurement at Time I. Fear of closeness and fear of abandonment were moderately correlated ( $r(143) = .29, p < .001$ ).

In a previous study using the same questionnaire, these attachment concerns were found to correlate with one's own and one's spouse's feelings of love, friendship, jealousy, and marital satisfaction (Mayselless, 1995). Furthermore, mothers' attachment concerns were found to correlate, as expected, with the Strange Situation reunion scales scores of those mothers' infants and with intimacy with their husbands (Mayselless, Sharabany, & Sagi, 1997). Finally, ratings on these scales corresponded, as expected, to self-classification of respondents into Bartholomew's four categories of attachment styles as assessed by Griffin and Bartholomew's (1994 **A or B?**) Relationship Questionnaire, with dismissing and fearful respondents showing the highest fear of closeness and with preoccupied and fearful respondents showing the highest fear of abandonment (Sharabany, Mayselless, Edri, & Lulav, 2001).

The WHOTO (Hazan & Zeifman, 1994) includes nine items describing attachment functions from which participants have to choose one of the significant figures (father, mother, sibling, friend, romantic partner, other) with whom the interaction or experience occurs. Items represent three functions of attachment: (a) secure base (i.e., "I know that I can always count on . . ."), (b) safe haven (i.e., "I know that I can turn to . . . for comfort when I am upset"), and (c) proximity seeking and separation protest (i.e., "I don't like to be far from . . ."), with three items describing each of the functions. As indicated above, employing a cross-sectional design in two studies, one with children (age range = 6 to 17) and the other with adults (age range = 18 to 82), Hazan and Zeifman (1994) demonstrated that the three functions are distinct and are transferred from parents to friends or romantic partners in the predicted order.

In another study (Sharabany et al., 2001), adult participants were asked to respond to this questionnaire with regard to their relationships in childhood. Results demonstrated the expected association with attachment ratings based on Bartholomew's (1990) four-style categorization. Specifically, security was positively correlated with higher ratings on all three functions for mother, siblings, and best friends in childhood. Fearful attachment was negatively correlated with ratings on these functions for mother, father, siblings, and best friend. Preoccupation was negatively correlated with ratings regarding siblings, and dismissing attachment was positively correlated with the choice of *nobody to turn to* and negatively correlated with *turning to best friend*.

As in the original study (Hazan & Zeifman, 1994), participants in the current study had to choose a single preferred person for each of the items. For

each function (e.g., secure base), participants' responses on each of the three items were summed up separately for parents (mother and father) and for peers (best friend and romantic partner). It was decided not to compute a separate index for best friends and romantic partners because a large majority of respondents (40%) did not have a current romantic relationship. The response regarding sibling was not included in the analyses because it was not clear whether choice of a sibling represents family or peers. Similarly, the response of *other*, which often included nobody, was excluded. In all, 16% to 22% of the choices were of sibling, whereas the choice of *other* was rare (1% to 2%). This procedure yielded two scores (choice of parents, choice of peers) ranging from 0 to 3 for each function at both times of measurement. Interrelations among the three functions for each of the targets rated (i.e., parents, peers) were intermediate and ranged from .29 to .49.

Note that because participants were required to choose one target for each item, scores do not denote the general extent to which each target was addressed for each attachment function but the relative preference of one target over the other. In that sense, a higher score on one scale (i.e., parents) almost always implies a lower score on the other (i.e., peers). However, because respondents could also choose sibling or other, and because these choices were not included in the construction of the two scales (parents and peers) used in the statistical analyses, these two scales were not statistically dependent in the formal sense and could be used in the same statistical analysis. Nevertheless, a transfer index was constructed where for each attachment function the rating of parents was subtracted from the rating of peers to represent the extent of transfer, namely, the extent to which peers were preferred to parents for this specific function. In addition, for each attachment function, a change-in-transfer score was calculated by subtracting Time I scores of the transfer index from Time II scores. Higher scores on the change-in-transfer index denote increase in transfer from Time I to Time II. Statistical analyses were conducted mostly with the transfer index and the change-in-transfer scores, but when appropriate, they were also conducted with the parents' and peers' scales.

The Hardiness Scale, which was used to assess the participants' inner resources is a known measure of hardiness (Kobasa, 1979). It is a 50-item questionnaire consisting of three scales: commitment, which, in 16 items, measures commitment to self (e.g., "It's exciting for me to learn something about myself"); control, which, in 17 items, measures internal locus of control (e.g., "I usually feel that I can change what's going to happen tomorrow by what I do today"); and challenge, which, in 17 items, measures an attitude of vigorousness toward the environment (e.g., "I like to be with people whose behavior is unpredictable"). It has shown good predictive and concurrent

validity in various studies (e.g., Kobasa, Maddi, & Puccetti, 1982; Manning, Williams, & Wolfe, 1988). For example, it was found to mediate the relationships between stressful life events and illness (Kobasa, 1979; Kobasa, Maddi, & Courington, 1993). The questionnaire was translated into Hebrew and was found to have good internal reliability and discriminant validity (Kravetz, Drory, & Florian, 1993; Orr & Westman, 1979). In the present study, internal reliability (Cronbach's alpha) of the overall scale was good,  $\alpha = .81$ .

Adjustment to the Military Questionnaire (Catz & Orbach, 1990) is a five-item scale frequently used in the IDF to study subjective sense of coping. It includes reference to (a) whether the respondent views his military service as a positive or negative experience, (b) his motivation to work hard in military service, (c) his evaluation of his capacity as a soldier, (d) his evaluation of his social adjustment, and (e) his evaluation of his general adjustment. Soldiers are asked to respond to each of these questions on a 5-point scale, with higher scores denoting better adjustment. In the present study, Cronbach's alpha for the scale was .79.

## RESULTS

### Attachment Dimensions and the Process of Transfer of Attachment Functions

To test the first hypothesis, a 2 (target [parents vs. peers])  $\times$  3 (functions [secure base, proximity seeking, safe haven]) ANOVA was conducted on the responses of the participants to the WHOTO at Time I, with each of the two factors acting as repeated measure. A main effect for target was significant (Wilks's  $\Lambda = 0.81$ ;  $F[1, 139] = 33.06$ ,  $p < .0001$ ). In general, these young adults reported a higher propensity to turn to their peers (a best friend or a romantic partner) for attachment functions than to their parents. However, this main effect was qualified by a two-way interaction. Specifically, the two-way interaction between functions and target (Wilks's  $\Lambda = 0.59$ ;  $F[2, 138] = 65.22$ ,  $p < .0001$ ) showed that there was a clear preference for peers over parents for the functions of proximity seeking and safe haven (post hoc  $t$  tests,  $p < .05$ ; for proximity seeking,  $M$  (parents) = 0.63,  $SD$  (parents) = 0.87,  $M$  (peers) = 1.97, and  $SD$  (peers) = 1.08; for safe haven,  $M$  (parents) = 0.60,  $SD$  (parents) = 0.85,  $M$  (peers) = 1.97, and  $SD$  (peers) = 1.01). This, however, was not the case with the secure-base function, with which participants indicated stronger preference for parents instead of peers (post hoc  $t$  tests,  $p < .05$ ;  $M$  (parents) = 1.53,  $SD$  = 1.23,  $M$  (peers) = 1.13,  $SD$  (peers) = 1.18).

To test the second hypothesis, Pearson correlations were computed between fear of closeness and fear of abandonment and the transfer indices of the three attachment functions in Time I. As expected, both fear of closeness and fear of abandonment were significantly and negatively correlated with the transfer index of secure base ( $r = -.17$  and  $r = -.22$ ,  $p < .05$ , respectively). Additionally, fear of closeness also was significantly and negatively correlated with the transfer index for the proximity-seeking function ( $r = -.17$ ,  $p < .05$ ).

To examine the third hypothesis, Pearson correlations were computed between the attachment dimensions and the indices of change in transfer of attachment functions from Time I to Time II. As expected, none of the correlations with fear of abandonment were significant. In contrast, fear of closeness was significantly and positively associated with the change in the transfer of the proximity-seeking function ( $r = .23$ ,  $p < .05$ ). Namely, higher fear of closeness was associated with more transfer across the transition. This change in the transfer was apparent both in a decrease in proximity seeking of parents ( $r = -.21$ ,  $p < .05$ ) and in an increase in proximity seeking of peers ( $r = .23$ ,  $p < .05$ ).<sup>1</sup> Though the peer's and parent's scores are related, they nevertheless represent two somewhat separate processes because respondents could have, in principle, decreased their proximity seeking of parents yet increased their choice of the *other* category. None of the other correlations between fear of closeness and the other indices of change in transfer were significant.

### **The Association Between Attachment Dimensions and Adjustment**

First, zero-order Pearson correlations were computed among the relevant variables (see Table 1). As expected, fear of abandonment and fear of closeness were negatively associated with hardiness, and hardiness was positively associated with adjustment. Furthermore, as expected, fear of abandonment was negatively associated with adjustment. However, the bivariate correlation between fear of closeness and adjustment was not significant. Similarly, and in contrast to our hypothesis, the change in the transfer of proximity seeking was positively rather than negatively associated with adjustment. Namely, avoidance of parents and increase in proximity seeking of peers were associated with better adjustment. Both changes were significantly associated with adjustment (for the association of adjustment with change in proximity seeking toward parents,  $r = -.21$ ,  $p < .05$ ; for the association of adjustment with change in proximity seeking of peers,  $r = .20$ ,  $p < .05$ ).

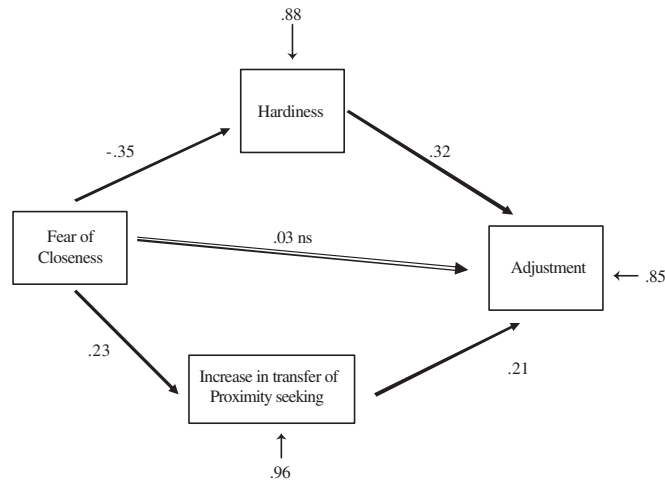
**TABLE 1: Means, Standard Deviations, and Intercorrelations Among the Study Variables**

<i>Study Measure</i>	1	2	3	4	5
1. Fear of closeness	1.00				
2. Fear of abandonment	0.29**	1.00			
3. Hardiness	-0.35**	-0.38**	1.00		
4. Change in transfer of Proximity seeking	.23*	-0.07	0.00	1.00	
5. Adjustment	-0.04	-0.33**	0.31**	.21*	1.00
<i>M</i>	2.51	2.37	98.06	-0.21	4.19
<i>SD</i>	0.66	0.71	9.62	2.17	0.57

\* $p < .01$ . \*\* $p < .001$ .

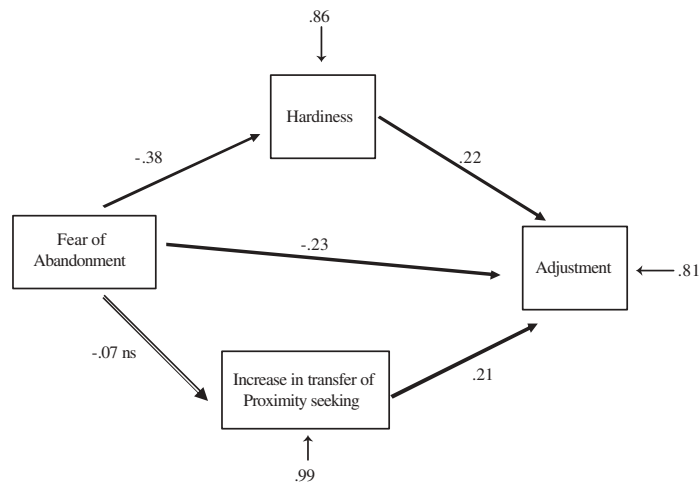
Latent variable structural equation models were constructed to test our hypotheses regarding mediational processes using LISREL 8 (Joreskog & Sorbom, 1993). Data were analyzed separately for the fear of abandonment and the fear of closeness scales. For each of the models assessed, we looked at a saturated model where both the direct effects of attachment on adjustment and the indirect effects through hardiness and change in transfer were estimated simultaneously. Figures 1 and 2 present the standardized MLEs of the saturated models for fear of closeness and fear of abandonment, respectively.

For the fear of closeness model, the goodness-of-fit indices (GFI = 1.00, AGFI = 0.97, NNFI = 1.02) and the nonsignificant  $\chi^2$  ( $\chi^2 = 0.84$ ,  $df = 1$ ,  $p = .36$ ) suggested that the data fit the hypothesized saturated model well (Bollen, 1989). The direct path from fear of closeness to adjustment was not significant ( $\beta = .03$ ). However, the indirect (mediational) paths from fear of closeness to adjustment were significant: fear of closeness to hardiness ( $\beta = -.35$ ); hardiness to adjustment ( $\beta = .32$ ); fear of closeness to change in transfer ( $\beta = .23$ ); and change in transfer to adjustment ( $\beta = .21$ ). We further estimated a more parsimonious model where only the mediational (indirect) paths were allowed. The difference in  $\chi^2$  between this mediational model and the saturated model with one degree of freedom was not significant (difference in  $\chi^2 = 0.10$ ) and the Model Akaike Information Criterion, which indicates the degree of parsimoniousness of the model [with lower scores denoting better fit], decreased from 18.84 to 16.94). Consequently, because the inclusion of the direct path between fear of closeness to adjustment did not improve the fit of the model, the more parsimonious mediational model was retained.



**Figure 1. Full saturated model assessing the association between fear of closeness and adolescent's adjustment.**

NOTE: All standardized coefficients at the two-tailed probability level of .05 or better, unless denoted with *ns* for nonsignificant.



**Figure 2. Full saturated model assessing the association between fear of abandonment and adolescent's adjustment.**

NOTE: All standardized coefficients are significant at the two-tailed probability level of .05 or better, unless denoted with *ns* for nonsignificant.

Note that fear of closeness was negatively associated with adjustment through hardiness but positively associated with adjustment through the increase in transfer of proximity seeking. These opposing effects may have contributed to the nonsignificant bivariate correlation reported earlier between fear of closeness and adjustment.

For the fear of abandonment model, the goodness-of-fit indices (GFI = 1.00, AGFI = 1.00, NNFI = 1.11) and the nonsignificant  $\chi^2$  ( $\chi^2 = 0.14$ ,  $df = 1$ ,  $p = .71$ ) suggested that the data fit the hypothesized saturated model well (Bollen, 1989). The direct path from fear of abandonment to adjustment was significant ( $\beta = -.23$ ). Similarly, the indirect (mediational) paths from fear of abandonment to adjustment were significant: fear of abandonment to hardiness ( $\beta = -.38$ ) and hardiness to adjustment ( $\beta = .22$ ). However, as expected, the second indirect path through change in transfer of proximity seeking was not significant; specifically, although the path from change in transfer of proximity seeking to adjustment was significant ( $\beta = .21$ ), the path from fear of abandonment to change in transfer of proximity seeking was not ( $\beta = -.07$ ). Thus, fear of abandonment was associated with adjustment through the mediation of low hardiness, but this mediation did not account for the whole extent of the association.

## DISCUSSION

In line with Hazan and Zeifman's (1994) model, the 18-year-old young men of this study seem to be in a process of transferring attachment-related functions from parents to peers (best friends and romantic partners). Specifically, participants showed more proximity seeking with peers and more use of peers than of parents as a safe haven. However, these young men still felt that their parents, rather than their peers, served as their major source of a secure base. This pattern of findings with young Israeli men replicates similar results with North American samples (Fraley & Davis, 1997; Hazan & Zeifman, 1994) and highlights the universal aspect of this transfer. In addition, attachment insecurity (either fear of closeness or fear of abandonment) was associated with being less advanced in this process. This was mostly apparent in the negative correlation with the transfer of the secure-base function, the last function, according to Hazan and Zeifman's model, to be transferred. Fear of closeness was also negatively associated with the transfer of the proximity-seeking function.

These findings lend support to the model suggested by Hazan and Zeifman (1994) regarding the process by which other close relations (best friends and romantic partners) replace parents in their capacity as primary

attachment figures and to the idea that attachment security promotes such a process. Note that the notion of replacement is inherent to the present measure (the WHOTO), which requires respondents to choose only one target for each item. Using a somewhat different measure—one that asked respondents to rank (all) their attachment figures rather than choose one—Trinke and Bartholomew (1997) found that although respondents ranked romantic partners (if they had them) highest, mothers were ranked close by, and in general, parents were almost always part of an attachment hierarchy. Indeed, the majority of their respondents not in a romantic relationship ranked parents as the primary attachment figures. Parents may not be relinquished as attachment figures, but peers, especially romantic partners, may be added as attachment figures in a hierarchy, only replacing parents as primary figures in it. Similarly, Weiss (1993) suggested that during the process of transfer, parents are not relinquished as attachment figures, but they change their position in the hierarchy and serve as attachment figures in reserve. Thus, the results of the current study might be more safely portrayed as demonstrating a process of addition of peers as attachment figures and preferring them to parents for some attachment functions. Future research may need to employ measures that allow clear examination and differentiation among these processes (i.e., replacement, addition, and/or relinquishing of attachment figures in a hierarchy).

The process of transfer was further highlighted by an examination of changes in the attachment functions across the home-leaving transition. It involved a stressful separation from home and family and a move into basic training. This stressful separation was expected to activate the youngsters' respective attachment strategies for affect regulation. Specifically, fear of closeness was expected to be associated with turning away from parents. The results partly supported this prediction. As expected, fear of closeness was associated with a decrease in turning to parents for proximity seeking across the stressful transition. However, it was also associated with a corresponding increase in applying to peers for this function. Changes in the transfer of the other attachment functions (safe haven and secure base) were not associated with attachment concerns.

In a way, the stressful separation instigated a quicker transfer of the attachment function of proximity seeking for participants high in fear of closeness. This acceleration in the transfer of proximity seeking from parents to peers may reflect a defensive move in the service of avoiding the parents (the main attachment figures). In this case, the relationships with peers might be quite superficial and may not actually provide security. In contrast, another process may have been operating. Under these stressful conditions, young men who evince high fear of closeness may try to compensate for what they miss

in their relationships with their parents by forging alternative, close relationships with others (i.e., best friend or a romantic partner), who, unlike their original attachment figures, are able to be more supportive and helpful. If this interpretation is correct, such stressful occasions may prove helpful in the process of transfer for individuals with high fear of closeness. The data regarding the adjustment of these young men to basic training seem to favor the latter interpretation regarding a compensatory, constructive process. For these young men (i.e., high in fear of closeness), increase in transfer of the proximity seeking function, which included both avoiding the parents and turning to peers, was associated with better adjustment and seems to work well for them.

It is interesting to note that these young men seem to compensate at Time II in the domain in which they evinced a delayed transfer at Time I (i.e., the negative correlation between fear of closeness and transfer of proximity seeking in Time I). In terms of the model regarding normative transfer of attachment functions (Hazan & Zeifman, 1994), this delay (unlike the delay in the secure-base function) is especially wanting because it is manifested in the function that was supposed to be transferred first and much earlier. Thus, it is as if these young men catch up with their deferred transfer, and this closing of the gap is beneficial for them. Though plausible, these interpretations are speculative because the present study was not designed to address the dynamics of these processes or to examine the alternative interpretations offered here. To explore them, longitudinal research that will also examine the quality of the relationships with peers and the meaning of these processes for the youngsters is needed.

The attachment concerns were not associated with significant changes in the transfer of the safe-haven or secure-base functions. Specifically, across the stressful transition, attachment concerns were not associated with any change in the target (parents or peers) with whom the participants wanted to consult when in distress or whom they felt would be there for them. This result, though unexpected, might be understood in light of the different malleability of the transfer of the various functions. According to the logic presented by Hazan and Zeifman (1994), if these functions were to be variously reflective of changes in circumstances, proximity seeking might be the most malleable, the safe haven less, and the secure base the least. The fact that in this study, transfer of proximity seeking was the only function to change with respect to attachment security and insecurity accords with such logic. Nevertheless, these findings, as well as the different profile of results with the three functions when Time I transfer was examined, open up a question that might be addressed in further research.

The results of the current study may also be interpreted from a different theoretical perspective. Missing the company of peers (i.e., proximity seeking) and turning to them for comfort and advice have also been described as processes of affiliation and social support, not just as components of attachment (e.g., Buhrmester & Furman, 1987; Collins, 1997). In particular, these processes may be amplified under stressful conditions and could be portrayed as coping through seeking help from peers. For quite some time, developmental researchers have been struggling with the issue of defining what constitutes attachment processes and where to draw the line between social support, affiliation or companionship, and attachment behavior. In general, following Ainsworth (1993) and Weiss (1993), it was suggested that attachment behaviors and relationships are implicated when all four processes are observed: proximity seeking, secure-base behavior, safe-haven behavior, and separation protest (Allen & Land, 1999). In this respect, processes of social support could be characterized as reflecting one aspect of attachment phenomena (Ptacek, 1996). Waters and Cummings (2000), in contrast, focus on secure-base behavior as the defining feature of attachment relationships. Viewed from their perspective, the transfer documented in this study reflects mostly age-normative changes and situational changes (because of stress) in the network of social support. This issue is still in need of further theoretical and empirical elaboration.

The current study partly replicated previous research, which found that insecure attachment is associated with worse coping and adjustment to hardship of various types (Mikulincer & Florian, 1995). However, in this study, bivariate association between attachment concerns and adjustment showed that fear of abandonment but not fear of closeness was associated with lower levels of adjustment. Mikulincer and Florian (1995), who also examined adjustment to basic training of Israeli young men, reported a somewhat similar finding. In their study, they employed Hazan and Shaver's (1994) typology and found that, in some cases, avoidant participants coped as well as did secure participants. The current extension of previous research to examine mediating variables may shed light on the processes involved in such coping. Specifically, in the current study, both hardiness, indicative of a person's inner resources, and increase in the transfer of proximity seeking mediated the association between fear of closeness and adjustment. Each of these mediating variables had a distinct mediating effect, though opposite in direction. Thus, fear of closeness was associated with lower levels of hardiness, which, in turn, contributed to lower levels of adjustment. However, fear of closeness was also associated with increase of transfer of proximity seeking, which, in turn, was positively associated with adjustment. These opposing processes may have worked to cancel each other out and eventually to nullify

the direct correlation between fear of closeness, indicative of the avoidance dimension and adjustment. Thus, the reason that fear of closeness was not associated with lower adjustment may have to do with the capacity of these individuals to turn in a compensatory manner to their peers for proximity, a positive experience that might have offset the negative contribution of their low inner resources (i.e., hardiness).

As expected, fear of abandonment was negatively associated with adjustment, with hardiness partially mediating this association. Low levels of hardiness may have contributed to low levels of adjustment by affecting processes of appraisal and by fostering use of ineffective coping strategies (i.e., emotion-focused coping). Indeed, in a study conducted with young recruits in Israel, Florian, Mikulincer, and Taubman (1995) found that hardiness predicted mental health at the end of the basic-training period through the mediation of cognitive appraisal of the situation and through coping. However, fear of abandonment was only partially mediated through hardiness. Thus, other aspects associated with fear of abandonment, such as less effective social skills, may have mediated this association as well.

This study was conducted within a specific cultural milieu, namely, the transition from high school to military service in Israel. Hence, generalizations to other cultures and contexts should be made cautiously. For example, it might be that for individuals high in fear of closeness, adjustment to military service, where emotional vulnerability and tenderness are not expected, and might even be rejected, is easier than adjustment to other contexts. Similarly, the transition to the military service entailed not only separation from home, friends, and family but also certain stressful aspects that are unique to the military context. Thus, the interplay between context and attachment processes needs to be further explored. In addition, this study was conducted with men only, so replication with women is required before these results can be generalized to the other sex. Nevertheless, because some of the findings of this study replicated previous results in other contexts (North American culture and the college context) and in both sexes, the external validity of the findings is partly supported.

All the information gathered from the participants of this study relied on self-report questionnaires. These are open to various biases, such as a bias toward a desirable self-presentation. Although such a bias cannot be ruled out in the present study, it should be noted that the questionnaire regarding the attachment functions does not lend itself easily to such biases, as it is not clear what a desired answer should be. Still, other ways of assessment, such as interviews with the youngsters or using parents' and friends' reports, may prove important in highlighting the processes examined in this study.

In particular, the examination of the transfer of attachment functions in this study was limited by the nature of the questionnaire used to assess the attachment functions. Only three items were employed for each function (Fraley & Davis, 1997, had only two items per scale), and participants were required to choose one target rather than to rate the extent to which each target was addressed. To understand better the processes involved in the transfer and the roles of the different functions, a more refined measure is required. Similarly, quite a large proportion of choices in this study were assigned to siblings. In Trinke and Bartholomew's (1997) study, 58% of their respondents were judged to be attached to at least one of their siblings, with 8% of them reporting a sibling as the primary attachment figure. In the developmental literature, siblings have been recognized as playing an important role as socializing agents (Tucker, Updegraff, McHale, & Crouter, 1999), as role models, and as attachment figures (Brody, 1998; Seginer, 1998). However, research on adult attachment styles has tended to neglect this important relationship. Future research might need to redress this gap.

In sum, this is the first study to explore transfer of attachment functions, both as a normative process and as one affected by individual differences, by means of a longitudinal design. The results of this study have raised several questions for future research, such as the malleability of the different functions or the compensatory process of avoidant individuals. To better understand this universal process, future research might need to employ longitudinal designs of longer duration and use more elaborate measures of attachment functions.

#### NOTE

1. In further analyses, where a transfer index was constructed separately for friends and for romantic partners, the results indicated that the positive correlation reported above was similar when examined with regard to romantic partner ( $r = .21$ ) or friends ( $r = .22$ ).

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