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Attachment orientations and job burnout: The mediating roles of team cohesion and organizational fairness

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ABSTRACT

The current study explored the mediating effect of perceived work team cohesion and organizational fairness on the link between adult attachment and job burnout in a sample of 393 Israeli employees. Structural equation modeling revealed that attachment anxiety and avoidance were related to more job burnout, that the link between avoidance and burnout was fully mediated by lower appraisals of organizational fairness, and that the link between anxiety and burnout was partially mediated by lower appraisals of team cohesion. Thus, attachment insecurities were associated with negative perceptions of team cohesion and organizational fairness which, in turn, contributed to job burnout. Results were discussed based on attachment theory while emphasizing the need for further research examining the generalizability of the findings.

KEY WORDS: attachment • burnout • mediation • organizational fairness • team cohesion

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Job burnout, commonly described as a state of mental weariness, is one of the most serious problems with which all organizations have to deal (Golembiewski, Boudreau, Sun, & Luo, 1998). Numerous studies demonstrated the negative impact burnout has on both employees and organizations worldwide (Maslach & Leiter, 1997). For this reason, empirical efforts have been directed toward identifying the sources of job burnout. Initial studies have focused almost exclusively on contextual conditions at the workplace as main contributors to job burnout (e.g., Maslach & Leiter, 1997; Schaufeli & Enzmann, 1998). With the accumulation of knowledge and the deficiency of purely contextual explanations, researchers have begun studying personality variables that can affect burnout and appraisals of contextual factors that are relevant to burnout (e.g., Ronen, 2006; Spector, Jex, & Chen, 1995; Spector & O'Connell, 1994). Recently, Pines (2004) found that attachment insecurities contribute to the development of job burnout. However, the psychological mechanisms by which these insecurities contribute to burnout were not yet systematically examined.

In this study, we attempt to further examine the link between attachment insecurities and job burnout while proposing a theoretical rationale for why attachment insecurities relate to job burnout. Specifically, we suggest that insecurely attached individuals are predisposed to perceive lower levels of organizational fairness and work team cohesion, and that these negative appraisals of organizational factors may contribute to the development of burnout and explain the attachment-burnout link.

In our study, we used Maslach's (1993) tri-dimensional conceptualization of burnout. Drawing from extensive research, she proposed that burnout consists of three dimensions: emotional exhaustion, cynicism, and reduced professional efficacy. Exhaustion refers to the depletion of physical, mental, and emotional resources. Cynicism refers to an indifferent or distant attitude towards job. Reduced professional efficacy refers to a tendency to evaluate work performance negatively, resulting in feelings of insufficiency and poor job-related self-esteem.

Attachment theory and research

One major tenet of the attachment theory is that human infants are born with an innate psychobiological system (the *attachment system*) that motivates them to seek and assure proximity to supportive others (*attachment figures*) in times of need (Bowlby, 1982). Although the attachment system is most important early in life, Bowlby (1982) claimed it is active over the entire life span. Bowlby (1973, 1980) also described important individual differences in attachment-system functioning that result from experiences with attachment figures. Interactions with attachment figures that are available and responsive in times of need are a source of comfort and relief and promote a sense of security. Moreover, these interactions provide a *secure base* from which individuals can explore the world and master their environment (activities that are functionally similar to work-related activities, see

Hazan and Shaver, 1990) without being worried with unfulfilled attachment needs. In contrast, when attachment figures are not reliably available or supportive, a sense of security is not attained and doubts about others' goodwill and one's lovability and worth are developed. According to Bowlby (1973), these interactions are internalized into attachment working models (mental representations of the self and others) that result in unique attachment orientations – patterns of relational expectations, emotions, and behaviors that result from a particular attachment history (Fraley & Shaver, 2000).

Much of the adult attachment literature has focused on individual differences in attachment orientations. Research, beginning with Ainsworth, Blehar, Waters, and Wall (1978) and continuing through recent studies by social and personality psychologists (reviewed by Mikulincer & Shaver, 2003, 2007), indicates that attachment orientations can be measured along two roughly 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 he or she distrusts relationship partners' goodwill and strives to maintain autonomy and emotional distance from them. People who score low on both dimensions are said to be secure, or securely attached.

Adult attachment studies have shown that attachment anxiety and avoidance are associated with negative appraisals of others' intentions and responses, pessimistic appraisals of interpersonal interactions, negative and unstable self-views, reliance on less constructive ways of coping with stress (e.g., mental rumination, denial, cognitive distancing), less effective regulation of distress, and emotional problems (e.g., Bartholomew & Horowitz, 1991; Collins & Read, 1990; Hazan & Shaver, 1987; Mikulincer, 1998). There is also evidence that attachment insecurities, either anxiety or avoidance, disrupt work functioning and contribute to poor adjustment at the workplace (e.g., Hazan and Shaver, 1990; Krausz, Bizman, & Braslavsky, 2001). Accordingly, Pines (2004) found that insecurely attached individuals reported higher levels of job burnout than secure individuals.

Attachment insecurities and job burnout

Although Pines (2004) showed that attachment insecurities are associated with burnout at the workplace, one should take into account that this is the only published study linking attachment to burnout and that Pines used a one-dimensional rather than a three-dimensional measure of burnout. Moreover, her study did not examine the psychological mechanisms by which attachment insecurities contribute to burnout. We designed the current study to further examine the attachment–burnout link, while relying on Maslach's (1993) tri-dimensional conceptualization of burnout and exploring psychological mechanisms that can explain this link. Specifically, we explored the extent to which (i) appraisals of organizational fairness

account for the contribution of attachment avoidance to job burnout, and (ii) appraisals of team cohesiveness account for the contribution of attachment anxiety to job burnout.

Appraisal of organizational fairness refers to a person's evaluation of the quality of interpersonal treatment received from supervisors and coworkers (Donovan, Drasgow, & Munson, 1998). In our view, this appraisal can explain the link between attachment avoidance and job burnout. On the one hand, although there is no published study examining attachment-related variations in appraisals of organizational fairness, avoidant people's negative views of others can lead them to underestimate the level of interpersonal fairness in their workplace. Previous findings have consistently shown that attachment avoidance is associated with negative descriptions of others, negative expectations about their behaviours, and attribution of their negative behaviors to intentional, global, and stable causes (see Shaver & Clark, 1994, Shaver & Hazan, 1993, for reviews). As a result, avoidant people may be predisposed to negatively appraise the treatment they receive from others at the workplace and then hold low appraisals of organizational fairness. On the another hand, there is extensive evidence showing that employees' low appraisals of organizational fairness are predictive of job dissatisfaction and burnout (e.g., Brotheridge, 2003; Cropanzano, Goldman, & Benson, 2005; Masterson, Lewis, Goldman, & Taylor, 2000). On this basis, we hypothesize that more avoidant people would hold lower appraisals of organizational fairness, which in turn would directly lead to job burnout.

Appraisal of work-team cohesion refers to a person's evaluation of the level of care, cooperation, and support in his or her work team (Hogg, 1992; Levine & Moreland, 1990). In our view, this appraisal can explain the link between attachment anxiety and job burnout. On the one hand, anxiously attached people's strong worries about others' care and support (Cassidy, 1994; Kobak & Sceery, 1988) can lead them to underestimate the level of cohesion in their work team. Studies have shown that attachment anxiety is associated with high sensitivity to signs of others' lack of love (Cassidy & Berlin, 1994; Simpson, Ickes, & Grich, 1999) and doubts about their own lovability and worth (e.g., Creasey, Kershaw, & Boston, 1999; Gamble & Roberts, 2005; Williams & Riskind, 2004). Moreover, Rom and Mikulincer (2003) provided direct evidence that attachment anxiety is associated with underestimation of work-team cohesion. On the other hand, research has shown that low appraisal of work-team cohesion is associated with poor job performance (Keller, 1986), job dissatisfaction (Oliver, Harman, Hoover, Hayes, & Pandhi, 1999) and distress at the workplace (e.g., Bliese & Halverson, 1996, 1998). On this basis, we hypothesize that more anxiously attached people would hold lower appraisals of work-team cohesion, which in turn, would directly lead to job burnout.

The current study

In the current study, we asked a sample of Israeli employees to complete self-report scales tapping attachment anxiety and avoidance, job burnout

(i.e., emotional exhaustion, cynicism, and reduced professional efficacy), perceived work-team cohesion and appraisals of fairness at the workplace. In this way, we examined the associations between attachment orientations and burnout and the extent to which these associations were mediated by appraisals of organizational fairness and team cohesion. Our predictions are as follows:

1. Attachment anxiety and avoidance will be associated with higher burnout.
2. Perceived organizational fairness will mediate the association between attachment avoidance and burnout.
3. Perceived work-team cohesion will mediate the association between attachment anxiety and burnout.

Method

Participants

Three hundred ninety three employees from 49 business organizations from the private sector in Israel volunteered to participate in the study without any payment. Sixty percent were women and 40% men. Participants were chosen to participate in our study if they were employed in full-time jobs and worked in groups or teams of between 7 and 10 people. They were employed as bank clerks (25%), salespersons (48%), insurance agents (16%), and practical engineers (11%). None of the participants held managerial positions during the data collection period. Participants' average age was 29.77 years (SD = 8.59 years; range = 18 to 50 years), average education was 13.32 years (SD = 1.88 years; range = 10 to 23 years), and average organizational tenure was 5.30 years (SD = 6.12; range = 1 month to 32 years). The participants in our study were located with the help of their organizations' human resources managers. Statistical tests revealed no significant differences in any of the assessed variables between employees from different organizations or between the different occupational groups. Tenure, age, education, and sex were not significantly related to any of the variables in the study.

Procedure

Participants completed the battery of questionnaires individually during work time. They were asked to answer the questions posed as honestly as possible and were assured that their responses would be kept anonymous. In order to control for priming effects and other biases related to the question context or item embeddedness, questionnaires were administered in a randomly-determined order for each participant. All these steps have been taken to reduce method biases as recommended by Podsakoff, MacKenzie, Lee, and Podsakoff, 2003.

Measures

Attachment anxiety and avoidance. Attachment anxiety and avoidance were assessed with a 15-item Hebrew version of the Experience in Close Relationships scale (ECR; Brennan et al., 1998). The original scale was translated into Hebrew and then back-translated to English to determine whether items were properly transformed. The original ECR scale included 36 items, but due to time restrictions, we shortened the scale to the most reliable 15 items using Brennan et al.'s norms. Previous studies have shown that scales that are short in length have some advantages in that they may reduce some forms of bias that are produced by respondent fatigue and carelessness (see Hinkin, 1995). Participants rated the extent to which each item described their feelings in close relationships on a 7-point scale ranging from "not at all" (1) to "very much" (7). Eight items tapped attachment anxiety (e.g., "I worry about being abandoned") and 7 items tapped attachment avoidance (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 (e.g., Brennan et al., 1998, Mikulincer & Florian, 2000). In the current sample, Cronbach alphas were high for both the anxiety items (.78) and the avoidance items (.79). On this basis, two scores were computed by averaging items on each scale.

Perceived organizational fairness. Perceived organizational fairness was assessed with the Perceptions of Fair Interpersonal Treatment scale (PFIT; Donovan et al., 1998). The scale taps employees' perceptions of the interpersonal treatment they receive in their workplace. It includes 18 items tapping the degree to which employee suggestions are used and the degree to which the supervisor plays favorites (potentially evoking distributive justice concerns). To assess how employees perceive the climate of interpersonal treatment in their organization, the PFIT scale presents statements that refer to "employees" (e.g., "Employees are lied to" rather than "You are lied to"). For each item, participants indicated whether the item is a good descriptor of their workplace (yes/no). Participants received one point each time their answer indicated appraisals of interpersonal fairness. A total score was then computed by summing the number of points for each participant. Higher scores represented the appraisal of more fair interpersonal treatment in the workplace.

Perceived work-team cohesion. Perceived work-team cohesion was assessed with a 10-item scale developed by Rom and Mikulincer (2003) based on the work of Stokes (1983) and Rosenfeld and Gilbert (1989). Items tapped the basic definitional components of perceived workplace cohesion, such as commitment, cooperation, coordination, and consensus (e.g., Hogg, 1992; Mullen & Cooper, 1994), for example "In my team, people help each other." Participants rated the extent to which each item was descriptive of their work environment. Ratings were performed on a 7-point scale, ranging from "not at all" (1) to "very much" (7). In the current sample, the Cronbach

alpha was high for the perceived cohesion items (.95). On this basis, we computed a perceived cohesion score for each participant by averaging the 10 items.

Burnout. Burnout was assessed with the Hebrew version (see Schaufeli, Salanova, González-Romá, & Bakker, 2002) of the Maslach Burnout Inventory–General Survey (MBI-GS; Schaufeli, Leiter, Maslach, & Jackson, 1996). The original scale was translated to Hebrew and then back-translated to English to determine that the items were properly transformed. The scale consisted of 16 items classified into three scales: emotional exhaustion (five items; e.g., "At the end of the day I feel tired"), cynicism (five items; e.g., "I have become less enthusiastic about my work"), and reduced professional efficacy (six items; e.g., "I can effectively solve the problems that arise in my work"). All the items were scored on a 7-point scale ranging from 1 (never) to 7 (always). The efficacy measure was reversed. Thus, high scores on exhaustion, cynicism, and reduced efficacy were indicative of high level of burnout. In the current sample, Cronbach alphas were high for the emotional exhaustion items (.81), the cynicism items (.84), and the reduced efficacy items (.86). On this basis, three scores were computed by averaging items on each scale.

Data analysis

Before examining the study's hypotheses, we made two computational steps. First, we checked the skew and kurtosis of the seven computed total scores for normality of distribution (see Table 1). All the skew and kurtosis values of these variables were less than 1.0, except for reduced efficacy, indicating that the scores had a normal distribution. For reduced efficacy, we then conducted a square-root transformation (i.e., R-Efficacy-s). The skew and

TABLE 1
Zero-order intercorrelations, means, standard deviations, skews and kurtosis for seven observed variables

Variable	1	2	3	4	5	6	7
1. Avoidance	_						
2. Anxiety	.32	_					
3. Organizational fairness	–.27	–.24	_				
4. Perceived cohesion	–.22	–.18	.51	_			
5. Exhaustion	.20	.25	–.36	–.30	_		
6. Cynicism	.24	.30	–.43	–.40	.55	_	
7. R-Efficacy-s	.26	.21	–.34	–.41	.30	.47	_
N	393	393	393	393	393	393	393
M	2.62	3.57	11.19	5.31	3.28	2.56	1.43
SD	1.01	1.24	4.58	1.16	1.22	1.37	.32

Notes: Anxiety = attachment anxiety; Avoidance = attachment avoidance; Exhaustion, Cynicism, and R-Efficacy are the subscales from Burnout Measure Inventory. R-Efficacy-s = reduced efficacy after a square-root transformation. All correlations are statistically significant at $p < .001$.

kurtosis for R-Efficacy-s (.81 and .97) indicated a normal distribution. The R-Efficacy and the R-Efficacy-s scores were highly correlated (r = .99). Thus, R-Efficacy-s was used in subsequent analysis.

Second, we constructed manifest indicators of latent attachment anxiety and avoidance, perceived organizational fairness, and perceived team cohesion following the recommendations of Russell, Kahn, Spoth, and Altmaier (1998) and their colleagues (Kishton & Widaman, 1994; Little, Cunnigham, Shahar, & Widaman, 2002). Namely, we created parcels as indicators of each latent variable. First, we conducted, separately for each scale, exploratory factor analysis using the maximum likelihood method of extraction, with a single factor extracted for each measure. We then ranked ordered items on the basis of the absolute magnitude of the factor loading and successively assigned triads of items going from the highest to the lowest loading to each of three parcels, to equalize the average loading of each parcel on the respective factor. Subsequently, we created parcel scores by computing the average score for each set of items.

For the burnout latent variable, we used the three total burnout scores (emotional exhaustion, cynicism, reduced-efficacy-s) as its manifest indicators. Maslach and her colleagues (e.g., Maslach, 1993; Maslach & Jackson, 1981) had argued against the computation of a single overall burnout score based on items from the three separate burnout dimensions. They contended, justifiably, that a single factor model of burnout would result in loss of information, because the richness and complexity of the syndrome is reflected in the differential patterns of correlations between the three components. In the present study, we treated burnout as a latent construct that took into account the co-variation in its three manifest dimensions – emotional exhaustion, cynicism, and reduced efficacy.

The study's hypotheses were examined with structural equation modeling (SEM) analysis using the Amos 7.0 program on the basis of the maximum likelihood estimation procedure. As advocated by Baron and Kenny (1986), SEM is the most efficient and least problematic method of testing mediation. By controlling for measurement error, SEM avoids problems of over- and underestimation of mediated effects. It also permits estimation of models that include multiple mediators (e.g. Shadish & Sweeney, 1991).

The SEM analysis of the hypothesized mediation model followed the two-step approach recommended by Anderson and Gerbing (1988). In the first step, we examined the measurement model of the variables by using confirmatory factor analysis (CFA) to estimate the loadings of the manifest indicators on their respective latent variables. We allowed all latent variables to correlate with each other in the model. Establishment of a measurement model was achieved by statistically significant loadings as well as an acceptable model fit. Once an acceptable measurement model was established, the structural model was tested in the second step.

We used three indexes to assess the goodness of fit of the measurement and structural models: the Bentler–Bonett's normed fit index (NFI: Bentler & Bonnett, 1980; values higher than .90 represent acceptable model fit), the comparative fit index (CFI: Bentler, 1990; values higher than .90 represent

acceptable model fit), and the root-mean-square error of approximation (RMSEA: Steiger, 1980; values of .08 and lower represent acceptable model fit). The commonly used chi-square index that was developed by Satorra and Bentler (1988) is reported for reasons of completeness but was not consulted because of its extreme sensitivity to sample sizes. However, we used the chi-square difference test (CSDT; Brown, 1990) in comparing competing models.

Results

Confirmatory factor analyses

We conducted confirmatory factor analyses and found that the loadings of the manifest indicators on their respective latent variables were highly statistically significant (the factor loadings are available from the authors upon request). In Table 2, we present the correlations between the latent variables. These loadings and correlations were highly statistically significant ($p < .001$). A test of the measurement model resulted in good fit indices, $\chi^2(80, N = 231) = 181.6$, $p = .00$; NFI = .935; CFI = .962; RMSEA = .057 (90% lower confidence limit = .046, and 90% upper confidence limit = .068). It therefore appears that all of the latent variables had been well measured by their respective indicators (observed variables). Thus, this measurement model was used to test the hypothetical structural model.

TABLE 2
Pearson correlations between the latent variables

Variable	Anxiety	Avoidance	Cohesion	Fairness	Burnout
Anxiety	_				
Avoidance	.46	_			
Cohesion	–.38	–.21	_		
Fairness	–.28	–.35	.55	_	
Burnout	.43	.38	–.58	–.64	_

Notes: Anxiety = attachment anxiety; Avoidance = attachment avoidance; All correlations were statistically significant at $p < .001$.

Structural model for tests of mediation

In order to examine whether attachment anxiety and attachment avoidance were associated with burnout, the *Attachment-Burnout Direct-Effect Model* specified a direct path between each of the predictors (i.e., attachment anxiety and avoidance) and the criterion (i.e., burnout). Path coefficients for both attachment anxiety (.32, $p < .001$) and attachment avoidance (.22, $p < .01$) were significant. The three goodness of fit indexes showed that the model fits the data well (see Table 3). Therefore, Hypothesis 1 was supported.

In order to examine whether perceived organizational fairness served as a mediator of the relation between attachment avoidance and burnout, and

TABLE 3
Summary statistics of the structural equation modeling models

Model	χ^2 (N = 393)	*df*	*p*	NFI	CFI	RMSEA
Attachment-Burnout Direct-Effect Model	76.9	24	.0001	.930	.950	.075
Attachment-Burnout Partially Mediated Model	272.0	83	.0001	.903	.930	.076
Attachment-Burnout Fully Mediated Model	288.3	85	.0001	.897	.925	.078
Revised Attachment-Burnout Partially Mediated Model	182.4	82	.0001	.935	.963	.056
Revised Attachment-Burnout Fully Mediated Model	199.5	84	.0001	.929	.957	.059
Controlled revised Attachment-Burnout Partially Mediated Model	118.8	67	.0001	.958	.981	.044
Controlled revised Attachment-Burnout Fully Mediated Model	127.4	69	.0001	.955	.978	.046

Notes: NFI = normed fit index; CFI = comparative fit index; RMSEA = root-mean-square error of approximation.

whether perceived work-team cohesion served as a mediator of the relation between attachment anxiety and burnout, three structural models were estimated following Holmbeck's (1997) recommendations. The significance of these two paths coefficients in the *Attachment-Burnout Direct-Effect Model* served as prerequisite for testing the mediation effect (Hoyle & Smith, 1994). The second model was labeled *Attachment-Burnout Partially Mediated Model* (see Figure 1), and it specified direct and indirect paths from the predictors (i.e., attachment anxiety and avoidance) to the criterion (i.e., burnout). The indirect path from attachment avoidance to burnout was set from attachment avoidance to perceived organizational fairness and from perceived organizational fairness to burnout. The indirect path from attachment anxiety to burnout was set from attachment anxiety to perceived team cohesion and from perceived team cohesion to burnout. The third model was labeled *Attachment-Burnout Fully Mediated Model*. The only difference between this model and the partially mediated model was that in the fully mediated model the direct paths from attachment anxiety and avoidance to burnout were constrained to zero (see Table 3 for goodness of fit indexes for each of the three models).

Given the high chi-square values of the fully and partially mediated models (see Table 3), we computed a modification index test for all the parameters to check whether we could improve the proposed model. Following the advice by MacCallum (1995), we only adopted theoretically supported modification suggestions of the test. The highest modification index obtained (74.55) was for the path going from perceived team cohesion to perceived organizational fairness that we did not include in the original model. This index indicated the approximate amount by which the discrepancy function would decrease if such a path were introduced. As past research also

TABLE 4
Standardized parameter estimates for the controlled and uncontrolled model of the revised Attachment-Burnout Partially Mediated Model

Description	Not controlled for common method variance	Controlled for common method variance
Anxiety → Perceived cohesion	–.38**	–.33**
Anxiety → Burnout	.17*	.18*
Avoidance → Organizational fairness	–.24**	–.23*
Avoidance → Burnout	.11	.05
Perceived cohesion → Organizational fairness	.50**	.51**
Perceived cohesion → Burnout	–.26**	–.27**
Organizational fairness → Burnout	–.41**	–.41**

Notes: *$p < .01$, **$p < .001$.

showed direct associations between these two variables (Flaherty & Moss, 2007), we thus decided to add this direct path.

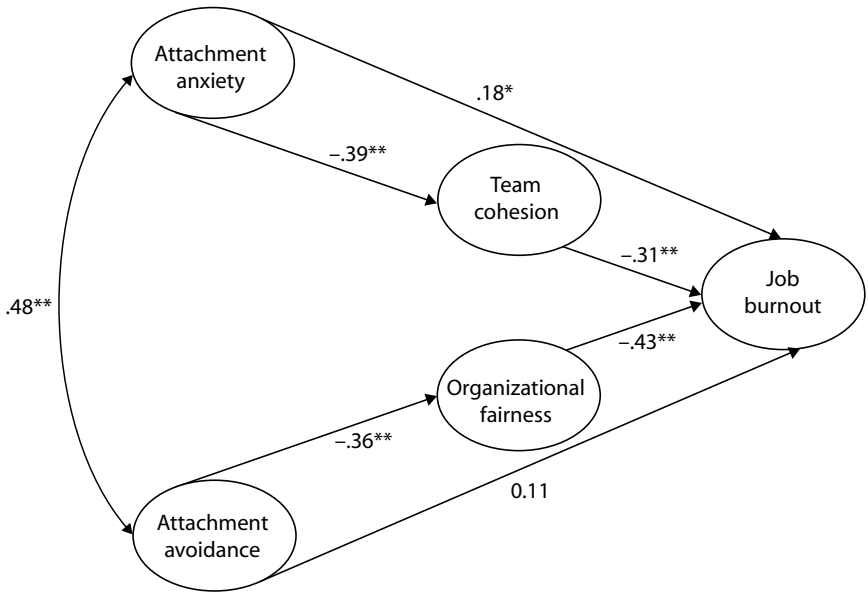
The goodness of fit indices of the revised *Attachment-Burnout Partially and Fully Mediated Model*s suggested that there was significant improvement when compared to the original models (see Table 3). Moreover, all fit indices of the revised models were above the .90 criterion suggesting a satisfactory model fit (Kline, 2004).

Given the fact that the variables in our study were collected at the same time and obtained by the same method (self-report questionnaires), common method variance might have affected the strength of observed relationships. Podsakoff et al. (2003) recommend a series of methods to evaluate the potential effect of common method variance. In the current study, we adopted the technique of controlling for the effects of a single unmeasured latent method factor. Specifically, we re-estimated our structural models with all indicators double loading onto a latent method factor and named them *Controlled Revised Attachment-Burnout Partially Mediated Model* and *Controlled Revised Attachment-Burnout Fully Mediated Model*. According to Podsakoff et al. (2003), this statistical method has the effect of adequately accounting for measurement error or controlling for the effects of a method factor on the measures of the construct. Table 3 presents summary statistics of all the models examined in this study.

The fit indices of the *Controlled* models suggested that there was significant improvement when compared to the revised models. In general, the overall pattern of significant associations in the revised model was unaffected by the common method variance. That is, paths that were significant when common method variance was not controlled remained significant even when common method variance was controlled (See Table 4).

The final step in our analyses was to compare the partially and fully mediated models to assess the plausibility of a model where the associations between attachment orientations and burnout are fully mediated by perceived organizational fairness and perceived team cohesion. Specifically, we

FIGURE 1
The structural model



Note: * $p < .05$; ** $p < .01$; $N = 393$.

examined (i) whether both the partially and fully mediated models fit the data and (ii) whether the difference in the goodness of fit between the fully and partially mediated models was not significant and thereby justifying the constraint placed on the direct path between the predictors and the criterion (i.e., fixing to zero the direct path).

Results indicated that both the partially mediated model and the fully mediated model fit the data well (see Table 3). However, a test of the chi-square differences yielded a significant difference between the fully and the partially mediated models, $\Delta\chi^2(2, N = 393) = 8.60$, $p < .05$. This result indicated that fixing to zero the direct paths of both attachment anxiety and avoidance on burnout (fully mediation) was not plausible, because it did reduce the goodness of fit of the model. However, fixing to zero only the direct path going from attachment avoidance to burnout yielded good fit (χ^2 118.9 (df = 68, $p < .01$), RMSEA = .044, NFI = .958, and CFI = .981), and a test of the chi-square differences yielded no significant difference between this model and the *Controlled Revised Attachment-Burnout Partially Mediated Model*, $\Delta\chi^2(1, N = 393) = 0.1$, $p > .75$. This result indicated that fixing to zero the direct path going from attachment avoidance to burnout was plausible, because it did not reduce model fit. Thus, it is possible to conclude that perceived organizational fairness fully mediated the association between attachment avoidance and burnout.

Perceived team cohesion did not seem to fully mediate the association between attachment anxiety and burnout. The mediation, however, appears

to be partial because the association between attachment anxiety and burnout was attenuated when perceived cohesion was entered to the model as a mediator. Consistent with recommendations for examining the statistical significance of a test of mediation (Holmbeck, 2002), we then conducted Sobel tests (Sobel, 1988) that indexed the significance of perceived team cohesion as a mediator of the relation between attachment anxiety and job burnout. The Sobel test is a conservative (MacKinnon, Warsi, & Dwyer, 1995) and recommended test of the statistical significance of a mediator (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). Specifically, this test utilizes standard errors and raw coefficients to calculate a ratio that indicates if the indirect effect of the predictor variable on the criterion variable through the mediator is significantly different from zero. In the current study, the Sobel test indicated that the inclusion of perceived team cohesion significantly decreased the strength of the association between attachment anxiety and job burnout (Attachment anxiety–Burnout; $z = 2.18$, $p < .05$), such that the associated beta weight decreased from .32 to .17. Thus, it is possible to conclude that perceived team cohesion partially mediates the association between attachment anxiety and burnout.

Discussion

The results of the current study extend previous research in several important ways. First, a recent study has indicated that attachment anxiety and avoidance are related to high levels of burnout (Pines, 2004). Unlike Pines' study that treated burnout as a one-dimensional construct, we adhered to a broader definition of burnout that includes exhaustion, cynicism, and reduced professional efficacy. In line with our hypothesis, the results of our study indicated that higher levels of attachment anxiety and avoidance are associated with higher levels of burnout. Second, the current study provides a unique perspective on the ways in which insecurely attached individuals appraise two contextual factors in the work environment that have been linked with job burnout in previous studies – perceived organizational fairness and perceived work-team cohesion. Using Structural Equation Modeling, we found that attachment anxiety was associated with lower perceptions of work-team cohesion and that attachment avoidance was associated with lower perceptions of organizational fairness. Third, we examined whether appraisals of organizational fairness and work-team cohesion could mediate the associations between attachment orientations and burnout. Consistent with our hypotheses, the results indicated that lower levels of perceived organizational fairness fully mediated the association between attachment avoidance and burnout and that lower levels of perceived team cohesion partially mediated the association between attachment anxiety and burnout.

The current findings suggest that the negative working models of the self and others that characterize attachment anxiety and avoidance negatively bias the appraisal of contextual factors at the work environment, and that these biased appraisals contribute to the development of burnout. Although

studies within organizational contexts usually treat variables like organizational fairness or work-team cohesion such that they exert similar influences on all working individuals, our study provides evidence for individual differences in the appraisal of these factors. More importantly, our results indicate that regardless of a possible impact of actual organizational factors, insecurely attached people's tendency to experience higher level of job burnout may be due to their negative appraisals of justice and cohesion at the workplace.

The current findings fit well with attachment theory. Anxiously attached individuals, who had experienced their caretakers as inconsistent and relatively unsupportive, have been described as doubting their self-worth and likeability. According to attachment theory and research, they have an extreme need to be accepted by others and at the same time they worry that others may not accept or support them (Cassidy, 1994; Ronen & Baldwin, 2009; Shaver & Mikulincer, 2002). Thus, it makes sense that, on the one hand, individuals with higher levels of attachment anxiety would ascribe high importance to factors like team cohesion, but on the other hand, would tend to appraise the levels of support, cooperation, and cohesion of their team as low. Given that anxiously attached individuals react to interpersonal threats with increased stress and maladaptive coping styles, the mediating effect of perceived cohesion on the link between attachment anxiety and burnout seems reasonable.

In a different manner, adults with attachment avoidance, who had experienced their caretakers as unreliable, have been described as holding more pessimistic expectations about others, attributing more negative intentions to others' behaviors, and perceiving others as untrustworthy (e.g., Collins, 1996; Kobak & Sceery, 1988; Mikulincer, 1998). Therefore, it makes sense that avoidant individuals perceive the interpersonal treatment they receive from other people in their workplace as less fair. Given that perceptions of reduced organizational fairness have been linked with burnout, the association between higher attachment avoidance and job burnout seems reasonable.

Our finding regarding the partial mediation effect of perceived team cohesion on the association between attachment anxiety and job burnout implies that attachment anxiety could relate to burnout through other factors as well. For example, the tendency of anxiously attached individuals to worry about their relationships and their inability to refrain from negative thoughts may lead to poor work performance. Hazan and Shaver (1990) found that anxiously attached people tended to be so preoccupied with attachment-related worries while at work that they had trouble meeting job deadlines. Previous studies demonstrated an association between poor job performance and burnout (Taris, 2006). Therefore, variables like low productivity or performance may serve as mediators between attachment anxiety and burnout. Further research is needed to examine this and other possible mediators.

In addition, the current findings suggest that policy makers, who are interested in reducing the level of burnout in their organizations, can focus on the ways in which attachment anxiety and avoidance contribute to employees'

burnout. Although building a program for burnout reduction is beyond the scope of this article, our results suggest at least two different ways in which attachment insecurities are linked to burnout. First, it appears that to the degree that individuals with attachment avoidance view the treatment they receive from their co-workers and managers as less fair, this may lead them to develop higher levels of cynicism, emotional exhaustion, and reduced efficacy. For anxiously attached people, burnout may develop due to appraisals of low team cohesion. Therefore, in addition to improving contextual factors that have been linked with the development of job burnout, policy makers can act directly to alter the negative perceptions of organizational fairness and team cohesion held by insecurely attached individuals.

Six limitations of our study can restrict the generalizability of the findings. First, the results were based on self-report measures, which can be biased by social desirability. Second, although our reasoning suggests that attachment working models affect the way people appraise their work environment and that these appraisals are related to the development of burnout, the correlational nature of the findings prevents any conclusive statement about direction of causality. For example, high levels of job burnout may cause people to perceive their organization as unfair or their team as less cohesive and not the other way around. Further studies can use longitudinal, prospective designs in order to establish stronger evidence concerning causal paths between attachment orientations, work-related appraisals, and burnout. Third, none of the participants had held managerial position during the time we collected the data. This might limit the validity of our finding to non-managerial populations. The findings can be replicated using other samples of managers or assorted populations. Fourth, given that culture shapes the core values and norms of its members (Erez & Gati, 2004), the validity of our findings might be limited to white-collar, non-managerial Israeli employees. Fifth, a typological, rather than a dimensional approach to attachment might put the findings in a different light. Although the current study was not well-suited to test this typological perspective, it would be an interesting approach for future research. Finally, in the present study we did not assess mental health. Given that mental health could serve as both a contributor to and a consequence of burnout (Golembiewski, Lloyd, Scherb, & Munzenrider, 1992), future studies on burnout should include measures of mental health. Despite these possible limitations, the current study emphasizes the relevance of attachment theory within organizational contexts and contributes to the integration of the fields of personal relationships, organizational and social psychology.

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