







Attachment Styles and Employee Performance: The Mediating Role of Burnout

Delia Virgă^a , Wilmar B. Schaufeli^{b,c} , Toon W. Taris^b , Ilona van Beek^b, and Coralia Sulea^a 

^aWest University of Timisoara; ^bUtrecht University; ^cKU Leuven

ABSTRACT

Researchers are becoming increasingly interested in how early experiences within the family are relevant to an individual's behavior at work. Drawing on Bowlby's attachment theory, the present study addresses this topic by examining the relationship between attachment in adulthood and job performance, and the mediating role of burnout in that relationship. We used data from two samples (201 Dutch employees and 178 Romanian working students) and structural equation modeling to test this mediation model and its possible invariance across both samples. The results showed that in both samples, attachment-related anxiety was positively related to burnout, which was in turn negatively related to job performance. Attachment-related avoidance was not significantly associated with burnout or performance. These results were similar in both samples, thus increasing their validity. The results suggest that childhood and early socialization experiences play a role in shaping the employee's behavior and well-being at work. The study is one of the few examining attachment styles in relation to burnout and performance.

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In recent years, there has been a growing interest in understanding how employees' attachment style influences their workplace behaviors, such as individual emotional regulation behavior at work, turnover intention, and organizational citizenship behavior (Richards & Schat, 2011). Based on their childhood experiences, individuals develop different types of affective bonds and proximity-seeking scenarios (Bowlby, 1973, 1988). These attachment styles affect their functioning in adulthood, e.g., in romantic relationships or at work (Hazan & Shaver, 1990; Yip, Ehrhardt, Black, & Walker, 2017). For example, an avoidant attachment style is related to higher turnover intentions and lower levels of organizational commitment (Mikulincer & Shaver, 2007; Scrima, Di Stefano, Guarnaccia, & Lorito, 2015). Thus, attachment theory is a relational framework for understanding interpersonal relationships and behaviors at work. Specifically, attachment theory focuses on the individual differences that may impact the individual's work behavior and attitudes (Wu & Parker, 2017). Therefore, this theory may act as a theoretical lens for providing insight into how individual differences may explain burnout and work-related performance.

CONTACT Delia Virgă  delia.virga@e-uvt.ro  Department of Psychology, West University of Timisoara, Bv. Vasile Părvan, no. 4, Timisoara, Romania.

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Research on attachment styles in organizational contexts is growing, especially regarding occupational burnout. Pines (2004) observed that the anxious and the avoidant attachment styles have a positive relationship with burnout. This result was confirmed by studies conducted among security guards (Vanheule & Declercq, 2009) and working adults in Israel (Reizer, 2015), suggesting that attachment style is an antecedent of burnout and, possibly, also of outcomes such as job performance (Littman-Ovadia, Oren, & Lavy, 2013; Swider & Zimmerman, 2010; Taris, 2006). However, the relationship between attachment styles and burnout needs a stronger empirical base. Based on the Job Demands-Resources model (JD-R model; Bakker & Demerouti, 2007), we discuss how attachment styles can be placed in the model and how these may contribute directly to burnout and (low) performance. The JD-R model focuses on the (main and interactive) relationships among job characteristics (demands and resources) and personal features (demands and resources) on the one hand, and the individual worker's motivation, health, and performance on the other. Thus, besides job characteristics, employee well-being and performance are presumed to be related to personal characteristics as well. Personal resources refer to the individuals' perceptions of their abilities to control and impact the environment, whereas personal demands or vulnerabilities refer to internal pressures "which depend upon the values and needs held or required by the individual" (Mackay & Cooper, 1987, p. 172). Specifically, drawing on the JD-R model (Bakker & Demerouti, 2007) and attachment theory (Bowlby, 1988), we argue that insecure attachment styles can be considered personal demands that—via specific mechanisms—contribute to employee's exhaustion and cynicism (i.e., burnout), which, in turn, impairs their performance at work. According to attachment theory, when a person's attachment needs are not fulfilled, negative consequences tend to appear. For instance, in a work context, employees with insecure attachment styles report higher levels of burnout (Littman-Ovadia et al., 2013). In line with the JD-R model, employees who are exhausted at work are more likely to make errors and mistakes, which has negative consequences for performance (Bakker, Van Emmerik, & Van Riet, 2008). Thus, burnout can act as a mediator of the relationships between insecure attachment styles (anxiety and avoidance) and job performance.

Therefore, the purpose of the present study is to test if adult attachment styles are associated with burnout and performance by examining the mediating role of burnout, and to expand this finding by considering demographic variables, such as nationality (Dutch and Romanian) and the nature of the sample (employees and working students).

Our study contributes to the growing adult attachment literature in three different ways. First, it aligns well with the current trend of research examining different mediating mechanisms that link employees' attachment styles and work-related outcomes (Yip et al., 2017). Second, we extend the JD-R model with personal demands that have so far not been studied within this model. We argue that insecure attachment styles act as personal demands, which could increase burnout and diminish performance at work. Third, we test this model in two different samples, one from an East-European country (Romania) and the other from a West-European country (the Netherlands) to investigate the cross-national validity of our results.

In the remainder of this manuscript, we first discuss the theoretical framework for this study, focusing on attachment styles as a possible personal demand in the JD-R model, assuming that burnout will at least partly mediate the associations between

attachment styles and performance. Using data from a Romanian and Dutch sample (overall $N=379$ participants), we test our expectations using structural equation modeling. Finally, we discuss the results in the light of our hypotheses and address the practical and scientific implications of the findings.

Literature Review

Attachment Theory

Attachment theory (Bowlby, 1973, 1988) proposes that feelings of (in)security arise from the innate tendency of infants to turn to their caregivers (usually parents) in order to satisfy their basic needs for refuge in times of distress and as a secure base for exploration. These patterns are based on internal working models (i.e., internalized cognitive, emotional, and behavioral schemas) which guide individuals in developing different forms of engagement with others, or *attachment styles*. Thus, in adulthood, attachment styles as mental representations may play a significant role in the interpretation and understanding the social world (Byrne, Albert, Manning, & Desir, 2017; Fraley, Waller, & Brennan, 2000).

Traditionally, the literature distinguished among three (secure, anxious, and avoidant; Hazan & Shaver, 1987) or four types of attachment (secure, preoccupied, fearful, and dismissing; Griffin & Bartholomew, 1994). More recently, adult attachment style has been reconceptualized in terms of two primary dimensions: attachment-related *anxiety* and attachment-related *avoidance* (Harms, 2011). This dimensional approach captures more accurately those mental models of attachment (i.e., mental scripts for relationships). Attachment-related anxiety refers to individuals who have an unfavorable view of the self and experience anxiety in their relationships (Richards & Schat, 2011), whereas attachment-related avoidance refers to individuals who declare they dislike it when others open up to them emotionally (Harms, 2011). Secure attachment styles characterize individuals with low levels of anxiety and low avoidance in a relationship with others; they are likely to view themselves and others positively, are resilient and offer support to others when needed (Harms, 2011; Hazan & Shaver, 1990).

Attachment Styles as Personal Demands in the JD-R Model

Attachment styles can be considered as personal attributes that can play a significant role in understanding the antecedents of burnout and job performance. A model that may help us understand the relationships between job and individual characteristics, employee well-being or ill-being (e.g., burnout) and performance is the JD-R model (Bakker & Demerouti, 2007). This model argues that job characteristics can be classified as job demands (e.g., high work pressure) or job resources (e.g., performance feedback), which spark two different processes (a health-impairment and a motivational process), respectively. Recently, this model was extended by integrating personal resources (e.g., self-efficacy, optimism) and personal demands (e.g., workaholism, performance expectations) (Bakker & Demerouti, 2017). Thus, the model argues that personal demands may be implicated in the health impairment process (such as workaholism) or the motivational process (such as performance expectations) suggested by the JD-R model.

In line with this extension of the JD-R model (Bakker & Demerouti, 2007), we consider attachment styles as personal characteristics that may be a resource (i.e., a secure attachment style) or a demand or vulnerability factor (i.e., avoidant and anxious attachment styles), depending on different effort investments in work required by insecure or secure style. Specifically, personal resources may help employees cope with the demands of organizational life. Secure attachment can be considered a personal resource because it predicts psychological resilience (Rutter, 2006) and is associated with low burnout (Simmons, Gooty, Nelson, & Little, 2009).

Personal demands are aspects of individuals “that force them to invest effort in their work and are therefore associated with physical and psychological costs” (Barbier, Hansez, Chmiel, & Demerouti, 2013, p. 751). Only recently did researchers become interested in the concept of personal demands (Schaufeli & Taris, 2014). Personal vulnerability factors (or personal demands), such as perfectionism, emotional instability, and high self-expectations (Lorente, Salanova, Martinez, & Schaufeli, 2008), but also workaholism (Guglielmi, Simbula, Schaufeli, & Depolo, 2012) and high performance expectations (Barbier et al., 2013), were found to play a relevant role in affecting employees’ well-being. Anxiety and avoidant styles can be considered personal vulnerability factors because insecure attachment in infancy may lead to poor coping with stress in adulthood (Pines, 2004) and low levels of resilience. This conceptualization of attachment styles as dispositional factors, which predict the needed effort a person must spend to do well at work, was used recently in a study on the relations between attachment and engagement by Byrne et al. (2017).

Tellingly, insecure attachment styles are associated with lower levels of hope and life satisfaction (Reizer, 2015). Avoidant attachment style was related to insomnia and social dysfunction, whereas an anxious attachment style was related to somatic symptoms, insomnia, social dysfunction, and poor physical health (Joplin, Nelson, & Quick, 1999). Thus, it seems that attachment-related anxiety and attachment-related avoidance can be considered vulnerability factors in the JD-R model since they are individual factors that generate poor coping with stress (Johnstone & Feeney, 2015). That means that insecure attachments require investments regarding efforts in relationships with others at work. Specifically, individuals with attachment-anxiety use hyper-activation strategies, which involve a deep-seated fear of interpersonal rejection and self-perception of vulnerability (Mikulincer & Shaver, 2005, 2013). Contrarily, individuals with attachment-avoidance use deactivating strategies, which involve the suppression of emotions (Mikulincer & Shaver, 2005). This propensity can lead to a gradual waste of these individuals’ intrinsic energetic resources over time, which may increase the likelihood of developing burnout symptoms (Reizer, 2015). Thus, insecure attachments act as a vulnerability factor. They are associated with health problems and lower levels of life satisfaction and may contribute to burnout, in a manner that is independent of work-specific factors.

Hypotheses Development

Attachment Styles and Burnout

Research on the relationship between attachment and personality has uncovered an active link between having an anxious attachment style and neuroticism (Fraley &

Shaver, 2008). This link provides insight into emotional reactions in a stressful workplace: individuals high on attachment-related anxiety exhibit the fear of rejection and abandonment by intimate others, whereas individuals high on attachment-related avoidance tend to distance themselves from emotional situations, and experience chronic discomfort with the demands of intimacy and dependence on others (Fraley et al., 2000; Mikulincer & Shaver, 2007).

Research within the JD-R framework has indicated that dispositional factors might play an important role in burnout at work, above and beyond job characteristics variables (Schaufeli & Taris, 2014). In this context, the insecure attachment can be considered a dispositional factor, which is activated in stressful situations and acts as a nonadaptive strategy in coping with job stress (Ronen & Mikulincer, 2009). More specifically, burnout is a work-related phenomenon that is characterized by a combination of low energy (exhaustion) and low identification (cynicism) (Schaufeli, Bakker, & Van Rhenen, 2009; Schaufeli & Taris, 2005). Exhaustion and cynicism—or mental distancing—are considered the core parts of burnout (Schaufeli & Salanova, 2007; Schaufeli & Taris, 2005). Research has shown that attachment styles at work are significantly correlated with burnout (Leiter, Day, & Price, 2015). Specifically, both attachment anxiety and avoidance are negatively related to the efficacy dimension of burnout, whereas only anxiety was positively correlated with the core burnout dimensions of exhaustion and cynicism. Also, in a review of ten studies, West (2015) demonstrated that attachment anxiety is associated with higher levels of burnout. However, whereas some studies did find a relation between avoidant attachment and burnout, others did not, suggesting that more evidence on this relationship is necessary.

As mentioned above, attachment-related anxiety is associated with feelings of low self-worth and insecurity (Mikulincer & Shaver, 2015). It might be that individuals high on attachment-related anxiety invest (too) much effort in their work to attract others' attention and obtain their approval (Hazan & Shaver, 1990). This effort might deplete their energy resources and may result in burnout; this is in line with the idea that employees are experiencing high levels of burnout at work while attempting to obtain others' approval and avoid additional adverse effects on their self-evaluation (van Beek, Hu, Schaufeli, Taris, & Schreurs, 2012). In contrast, attachment-related avoidance is associated with an adverse disposition toward others (Mikulincer & Shaver, 2015). It might be that individuals high on attachment-related avoidance invest so much energy in their work because they pursue a high level of independence and want to avoid interactions with others (Hazan & Shaver, 1990), which may also lead to burnout. Also, Ronen and Mikulincer (2012) have demonstrated that both leader and follower attachment insecurity contribute to follower burnout and job dissatisfaction. However, recent research found that individuals having an anxious or avoidant attachment style tend to perceive workplace stressors as more intense (Johnstone & Feeney, 2015). Thus, employees with an insecure attachment will spend more energy on their work in general, and in their interpersonal relationships at work, in particular, and will thus show symptoms of burnout in the form of cynicism and exhaustion related to work. Based on this reasoning, we expect that:

Hypothesis 1a. Attachment-related anxiety is positively associated with burnout.

Hypothesis 1b. Attachment-related avoidance is positively associated with burnout.

Burnout and Job Performance

In-role performance represents “the primary contribution of individuals to organizational effectiveness” (Schat & Frone, 2011, p. 23). People with high levels of burnout spend much effort in dealing with job demands, leading to suboptimal functioning at work and increasing resistance against the job, reduced commitment, diminished interest, and mental distancing (Leiter & Maslach, 2005). Although psychological withdrawal protects employees from spending energy and entirely depleting their resources (Schaufeli & Taris, 2005), it is conceivable that it also affects employees’ performance negatively. Based on several studies, Schaufeli and Enzmann (1998) calculated that each burnout dimension explained on average 4% of the variance in task performance. Taris (2006) found the same empirical evidence for the relationship between burnout and job performance by analyzing 16 studies and reported a meta-analytic correlation ($r = -.22$) between exhaustion and supervisors’ reports of performance. In a more recent meta-analysis, Swider and Zimmerman (2010) found that job burnout moderates the effect of job resources on job performance ($r = -.35$). More specifically, employees with high levels of burnout possess insufficient resources to deal effectively with the personal and job demands, leading to impaired job performance (Taris, 2006). Based on the empirical evidence presented above, we expect that:

Hypothesis 2. Burnout is negatively associated with job performance.

Attachment Styles and Job Performance: Burnout as a Mediator

Performance is one of the primary outcomes that is investigated in the attachment literature (Harms, 2011). Secure attachment makes people feel capable of taking on challenges and increases their inclination to trust others (Mikulincer & Shaver, 2007). People with insecure attachment tend to have concerns related to unmet attachment needs. These concerns affect their concentration at work and have a disruptive effect on job performance (Hazan & Shaver, 1990). In most attachment studies, the primary focus is on the positive relationship between secure attachment and extra-role performance, such as organizational citizenship behavior (Little, Nelson, Wallace, & Johnson, 2011) or job performance and job promotion (Ronen & Zuroff, 2017). Other studies have failed to find a link between adult attachment styles and job performance (Ronen & Zuroff, 2009; Richards & Schat, 2007; Simmons et al., 2009). Thus, the attention of researchers is focused on studies that investigate the role of mediators between adult attachment styles and job performance (Ronen & Zuroff, 2017). Swider and Zimmerman (2010), in their meta-analysis, also revealed that job burnout partially mediates the link between personality traits and job performance. In the current study, we assume that burnout partially mediates the relationship between insecure attachment styles and performance. Employees experiencing burnout have developed a specific mental distance towards their work (Van Beek, Hu, Schaufeli, Taris, & Schreurs, 2012). An insecure attachment history in childhood, which results in anxious and avoiding attachment style in adulthood, is associated with a tendency towards negative appraisal of the sources of stress, with poor coping and, in the end, with burnout (Pines, 2004; Johnstone & Feeney, 2015). Employees with an insecure attachment style (avoidance

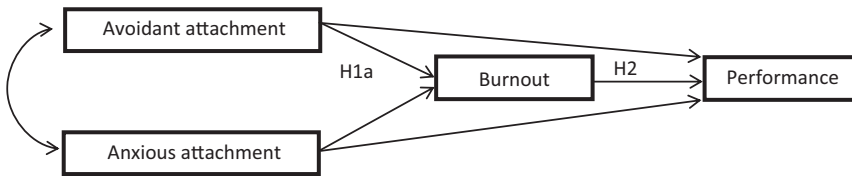


Figure 1. Research model (Model 5).

and anxiety) reported less cognitive liveliness, a lower level of emotional energy (Reizer, 2015) and a higher level of burnout (Littman-Ovadia et al., 2013). This ill-being or burnout translates to a low level of performance at work. Thereby, employees with high scores on burnout are more dissatisfied with their jobs and perform poorer than other employees (Maslach, Schaufeli, & Leiter, 2001). Burnout could be an explanatory mechanism linking insecure attachment styles and performance at work. Consequently, we expect that:

Hypothesis 3a. Burnout mediates at least part of the relation between attachment-related anxiety and job performance.

Hypothesis 3b. Burnout mediates at least part of the relation between attachment-related avoidance and job performance.

The model presented in Figure 1 displays all the study hypotheses. These hypotheses will be tested simultaneously using structural equation modeling (SEM).

Method

Sample and Procedure

This study was conducted in accordance with the ethical guidelines of the American Psychological Association and the ethical review board of (information withheld for anonymity). According to these guidelines, studies using standardized self-report surveys in which participants are neither deceived nor involved in an intervention are formally exempted from the approval of an institutional ethics committee.

The present study employed data from two samples from two different countries (the Netherlands and Romania), which allowed us to investigate the validity of our research findings in different cultural settings. These two countries differ strongly in terms of the four cultural dimensions distinguished by Hofstede (2001), with the Netherlands obtaining considerably higher scores on individualism and substantially lower scores on power distance, masculinity and uncertainty avoidance than Romania. For the Dutch sample, participants were individually approached during several job-related exhibitions (like an Information and Communication Technology [ICT]—fair) and were informed about the nature and the general aim of the present study. The participants were informed that participation was voluntary, and they did not receive any incentives. Based on their preliminary agreement and if they currently had a job, they received an email with a link to our digital questionnaire. On the first page of this questionnaire, we presented the relevant ethical aspects (e.g., anonymity and confidentiality) and the time needed to complete the questionnaire (~10 minutes).

Participants were 201 Dutch employees (with a high response rate of 77%) who worked in different sectors, most of them in ICT (26.9%), education (19.4%), and healthcare (15.9%). The average age was 40.91 years ($SD=10.90$), and 50.71% were female. Regarding educational level, 78.6% of employees had a college or university degree, and 74.6% had a permanent work contract. The participants worked on average for 6.33 ($SD=7.23$) years in their current position and 39.64 ($SD=11.15$) hours per week.

For the Romanian sample, participants were recruited from the social and economic science college students who voluntarily participated in the study and had part-time or full-time jobs. The first page of the questionnaire explained the purpose of the study and the ethical aspects relevant to their informed consent (e.g., confidentiality and anonymity, which was guaranteed). Respondents were also informed about how long it would take to complete the questionnaire (approximately 10 minutes). We sent out 240 emails that invited participants to fill out an online questionnaire.

Participants were 178 Romanian students (74% response rate) who worked in part-time jobs (74.2%) or full-time jobs (25.8%). The average age was 22.07 ($SD=4.81$), and 62.9% were female. The participants worked on average 18.85 ($SD=18.72$) hours per week.

Measurement

Attachment style was measured with two subscales: *avoidance* (6 items; e.g., “I usually discuss my problems and concerns with this person.”) and *anxiety* (3 items; e.g., “I often worry that this person doesn’t really care for me.”) from the Experiences in Close Relationships–Relationship Structures Questionnaire-Revised (ECR-RS; Fraley, Heffernan, Vicary, & Brumbaugh, 2011). We used the ECR-RS to assess general attachment styles (Fraley, Hudson, Heffernan, & Segal, 2015). Items were scored on a 7-point rating scale, ranging from 1 (“strongly disagree”) to 7 (“strongly agree”), and each item described the feelings of the participants in relationships with significant others. The ECR-RS has previously been validated psychometrically in The Netherlands (e.g., van den Brink, Smeets, Hessen, & Woertman, 2016) and in Romania (e.g., Rotaru & Rusu, 2013). Cronbach’s alpha for the avoidance scale was .79 in the Romanian sample and .75 in the Dutch sample; for the anxiety scale, these alphas were .90 in the Romanian sample and .86 in the Dutch sample.

Burnout was assessed with two scales of the Maslach Burnout Inventory-General Survey (MBI-GS; Schaufeli, Leiter, Maslach, & Jackson, 1996): *emotional exhaustion* (e.g., “I feel emotionally drained from my work”; 5 items) and *cynicism* (e.g., “I have become more cynical about whether my work contributes anything”; 4 items). All items were scored on a 7-point scale ranging from 0 (“never”) to 6 (“always”). The MBI-GS has been successfully validated psychometrically in The Netherlands (e.g., Bakker, Demerouti, & Schaufeli, 2002) and in Romania (e.g., Sulea et al., 2012). Cronbach’s alpha for the composite burnout scale was .80 in the Romanian sample and .88 in the Dutch sample.

Job performance was measured with a single item taken from the World Health Organization’s Health and Work Performance Questionnaire (HPQ; Kessler et al.,

2003). The item “how would you rate your overall job performance on the days you worked during the past 4 weeks (28 days)?” was scored on a scale from 0 (“the worst work performance possible”) to 10 (“the best job performance possible”). This overall measure of work performance has shown to be valid across various occupations (Kessler et al., 2003; Shimazu & Schaufeli, 2009). The Romanian and Dutch versions of this item were evaluated using the standard back-translation technique (Brislin, 1970).

Results

Statistical Analysis

A path analysis using SEM methods as implemented in Mplus 6.12 software was conducted to test the model presented in Figure 1. All variables had normal distributions in both samples according to the following criteria: values below 3 are acceptable for skewness, and items below 10 are acceptable for kurtosis (Kline, 2005). Maximum likelihood estimation methods were used, and the goodness-of-fit of the model was evaluated using the χ^2 test statistic, two relative fit indices (the Tucker–Lewis index, TLI and the Comparative Fit Index, CFI), the Root Mean Square Error of Approximation (RMSEA) and the standardized root mean square residual (SRMR) as absolute fit indices. Values higher than .90 (for CFI and TLI) or .08 or lower (for RMSEA and SRMR) signify acceptable model fit (Byrne, 2009). The difference between the non-nested models was assessed using the Akaike information criterion (AIC). Smaller values of AIC indicate better model fit. We tested the invariance of the mediation model across both samples. Invariance between the compared groups is indicated by a nonsignificant $\Delta\chi^2$ statistic and a change of Δ CFI value smaller than .01 (Cheung & Rensvold, 2002). Indirect effects were tested based on 5000 bootstrap samples with 95% confidence intervals.

Measurement Models

In order to test for common method variance (CMV), we used Harman’s one-factor test in both an exploratory and a confirmatory way. Harman’s one-factor test assesses the extent to which the data support one general factor accounting for covariance among the variables (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). In the exploratory approach (EFA), the variance of the first unrotated principal component was 29.2% for the Dutch sample and 24.6% for Romanian sample. Thus, in both samples, this factor only accounted for a limited part of the variance in the data. In the confirmatory approach (CFA) we tested a model with all observed variables loading on one latent variable. As shown in Table 1, for both samples, we tested and compared four measurement models: M1—a single factor model; M2—a four-factor model (avoidance and anxious attachment, burnout and performance); M3—a three-factor model (avoidance and anxious attachment as a factor, burnout and performance); M4—a common-method model (this model is identical with M2, but all the items are encompassed in a common latent factor). The single-factor model (M1) did not fit the data well for the Dutch and Romanian sample, and Model 2 fits the data better, and Model 3 also has poor fit indices. Model 4 fits the data for both samples, but not so well compared with Model 2.

Table 1. Multiple Group Analyses (MGA) of the Measurement Models Including the Dutch ($n = 201$) and Romanian Samples ($n = 178$).

Model	χ^2	df	χ^2/df	TLI	CFI	RMSEA [90% CI]	SRMR	AIC
Measurement model								
Dutch sample								
M1—single-factor model	379.10**	65		.53	.60	.16 [.14–.17]	.12	7023.56
M2—four-factor model	482.65**	153		.72	.75	.10 [.09–.11]	.14	10472.04
M3—three-factor model	680.02**	153		.56	.60	.13 [.12–.14]	.15	10732.02
M4—common-method model	471.37**	138		.69	.75	.11 [.10–.12]	.35	10480.92
Romanian sample								
M1—single-factor model	499.07**	65		.29	.41	.19 [.18–.21]	.13	7992.95
M2—four-factor model	422.19**	153		.73	.76	.10 [.09–.11]	.13	10928.80
M3—three-factor model	627.68**	153		.52	.57	.13 [.12–.14]	.15	11166.36
M4—common-method model	435.47**	138		.67	.73	.11 [.10–.12]	.14	10941.47

Note. ** $p < .001$, χ^2 = chi-square; df = degrees of freedom; TLI = Tucker–Lewis index; CFI = Comparative Fit Index; RMSEA = root mean square error of approximation; CI = confidence interval; AIC = Akaike information criterion; For M2–M4 models, the comparison is versus M1.

Table 2. Means, Standards Deviation, and Correlation Coefficients Between Variables for the Dutch and ($N = 201$) and Romanian ($N = 178$) Samples.

Variable	M ₁	SD ₁	M ₂	SD ₂	1.	2.	3.	4.	5.	6.
1. Gender	1.51	.50	1.63	.42	—	.01	–.14	–.16*	–.07	.13
2. Age	40.91	10.90	22.07	4.81	–.24**	—	–.13	.06	–.14	–.02
3. Attachment-related anxiety	1.69	.87	2.29	1.46	–.05	.04	—	.32**	.30**	–.20**
4. Attachment-related avoidance	2.17	.86	2.27	.92	–.17*	–.06	.36**	—	.07	–.05
5. Burnout	2.08	.80	1.88	.90	.05	–.19*	.33**	.14*	—	–.29**
6. Job performance	7.80	.70	7.13	1.17	.03	–.09	–.24**	–.19**	–.38**	—

Notes. $N_1 = 201$, $N_2 = 178$, ** $p < .001$; 1 = Netherlands, 2 = Romania. Dutch correlations below the diagonal and Romanian correlations above the diagonal.

Thus, we retained the four-factor model (M2). In conjunction, these results suggest that for both samples, common-method bias is unlikely to be a significant issue.

Preliminary Results

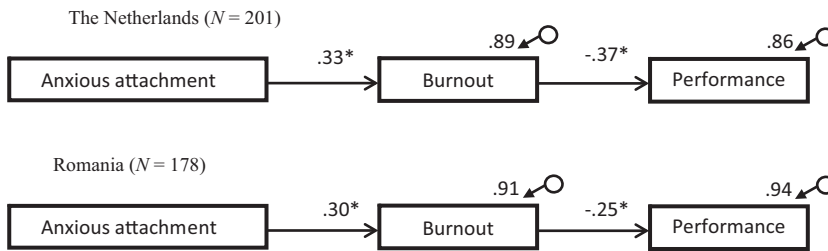
Mean values, standard deviations, and inter-correlations for the study variables are shown in Table 2 for both samples. The internal consistency estimates ranged from good to excellent (.79–.90), indicating the overall acceptable reliability of the scales used in the current study. Further, Table 2 illustrates that for anxious attachment, proceeding to the analysis of mediation was justified because all the conditions for mediation as stipulated by Baron and Kenny (1986) were met: anxious attachment (the predictor) was significantly related to both job performance (the outcome) and burnout (the mediator), with the latter being significantly related to the outcome as well. However, contrary to our expectations (Hypothesis 1b), attachment-related avoidance was unrelated to burnout. Also, in both samples and contrary to Hypothesis 3b, attachment-related avoidance was not related to the mediator and performance.

Multiple group structural equation modeling was used to assess whether the structural model was invariant across the Dutch and Romanian samples. Table 3 shows that the goodness-of-fit indices of the model hypothesized in Figure 1 (Model 5) were excellent, meaning that this model provided an acceptable starting point for further analysis. Although the fit of Model 1 (hypothesis model) was excellent ($\chi^2 = .00$, $df = 0$, TLI = 1.00, CFI = 1.00, RMSEA = .00, 90% CI [.00, .00], SRMR = .00), inspection of the

Table 3. Multiple Group Analyses (MGA) of the Structural Models Including the Dutch ($n = 201$) and Romanian Samples ($n = 178$).

Model	χ^2	df	χ^2/df	TLI	CFI	RMSEA [90% CI]	SRMR	AIC	$\Delta\chi^2$	Δdf	ΔCFI
Structural model											
M5—hypothesized partial mediation model with avoidant and anxious attachment as predictors	.00**	0	0	1.00	1.00	.00 [.00–.00]	.00	2220.15			
M6—total mediation model with anxious attachment as predictor and burnout as mediator	3.68	2	1.84	.94	.98	.07 [.00–.17]	.03	2215.34			
M7—total mediation model with anxious attachment as predictor after controlling avoidant attachment	66.57	10	6.65	.46	.55	.17 [.14, .21]	.15	3213.87	62.89	8	.43
M8—fully constrained model for the three-factor model—M6	5.96	4	1.49	.96	.98	.05 [.00, .13]	.04	2213.61	2.28	2	0

Note. ** $p < .001$, χ^2 = chi-square; df = degrees of freedom; TLI = Tucker–Lewis index; CFI = Comparative Fit Index; RMSEA = root mean square error of approximation; CI = confidence interval; AIC = Akaike information criterion; For models M7 and M8 models the comparison is versus M6.

**Figure 2.** Final model (Model 6).

Note: * = $p < .05$

separate paths revealed that avoidant attachment was not significantly related to burnout, nor to performance, while anxious attachment was related to performance for both samples. Therefore, the avoidant attachment style was removed from the model, and the relationship between anxious attachment and performance was insignificant. The fit of the resulting model (Model 2) was excellent, and all paths were statistically significant excellent ($\chi^2 = 3.68$, $df = 2$, $TLI = .94$, $CFI = .98$, $RMSEA = .07$, 90% CI [.00, .17], $SRMR = .03$). The total mediation model with anxious attachment as predictor has poor fit indices ($\chi^2 = 66.57$, $df = 10$, $TLI = .46$, $CFI = .55$, $RMSEA = .17$, 90% CI [.14, .21], $SRMR = .15$), after controlling for avoidant attachment (M7). Figure 2 shows our final model (Model 6) ($AIC = 2215.34$). This model was significantly superior to the Model 5 ($AIC = 4324.64$) and Model 7 ($AIC = 3213.87$), as it has smaller AIC values that indicate a better model fit for the first ($\Delta i = 998.53$) and the second comparison ($\Delta i = 2109.3$). One constrained model (Model 8) starting from Model 6 was added to assess the invariance of the two samples: this was a model with all structural parameters (relationships) constrained to be equal across samples. The fit of the constrained Model 8 did not significantly deteriorate as compared to Model 6 ($\Delta\chi^2 = 2.28$, $n.s.$; $\Delta CFI = .00$). Therefore, the relationships between the three observed variables as specified in Model 6 are invariant across the Dutch and Romanian samples.

Table 4. Standardized Indirect Effects with Bootstrapped 95% Confidence Intervals.

Independent variable	Mediator	Dependent variable	Estimate	95% CI
1. Anxious attachment	Burnout	Performance	-.16**	[-.26, -.09]
2. Anxious attachment	Burnout	Performance	-.10**	[-.16, -.04]

Note. ** $p < .001$. $N_1 = 201$, $N_2 = 178$, ** $p < 0.01$; 1 = Netherlands, 2 = Romania.

Testing the Hypotheses

Attachment Styles and Burnout

Hypothesis 1 stated that insecure attachment styles are positively associated with burnout (exhaustion and cynicism). The findings displayed in Figure 2 confirmed Hypothesis 1a only. Anxious attachment was indeed positively related to burnout ($\beta = .33$, $p < .001$ for the Dutch sample and $\beta = .30$, $p < .001$ for the Romanian sample), but avoidance attachment was not ($\beta = .04$, $p > .05$ for the Dutch sample and $\beta = .03$, $p > .05$ for the Romanian sample). Hence, hypothesis 1b not supported. When constraining the relationship between anxious attachment and burnout to be equal for both samples, we also obtained a positive association ($\beta = .23$, $p < .001$).

Burnout and Performance

Hypothesis 2 stated that burnout is negatively associated with job performance ($\beta = -.37$, $p < .001$ for the Dutch sample and $\beta = -.25$, $p < .001$ for the Romanian sample). Data from Figure 2 show that the results confirmed this hypothesis. Burnout was indeed negatively related to job performance. When restricting the relationship between burnout and performance to be equal for the Dutch and Romanian samples we obtained comparable results, but even stronger than for each of the two separate samples ($\beta = -.52$, $p < .001$).

Burnout as a Mediator

According to Hypothesis 3, burnout mediates the relationship between insecure attachment styles and job performance. Bootstrapping techniques confirmed the mediating role of burnout. The indirect path linking anxiety attachment style to performance via burnout was $-.16$ (CI 95% $[-.26, -.09]$) for the Dutch sample and $-.10$ (CI 95% $[-.16, -.04]$) for the Romanian sample, indicating that in both samples a high anxiety attachment style is associated with burnout and, in turn, with poor performance. In Model 3 we also tested a similar indirect path between the two samples, obtaining a similar effect of $-.12$ (95% CI $[-.17, -.07]$) (see Table 4). As displayed in Figure 2, burnout fully mediated the association between anxious attachment and job performance (Hypothesis 3a is partially confirmed). Since avoidant attachment was unrelated to burnout, the data did not support Hypothesis 3b which stated that burnout would mediate the relation between attachment-related avoidance and job performance. Interestingly, for the Dutch sample the explained variance in the mediator, burnout, ($R^2 = .11$) and the outcome, performance ($R^2 = .14$), was more substantial than for the Romanian sample ($R^2 = .09$ for burnout and $R^2 = .06$ for performance).

Discussion

Consistent with previous research, our findings showed that burnout entirely mediated the relationship between insecure attachment (the anxious form) and job performance. The mediation effect of burnout was significant in both samples, and the path coefficients were invariant across both samples. This result confirms our assumption that attachment theory may help us understand how individual differences in attachment may impact on well-being and performance at work. The three most interesting findings of this study are the following.

First, consistent with our predictions, we found that attachment-related anxiety was related to performance, through burnout, in both samples. In our research, the effect of anxious attachment style on burnout was relatively stable. Thus, attachment-related anxiety was negatively associated with burnout, indicating that employees who tend to display dysfunctional interaction patterns at work are more prone to experience burnout. These individuals have an unfavorable view of themselves and use noneffective energy management strategies (Mikulincer & Shaver, 2007). Also, they put much effort to work to attract others' attention and to obtain their approval or support (Hazan & Shaver, 1990). Further, individuals who seek attention and approval or support from others at work, but are not able to elicit this, tend to experience lower levels of well-being (Reizer, 2015). As a result, they are ineffective in regulating negative emotions and perform less well than other employees. Attachment anxiety is related to poorer job performance through the experience of higher levels of burnout. Thus, regarding the JD-R model, attachment-related anxiety acts as a personal vulnerability factor that may promote the occurrence of burnout (cf. Barbier et al., 2013).

Furthermore, these results extend the attachment theory by showing that the anxiety dimension of attachment has the potential to increase our understanding of work behavior, especially the behavior that reflects how workers deal with negative emotions, and the subsequent impact on job performance. These results are in line with previous studies indicating that the individuals with anxious attachment experience a loss of energy, cognitive liveliness, and physical strength in stressful situations (Mikulincer & Shaver, 2007; Reizer, 2015). These tendencies are manifested in higher levels of burnout and further on in lower levels of job performance.

Second, we observed a peculiarity in the relationship between insecure attachment styles and burnout. Only anxious attachment style was related to burnout in both samples. As for the effects of attachment avoidance, the evidence was less consistent; contrary to our expectation, the findings indicated that attachment avoidance did not contribute to burnout. One possible explanation for this finding relates to how individuals react to stress, which depends on the type of insecure attachment. Individuals with both forms of insecure attachments waste their valuable resources, but in different ways: whereas individuals with anxious attachment hyper-activate negative emotions, individuals with avoidant attachment suppress negative emotions (Ronen & Mikulincer, 2009). The avoidant individual assumes that no one will be available in situations of distress and tends to be detached from work and significant others (Mikulincer & Shaver, 2007). However, individuals with avoidance attachment tend to minimize problems and prevent negative emotional experience (Harms, 2011). Thus, an avoidant individual could be disengaged but not necessary in burnout. The anxious worker is ambivalent in

his/her relationships: on the one side, he or she fears abandonment and, on the other side, seeks to work with others (Hazan & Shaver, 1990). This ambivalence, as a personal vulnerability factor, can result in significant associations with burnout.

Third, we observed an interesting aspect in Model 1: anxiety and avoidance attachment were moderately highly correlated (.36 for the Dutch sample and .33 for the Romanian sample), indicating that both forms of insecure attachment share about 10 percent of their variance. This result was similar to what Richards and Schat (2011) observed in three studies ($r = .16$ and $.27$, $p < .001$ in Studies 1 and 2, respectively), Reizer (2015, $r = .21$, $p < .001$), and Byrne, Albert, Manning, and Desir (2017, $r = .23$, $p < .01$). So, it seems that even though both dimensions are independent at a conceptual level, they are empirically positively related (see Fraley, Heffernan, Vicary, & Brumbaugh, 2011). Therefore, to be able to identify the unique contributions of the two dimensions of attachment, these authors recommended using multivariate tests.

Strengths, Weaknesses, and Suggestions for Further Research

This study contributes to a better understanding of the impact of insecure attachment style on well-being and behavior at work. A significant strength is that similar results were obtained from two samples that not only differ in nationality (Dutch and Romanian) but also in the nature of the sample (employees and working students). The fact that the estimated path coefficients of the model were invariant across both samples increases the validity of our findings. However, our study also has some limitations. First, it is based on two cross-sectional convenience samples and uses self-report data. It is therefore desirable to replicate the results longitudinally in future research, preferably using objective performance measures. Second, the insecure attachment style is a distal predictor of job performance: consequently, understanding this relationship is a challenge for researchers. In future studies, assessing secure attachment styles may offer a more comprehensive view of the relationships between the variables of interest and could also contrast the effects of “negative” and “positive” attachment. Another interesting idea is to examine the interaction between the anxious and avoiding attachment styles in addressing the issue of secure attachment styles. Third, the single-item measure for job performance could be a limitation of our study because attachment might influence self-perception of performance, particularly for individuals with attachment anxiety, who have an unfavorable view of themselves. Therefore, future studies should integrate objective or interpersonal assessments of performance (e.g., supervisor or colleague ratings). Fourth, investigating attachment styles in the organizational environment could create an ethical issue, in particular, if traditional and general scales are used to assess attachment styles since these pertain to personal relationships workers maintain with others. On the one hand, this calls for future studies that need to design and validate instruments focusing on attachment in the context of organizational behavior, rather than on attachment *per se*. On the other hand, one may ask whether measuring attachment style itself is meaningful, especially if a worker handles this predisposition well enough not to let it influence their work behavior negatively. Finally, the mediating effects are not particularly strong, although they do provide some indication as to the mechanisms underlying this association. Thus, further research

should study other possible mediators (e.g., need satisfaction as variable at the individual level or supportive climate as variable at the organizational level) to have a more comprehensive representation of the mechanisms connecting anxious attachment to performance.

Theoretical Implications

Our results contribute to a new perspective regarding the extension of the JD-R model with new personal demands. As a personal vulnerability factor, insecure attachment style (especially the anxious form) may act as an antecedent of burnout and performance. Thus, based on the JD-R model, it is not only high job demands that generate burnout, and impact job performance; personal demands such as an insecure attachment style should also be taken into account. This is in line with observations of Schaufeli and Taris (2014) who advocated more research on the topic of personal demands, because “So far only personal resources have been integrated into the JD-R model, but personal vulnerability factors ... could also be included” (p. 57).

Practical Implications

This study advances our knowledge about the possible antecedents of burnout and job performance. Attachment in adulthood, as a personal attribute, is relatively understudied in the field of occupational health psychology. The present study illustrates the applicability of the attachment theory in this area. More specifically, implications for practice include that, in order to prevent burnout and increase performance, organizations may consider the individual's relational style and foster an interpersonal environment that is inclusive and supportive.

Thus, our dispositional approach may help practitioners identify those who are predisposed to burnout. Increased awareness of attachment issues and their impact on stress perception can help insecure employees evaluate stressors as less intense by promoting a collaborative approach at work (Johnstone & Feeney, 2015). Additionally, a key strategy for managers includes becoming aware of individuals' relational styles, especially when having anxiety issues, and cultivating security-enhancing contexts which may help less secured employees in preventing burnout and instead of stimulating their engagement. Furthermore, insecure attachment models are activated more in times of stress (Albert, Allen, Biggane, & Ma, 2015); this means that strategies to promote stress-management and occupational health may be beneficial.

Conclusion

This study demonstrates that high levels of attachment-related anxiety were associated with reduced performance, via burnout. By showing that a high score on one dimension of attachment—*anxious attachment*—was related to lower performance through higher levels of burnout, more insight was obtained in the effect of this particular personal vulnerability factor on employee behavior at work. More specifically, worrying about the availability and responsiveness of one's colleagues and/or supervisor is associated with

higher levels of burnout, which is in turn related to lower levels of performance. Therefore, it is important for both the organization and the employee to have some understanding of the degree to which employees are securely or insecurely attached and the factors that could diminish or facilitate the employee's well-being and performance at work.

Author Notes

Delia Virgă (PhD in Psychology in 2007 from Babes-Bolyai University, Romania) is a full professor of Work and Organizational Psychology at the West University of Timisoara, Romania. She coordinates the Master's program in Work, Organizational, and Transportation Psychology. Her research interests focus on the topics in occupational health psychology, in special on the personal resources in relation with well-being, health, and performance at work.




Wilmar B. Schaufeli received his PhD in 1989 from Groningen University, The Netherlands, and is currently is a full professor of Work and Organizational Psychology at Utrecht University (The Netherlands) and distinguished research professor at KU Leuven (Belgium). His research focuses on occupational health psychology, more particularly on job burnout and work engagement, also in relation to leadership (www.wilmarschaufeli.nl).

Toon W. Taris (1962) received his PhD in 1993 from the Free University Amsterdam, The Netherlands. He is a full professor of Work & Organizational Psychology at Utrecht University (The Netherlands). His research interests focus on issues in occupational health psychology.

Ilona van Beek received her PhD in 2014 from Utrecht University, The Netherlands. She is a consultant, researcher and university teacher in the field of work and organizational psychology. Her research interests focus on heavy work investment, workaholism, work engagement, distress, motivation, job demands and resources, and performance (www.ilonavanbeek.nl).

Coralia Sulea, PhD, is an associate professor at the West University of Timisoara. Her research focuses on employees' work engagement and burnout, job insecurity and counterproductive work behaviors. She also coordinates Master's program in Organizational and Occupational Health Psychology (<https://fsp.uvt.ro/master-in-oohp/>).

ORCID

Delia Virgă  <http://orcid.org/0000-0002-9321-4520>
 Wilmar B. Schaufeli  <http://orcid.org/0000-0002-6070-7150>
 Toon W. Taris  <http://orcid.org/0000-0003-1946-3307>
 Coralia Sulea  <http://orcid.org/0000-0002-3209-6946>

References

- Albert, L. S., Allen, D. G., Biggane, J. E., & Ma, Q. K. (2015). Attachment and responses to employment dissolution. *Human Resource Management Review*, 25, 94–106.
- Bakker, A. B., & Demerouti, E. (2017). Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285.
- Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2002). Validation of the Maslach Burnout Inventory-General Survey: An internet study. *Anxiety, Stress and Coping*, 15(3), 245–260.
- Bakker, A., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22, 309–328.

- Bakker, A. B., Van Emmerik, H., & Van Riet, P. (2008). How job demands, resources, and burn-out predict objective performance: A constructive replication. *Anxiety, Stress, & Coping*, 21, 309–324.
- Barbier, M., Hansez, I., Chmiel, N., & Demerouti, E. (2013). Performance expectations, personal resources, and job resources: How do they predict work engagement? *European Journal of Work and Organizational Psychology*, 22, 750–762.
- Baron, R., & Kenny, D. (1986). The moderator-mediator variable distinction in social-psychological research. *Journal of Personality and Social Psychology*, 51(6), 1173–1182.
- Bowlby, J. (1973). *Attachment and loss: Separation: Anxiety and anger* (vol. 2). New York, NY: Basic Books.
- Bowlby, J. (1988). *A secure base: Parent-child attachment and healthy human development*. New York, NY: Basic Books.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1, 185–216.
- Byrne, B. M. (2009). *Structural equation modelling with AMOS: Basic concepts, programming, and applications* (2nd ed.). Mahwah, NJ: Erlbaum.
- Byrne, Z. S. (2009). What we don't know about justice: Behaviors and bridging the scientist-practitioner gap. *Industrial and Organizational Psychology*, 2(02), 217–220.
- Byrne, Z., Albert, L., Manning, S., & Desir, R. (2017). Relational models and engagement: An attachment theory perspective. *Journal of Managerial Psychology*, 32(1), 30–44.
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modelling*, 9(2), 233–255.
- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships—Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, 23(3), 615–625.
- Fraley, R. C., Hudson, N. W., Heffernan, M. E., & Segal, N. (2015). Are adult attachment styles categorical or dimensional? A taxometric analysis of general and relationship-specific attachment orientations. *Journal of Personality and Social Psychology*, 109(2), 354–366.
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, 78(2), 350–365.
- Fraley, R. C., & Shaver, P. R. (2008). Attachment theory and its place in contemporary personality research. In O. John & R. W. Robins (Eds.), *Handbook of personality: Theory and research* (3rd ed., pp. 518–541). New York, NY: Guilford Press.
- Griffin, D. W., & Bartholomew, K. (1994). Models of the self and other: Fundamental dimensions underlying measures of adult attachment. *Journal of Personality and Social Psychology*, 67(3), 430–445.
- Guglielmi, D., Simbula, S., Schaufeli, W. B., & Depolo, M. (2012). Self-efficacy and workaholism as initiators of the Job Demands-Resources model. *Career Development International*, 17(4), 375–389.
- Harms, P. D. (2011). Adult attachment styles in the workplace. *Human Resource Management Review*, 21(4), 285–296.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52(3), 511–524.
- Hazan, C., & Shaver, P. R. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology*, 59(2), 270–280.
- Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.
- Johnstone, M., & Feeney, J. A. (2015). Individual differences in response to workplace stress: The contribution of attachment theory. *Journal of Applied Social Psychology*, 45(7), 412–424.
- Joplin, J. R., Nelson, D. L., & Quick, J. C. (1999). Attachment behavior and health: Relationships at work and home. *Journal of Organizational Behaviour*, 11, 783–796.

- Kessler, R. C., Berglund, P., Demler, O., Jin, R., Koretz, D., Merikangas, K. R., ... Wang, P. S. (2003). The epidemiology of major depressive disorder: Results from the National Comorbidity Survey Replication (NCS-R). *JAMA*, 289(23), 3095–3105.
- Kline, R. B. (2005). *Principles and practices of structural equation modeling* (2nd ed.). New York, NY: Guilford Press.
- Leiter, M. P., Day, A., & Price, L. (2015). Attachment styles at work: Measurement, collegial relationships, and burnout. *Burnout Research*, 2(1), 25–35.
- Leiter, M. P., & Maslach, C. (2005). A mediation model of job burnout. *Research Companion to Organizational Health Psychology*, 544–564.
- Little, L., Nelson, D., Wallace, J. C., & Johnson, P. (2011). Integrating attachment style, vigor at work, and extra-role performance. *Journal of Organizational Behavior*, 32(3), 464–484.
- Littman-Ovadia, H., Oren, L., & Lavy, S. (2013). Attachment and autonomy in the workplace: New insights. *Journal of Career Assessment*, 21(4), 502–518.
- Lorente, L., Salanova, M., Martinez, I., & Schaufeli, W. B. (2008). Extension of the job demands-resources model in the prediction of burnout and engagement among teachers over time. *Psicothema*, 20(3), 354–360.
- Mackay, C., & Cooper, C. L. (1987). Occupational stress and health: Some current issues. In C. L. Cooper & R. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 167–199). Chichester, UK: Wiley.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422.
- Mikulincer, M., & Shaver, P. R. (2005). Attachment security, compassion, and altruism. *Current Directions in Psychological Science*, 14(1), 34–38.
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York, NY: Guilford Press.
- Mikulincer, M., & Shaver, P. (2015). The psychological effects of the contextual activation of security-enhancing mental representations in adulthood. *Current Opinion in Psychology*, 1, 18–21.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.
- Pines, A. M. (2004). Adult attachment styles and their relationship to burnout: A preliminary, cross-cultural investigation. *Work and Stress*, 18, 66–80.
- Reizer, A. (2015). Influence of employees' attachment styles on their life satisfaction as mediated by job satisfaction and burnout. *Journal of Psychology*, 149(3-4), 356–377.
- Richards, D. A., & Schat, A. C. (2007). Attachment and customer aggression: An affective events theory model. *ASAC*, 28, 15–24.
- Richards, D. A., & Schat, A. C. H. (2011). Attachment at (not to) work: applying attachment theory to explain individual behavior, organizations. *Journal of Applied Psychology*, 96(1), 169–182.
- Ronen, S., & Mikulincer, M. (2012). Predicting employees' satisfaction and burnout from managers' attachment and caregiving orientations. *European Journal of Work and Organizational Psychology*, 21(6), 828–849.
- Ronen, S., & Zuroff, D. (2009). Attachment orientations, stress and job performance: The mediating role of social rank strategies. *ASAC*, 30, 1–14.
- Ronen, S., & Zuroff, D. C. (2017). How does secure attachment affect job performance and job promotion? The role of social-rank behaviors. *Journal of Vocational Behavior*, 100, 137–148.
- Ronen, S., & Mikulincer, M. (2009). Attachment orientations and job burnout: The mediating roles of team cohesion and organizational fairness. *Journal of Social and Personal Relationships*, 26, 549–567.
- Rotaru, T.-S., & Rusu, A. (2013). Psychometric properties of the Romanian version of Experiences in Close Relationships-Revised questionnaire (ECR-R). *Psiworld*, 78, 51–55.
- Rutter, M. (2006). Implications of resilience concepts for scientific understanding. *Annals of the New York Academy of Sciences*, 1094(1), 1–12.

- Schat, A. C., & Frone, M. R. (2011). Exposure to psychological aggression at work and job performance: The mediating role of job attitudes and personal health. *Work and Stress*, 25(1), 23–40.
- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and research: A critical analysis*. London, UK: Taylor and Francis.
- Schaufeli, W. B., & Taris, T. W. (2005). The conceptualization and measurement of burnout: Common ground and worlds apart. *Work & Stress*, 19(3), 256–262.
- Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the Job Demands-Resources Model: Implications for improving work and health. In G. Bauer & O. Hammig (Eds.), *Bridging occupational, organizational and public health* (pp. 43–68). Dordrecht, The Netherlands: Springer.
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30, 893–917.
- Schaufeli, W. B., Leiter, M. P., Maslach, C., & Jackson, S. E. (1996). Maslach Burnout Inventory-General survey. In C. Maslach, S. E. Jackson, & M. P. Leiter (Eds.), *The Maslach Burnout Inventory: Test manual* (3rd ed., pp. 22–26). Palo Alto, CA: Consulting Psychologists Press.
- Schaufeli, W. B., & Salanova, M. (2007). Efficacy or inefficacy, that's the question: Burnout and work engagement, and their relationship with efficacy beliefs. *Anxiety, Stress and Coping*, 20(2), 177–196.
- Scrima, F., Di Stefano, G., Guarnaccia, C., & Lorito, L. (2015). The impact of adult attachment style on organizational commitment and adult attachment in the workplace. *Personality and Individual Differences*, 86, 432–437.
- Shimazu, A., & Schaufeli, W. B. (2009). Is workaholism good or bad for employee well-being? The distinctiveness of workaholism and work engagement among Japanese employees. *Industrial Health*, 47(5), 495–502.
- Simmons, B. L., Gooty, J., Nelson, D. L., & Little, L. M. (2009). Secure attachment: Implications for hope, trust, burnout, and performance. *Journal of Organizational Behavior*, 30(2), 233–247.
- Sulea, C., Virga, D., Maricutoiu, L. P., Schaufeli, W., Zaborila Dumitru, C., & Sava, F. A. (2012). Work engagement as mediator between job characteristics and positive and negative extra-role behaviours. *Career Development International*, 17(3), 188–207.
- Swider, B. W., & Zimmerman, R. D. (2010). Born to burnout: A meta-analytic path model of personality, job burnout, and work outcomes. *Journal of Vocational Behavior*, 76(3), 487–506.
- Taris, T. W. (2006). Is there a relationship between burnout and objective performance? A critical review of 16 studies. *Work & Stress*, 20(4), 316–334.
- Van Beek, I., Hu, Q., Schaufeli, W. B., Taris, T. W., & Schreurs, B. H. J. (2012). For fun, love, or money: What drives workaholic, engaged, and burned-out employees at work? *Applied Psychology*, 61(1), 30–55.
- van den Brink, F., Smeets, M. A., Hessen, D. J., & Woertman, L. (2016). Positive body image and sexual functioning in Dutch female university students: The role of adult romantic attachment. *Archives of Sexual Behavior*, 45(5), 1217–1226.
- Vanheule, S., & Declercq, F. (2009). Burnout, adult attachment and critical incidents: A study of security guards. *Personality and Individual Differences*, 46(3), 374–376.
- Yip, J., Ehrhardt, K., Black, H., & Walker, D. O. (2017). Attachment theory at work: A review and directions for future research. *Journal of Organizational Behavior*, 39, 185–198.
- West, A. L. (2015). Associations among attachment style, burnout, and compassion fatigue in health and human service workers: A systematic review. *Journal of Human Behavior in the Social Environment*, 25(6), 571–590.
- Wu, C., & Parker, S. (2017). The role of leader support in facilitating proactive work behavior: A perspective from attachment theory. *Journal of Management*, 43(4), 1025–1049.