

Running Head: ENGAGEMENT POS

**The Buffering Effect of Perceived Organizational Support on the Relationship between
Work Engagement and Behavioral Outcomes**

Amanda Shantzⁱ

Assistant Professor, School of Human Resource Management, York University

4700 Keele Street, Toronto, ON, M3J 1P3

E-mail: shantza@yorku.ca

Phone: (416) 736-5806 Fax: (416) 736-5188

Kerstin Alfes

Assistant Professor, Department of Human Resource Studies, Tilburg University

Warandelaan 2, 5037 AB Tilburg, The Netherlands

E-mail: K.Alfes@uvt.nl

Phone: 31 13 466 2499 Fax: 31 13 466 2053

Gary P. Latham

Secretary of State Professor of Organizational Effectiveness Rotman School of Management,
University of Toronto

105 St. George Street Toronto, ON M5S 3E6

E-mail: latham@rotman.utoronto.ca

Phone: (416) 978-4916 Fax: (905) 881-6030

Abstract

The present study examined the commonly held assumption that a low level of work engagement leads to higher turnover intentions and employee deviant behavior. Employee survey results (n=175) from a manufacturing organization in the United Kingdom showed that employee work engagement correlates negatively with lagged measures of turnover intentions and deviant work behavior directed towards the organization. The results suggest that perceived organizational support moderates the relationship between work engagement and turnover intentions and deviant behaviors directed towards the organization, such that perceived organizational support compensates for relatively low levels of work engagement.

Keywords: work engagement, perceived organizational support, turnover intentions, deviant behavior

A mounting body of research extols the benefits of an engaged workforce. Research has revealed that employee work engagement is positively related to life and job satisfaction (e.g., Hakanen & Schaufeli, 2012; Saks, 2006), task performance (e.g., Bakker, Demerouti, & Verbeke, 2004) and work ability (Airila, Hakanen, Punakallio, Lusa, & Luukkonen, 2012), and negatively related to absenteeism (Schaufeli, Bakker, & Van Rhenen, 2009), deviant behavior (e.g., Shantz, Alfes, Truss, & Soane, 2013; Sulea et al., 2012) and turnover intentions (e.g., Halbesleben, 2010). In light of these findings, researchers have argued the necessity of focusing on ways to increase employee work engagement (e.g., Bakker, 2011). In the search to discover the antecedents of work engagement, the possibility that the relationship between work engagement and work outcomes varies as a function of a moderating variable has yet to be examined. As Parker and Griffin (2011) noted, low levels of work engagement do not necessarily imply correspondingly low levels of desirable work outcomes (e.g., higher turnover intentions and deviant behavior). This is because other resources in the work environment may buffer the effects of lower levels of engagement.

Based upon Parker and Griffin's (2011) arguments, the major hypothesis tested in the present study is that a low level of work engagement may not always lead to lower levels of desirable work outcomes. This is because relatively disengaged employees may exhibit lower levels of turnover intentions and deviant behavior because of other available resources in the work environment. In the present study, we jointly apply conservation of resources theory (Hobfoll, 2001, 2002) and the buffering hypothesis (Caplan, 1974) to argue that an organizational resource, that is, perceived organizational support (POS; Eisenberger, Huntington, Hutchison, & Sowa, 1986) may compensate for a low level of work engagement.

The present study was designed to contribute to the literature in four ways. First, we identify a possible moderator of the relationship between employee work engagement and turnover intentions and deviant behavior. Although some research has examined interactions

among personal and job-related factors as antecedents of work engagement (e.g., Hakanen, Bakker, & Demerouti, 2005; Hakanen & Lindbohm, 2008), to date, no empirical studies have examined a boundary condition of the relationship between engagement and important individual outcomes. Whetten (1989) and subsequently Colquitt and Zapata-Phelen (2007), argued that a theory describes the conditions under which a hypothesized relationship holds (e.g., moderators). Thus, examining POS as a moderator enhances engagement theory by identifying conditions under which the relationship between engagement and its outcomes are amplified or attenuated. Moreover, assessing an organizational moderator, that is, POS, is also of practical significance for managing the relationship between engagement and work behavior. To the extent that POS acts as a moderator, organizations can reduce the likelihood that employees who are relatively disengaged with their work will have higher intentions to quit and engage in deviant behavior at work.

The present study also contributes to engagement theory by positioning work engagement as a work-related energy resource that is interchangeable with other resources (Gorgievski-Duijvesteijn & Hobfoll, 2008). Although prior research has applied conservation of resources theory to work engagement theory (e.g., Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Hakanen, Peeters, & Perhoniemi, 2011; Halbesleben, Jaron Harvey, & Bolino, 2009; Schaufeli & Salanova, 2007), these studies have theorized that engagement is an outcome of job resources. In the present study, consistent with Gorgievski-Duijvesteijn and Hobfoll (2008), we conceptualized engagement as an energetic resource in and of itself.

Third, the present study contributes to a body of research that positions POS in terms of resource allocation (e.g., Hochwarter, Witt, Treadway, & Ferris, 2006; Panaccio & Vandenberghe, 2009; Witt & Carlson, 2006). Although POS has traditionally been viewed as a social exchange process in that it sets the basis for exchange relationships (Blau, 1964; Eisenberger et al., 1986), researchers have suggested that POS also acts as a resource from

which employees may draw. Consistent with conservation of resources theory, we hypothesized that low levels of engagement implies depletion of a work-related energy resource (e.g., engagement) which can be compensated for by an organization-related resource (e.g., POS).

A fourth contribution of this study is that we examine the relationship between engagement and turnover intentions and deviant behavior. Two meta-analyses show that there are far fewer empirical studies that have examined the relationship between engagement and these two outcome variables, relative to organizational commitment and job performance (Christian, Garza, & Slaughter, 2011; Halbesleben, 2010). Although the results of these meta-analyses clearly support the relationship between engagement and positive work-related attitudes and behaviors, there is a need for research on the extent to which engagement leads to less desirable outcomes for organizations, such as turnover intentions and deviance. Moreover, few studies that have examined the relationship between engagement and turnover intentions, and none of the studies that have examined the relationship between engagement and deviance, have employed lagged dependent measures. Hence the present study contributes to the turnover and deviant behavior literatures by enhancing the external validity of prior research that has positioned engagement as a determinant of these outcomes.

Theoretical Background and Hypotheses

The Effect of Work Engagement on Turnover Intentions and Deviant Behavior

Schaufeli and Bakker (2004) operationalized work engagement as an active, positive, work-related state that encompasses three dimensions, namely, vigor, dedication, and absorption. Vigor is characterized by high levels of energy and mental resilience; dedication refers to being strongly involved in one's work and feeling enthusiastic about it; and absorption refers to being fully concentrated and engrossed in one's work so that time passes quickly. The job demands resources model (JD-R) has been extensively applied in the

literature to explain employee burnout and work engagement (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Hakanen, Bakker, & Schaufeli, 2006).

The JD-R model specifies two processes that are caused by different personal and work-related factors. In the health impairment process, high job demands exhaust employees' mental and physical resources, leading to employee burnout, and to subsequent health problems. In contrast, the motivational process predicts that job resources foster employee engagement, leading to positive attitudes and behaviors at work.

In the present study, we focus on the part of the JD-R model that predicts that engagement is related to valued organizational outcomes, in particular, lower turnover intentions and deviant behaviors directed towards the organization. Turnover intentions are considered the penultimate step in a sequence of withdrawal behavior because previous studies have shown that intention to leave is positively related to actual turnover (Mobley, Horner, & Hollingsworth, 1978). Deviant behavior includes behaviors such as theft, damaging an organization's property, arriving late to work, and taking unauthorized breaks. Hence, deviant behavior negatively impacts the organization and threatens its well-being (Robinson & Bennett, 1995).

There are a number of reasons to expect that work engagement is negatively related to turnover intentions and deviant behavior. First, the experience of engagement is described as a fulfilling positive work-related state of mind (Schaufeli & Bakker, 2004) and is positively related to good health and positive affect (Avey, Wernsing, & Luthans, 2008; Sonnentag, 2003). Such positive experiences and emotions serve as energetic resources that are likely to result in an employee's desire to remain in the organization. Moreover, since employees who engage in deviant behavior also tend to experience negative emotions (Fox, Spector, & Miles, 2001), engaged employees may be less likely to commit deviant acts.

Second, according to social exchange theory (Blau, 1964), when both the employee and employer abide by exchange rules, the result is a trusting and loyal relationship (Cropanzano & Mitchell, 2005). Saks (2006) argued that employees who are engaged at work experience a reciprocation of favorable exchanges with their organization. As a result, employees who are engaged are likely to have positive relationships with their employer and will therefore be likely to report intentions to remain in the organization. Similarly, employees in a positive exchange relationship with their employer are likely to refrain from committing acts of deviant behavior in order to maintain the quality of their relationship (e.g., Murphy, Wayne, Liden, & Erdogan, 2003).

Third, engaged employees are likely to find it difficult to detach from their work because they have invested so much energy into it, and they identify with the work that they do (Schaufeli & Bakker, 2004). Changing jobs may be a risky investment of time and effort that engaged employees are unwilling to take (Halbesleben, 2010). Committing acts of deviance is also risky for engaged employees. Given their energetic resources, engaged employees may not purposefully commit acts that are designed to harm the organization because of the negative consequences that are likely to ensue.

The results of a meta-analysis of four studies showed a moderate relationship between engagement and turnover intentions (Halbesleben, 2010). Two cross-sectional studies have revealed the negative relationship between work engagement and deviance (Shantz et al., 2013; Sulea et al., 2012). Although there are exceptions (e.g., Schaufeli et al., 2009), most research on the outcomes of engagement have used cross sectional designs. The present study uses a lagged measure of turnover intentions and deviant behavior to test the following hypotheses:

Hypothesis 1: Employee work engagement is negatively related to subsequent turnover intentions.

Hypothesis 2: Employee work engagement is negatively related to subsequent deviance.

The Buffering Effect of Perceived Organizational Support

Research in human resource management (HRM) has focused on identifying ways to increase engagement. However, there appears to be a presumption in the literature that engagement is *the* key to unlocking productivity. We questioned this presumption by examining a possible moderator of the relationship between engagement (whereby a low level of engagement is operationalized as one standard deviation below the sample mean) and work-related outcomes, namely, an employee's POS.

POS refers to employees' global beliefs concerning the extent to which their organization values their contributions and cares about their wellbeing (Eisenberger et al., 1986). This variable was chosen by the present researchers because prior research has established its buffering role on negative workplace phenomena (e.g., Schat & Kelloway, 2003). Moreover, a number of studies have found direct negative relationships between POS and turnover intentions and deviant behavior (e.g., Colbert, Mount, Harter, Witt, & Barrick, 2004; Rhoades, Eisenberger, & Armeli, 2001). Prior research has also identified POS as an antecedent of work engagement (e.g., Kinnunen, Feldt, & Makikangas, 2008). However, there are also theoretical reasons to hypothesize that POS moderates the relationship between relatively low levels of engagement and turnover intentions and deviant behavior. Both Hobfoll's (1989) conservation of resources theory and Caplan's (1974) buffering hypothesis suggest that POS may compensate for relatively lower levels of engagement.

Conservation of resources theory rests on the tenant that individuals strive to obtain, retain, foster, and protect valued resources. Resources have intrinsic and/or instrumental value. They include materials (e.g., income), conditions (e.g., work environment), personal resources (e.g., self-efficacy), and energy resources (e.g., engagement). When a loss or threat

of a loss occurs, people engage in efforts to avoid further loss. Doing so can influence an individual's health, wellbeing, and behavior (Gorgievski-Duijvesteijn & Hobfoll, 2008; Hobfoll, 2001).

Research has positioned both engagement and POS as resources from which an employee may draw in the workplace. Gorgievski-Duijvesteijn and Hobfoll (2008), for example, described engagement as an "intrinsic energetic resource" which is inherently pleasant. When employees' energetic states are altered from their optimal level, employees are likely to experience negative outcomes. POS is likewise an important resource. A high level of POS implies the provision of support for workers (Kraimer, Wayne, & Jaworski, 2001) in terms of both socio-emotional needs and in terms of equipment, funding, technology, and physical assistance (Eisenberger et al., 1986).

Hobfoll, Freedy, Lane and Geller (1990) emphasized that an important component of conservation of resources theory is the "substitution hypothesis". They suggested that people are motivated to protect resources that are valued, especially those that protect their identity. Resource substitution is a means to attain these goals (Hobfoll & Leiberman, 1987). The substitution hypothesis suggests that resources are substitutable for one another to meet the demands caused by a loss or a threat of a loss of resources. Hence if one resource is low, another may compensate for it. Hobfoll et al. also argued that any resource that fits the environmental circumstance may substitute for other resources, respectively.

Accordingly, we hypothesized that employees with a depleted work-related energy resource, such as engagement, may draw from a different work-related resource, such as POS. POS is likely to compensate for lower levels of work engagement since it has been shown to effectively counterbalance unfavorable internal and external conditions (e.g., Byrne & Hochwarter, 2006; Hochwarter et al., 2006; Kinnunen et al., 2008). For example, Hochwarter, Witt, Treadway, and Ferris (2006) found that social skill was more strongly

related to performance among employees who reported low rather than high levels of POS. Consistent with their research, we hypothesized that relatively disengaged employees who have high levels of POS are likely to maintain their motivation to remain employed with the organization and refrain from committing deviant acts.

Support for this hypothesis can be inferred from social exchange theory which states that when an organization provides both tangible and intangible resources, employees will reciprocate in kind (Blau, 1964; Saks, 2006). Our theoretical model builds upon both social exchange theory and conservation of resources theory. The former predicts that if employees are not engaged with work, they will reciprocate with poorer job attitudes and behaviors. Conservation of resources theory suggests that this may not always be the case; if employees are able to replace engagement with another resource (i.e. POS), they will have lower turnover intentions and deviant behavior. Employees who are already well resourced (relatively high levels of engagement), on the other hand, may not require an additional pool of resources to draw from.

These assertions are consistent with Caplan's (1974) buffering hypothesis which states that support ameliorates the deleterious effects of stress on an individual's health and wellbeing, and that support has little or no impact on individuals who are not stressed. Research in HRM has shown that POS can buffer the negative effects of experiencing mistreatment in organizations. For example, Schat and Kelloway (2003) found that victims of violence who reported feeling supported by their organization reported less decline in emotional well-being, physical health, and job-related positive affect compared to victims who did not feel supported. Similarly, Miner, Settles, Pratt-Hyatt, and Brady (2012) found that at low levels of POS, incivility had a positive relationship with physical illness, and a negative relationship with job satisfaction. However, at high levels of POS, there was no significant relationship between incivility and either outcome measure. These findings

suggest that employees may have lower turnover intentions, and enact fewer deviant behaviors even when they feel disengaged from their work, provided that they feel supported by their organization. At high levels of engagement, on the other hand, POS may be less influential on these three outcomes.

On the basis of conservation of resources theory and the buffering hypothesis, we hypothesized that POS buffers the negative influence of lower levels of engagement on work-related outcomes. When engagement is low, POS has a compensatory effect. Thus, positive work-related outcomes are higher than if engagement and POS are both low (and vice versa). Thus the following hypotheses were tested:

Hypothesis 3: POS moderates the relationship between employee work engagement and turnover intentions such that POS compensates for relatively low levels of work engagement.

Hypothesis 4: POS moderates the relationship between employee work engagement and deviant behavior such that POS compensates for relatively low levels of work engagement.

Method

Participants and Procedure

The organization that employed the participants in this study is a UK-based plastics manufacturer that produces blow-molded plastic bottles for the food and drink industry. All 509 employees were invited to complete two surveys administered twelve months apart. In both surveys, employees were informed of the purpose of the study and assured anonymity. Specifically, they were informed that individual responses would not be shared with the organization, and that the data would be used solely for research purposes.

All employees were given time to complete the surveys at work, and they were asked to return them directly to the research team. In the first survey, individuals rated their

perceptions of organizational support and their level of work engagement, as per the measures described below. From the sample of 509 employees, 284 questionnaires were completed, constituting a response rate of 56%.

Twelve months later, all employees who participated in the first survey were invited to take part in the second survey, following the same procedures used previously. Employees rated their turnover intentions and the frequency with which they engaged in deviant behavior. A one-year follow-up was chosen because engagement is defined as a persistent psychological state that does not change very much in the short term (Schaufeli et al., 2009; Schaufeli & Salanova, 2007).

One hundred seventy five employees completed the second survey, constituting a response rate of 62%. Of the resulting sample, 90.8% were male. The mean age of the employees was 40.43 years ($SD=11.24$). Their average tenure with this organization was 7.07 years ($SD=5.55$). The sample consisted of employees in a number of different occupations, namely senior managers (5.3%), administrative and support (5.6%), managers (15%), skilled trades (13.5%), machine operators (56%) and elementary occupations, such as janitors (1.1%). However, 3.5 percent of the sample indicated 'other' when asked about their job role. The hypotheses were tested using the sample of employees who participated in both surveys ($n=175$).

Measures

Employee Work Engagement. Employee work engagement was assessed with the 9-item version of the Utrecht Work Engagement Scale (UWES-9; Schaufeli, Bakker, & Salanova, 2006b). This scale has been used in numerous studies (e.g., Fairlie, 2011; Seppälä et al., 2009; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009b) and has been shown to have both high internal consistency and test-retest reliability, as well as discriminant, convergent, and construct validity (Schaufeli, Bakker, & Salanova, 2006a; Seppälä et al.,

2009). Each facet of work engagement, namely, absorption (e.g., “I am immersed in my work”), dedication (e.g., “I am enthusiastic about my job”) and vigor (e.g., “At work, I feel full of energy”) was assessed with three items and a 7-point rating scale from 1 (“never”) to 7 (“always”) for all subscales. The subscales were combined to measure the overall level of work engagement.

Perceived Organizational Support. POS was measured with a 4-item, 7-point version of the Survey of Perceived Organizational Support (Eisenberger et al., 1986). Participants responded to items such as, “My organization really cares about my wellbeing.” Rhoades and Eisenberger (2002, p. 699) stated that “because the original scale is uni-dimensional and has high internal reliability, the use of shorter versions does not appear problematic”. Alfes, Shantz, Truss and Soane (2013) found that this 4-item measure was reliable (Alpha = .91).

Turnover intentions. Turnover intentions were measured using a two-item measure from Boroff and Lewin (1997), which, in their study was reliable (Alpha = .80): “During the next year, I will probably look for a new job outside my current employer” and “I am seriously considering quitting my current employer for an alternative employer.”

Deviant behavior. Deviant behavior toward the organization was measured with four items adapted from Bennett and Robinson (2000). A sample item is: “In the past 6 months, how frequently have you taken an additional or longer break than is acceptable in your workplace?” The response scale ranged from 1 (“never”) to 7 (“always”). Prior research has found that this scale is reliable (e.g., Shantz et al., 2013, Alpha = .81).

Control Variables. In a meta-analysis of the correlates of turnover, Griffith, Hom, and Gaertner (2000) found that gender moderated the relationship between age and turnover, and employee age moderated the tenure-turnover relationship. In a meta-analysis of the correlates of deviance, Berry, Ones and Sackett (2007) found that age, being female, and tenure were negatively related to deviance. Consequently, gender (1, female; 0, male), age, and tenure

were used as control variables. In addition, we controlled for well-being, a proxy for positive affect (Soane et al., 2013). The literature on happiness suggests that current feelings are integrated into global assessments of affective well-being (Schwarz & Clore, 1983; Schwarz & Strack, 1999). Positive affect may partially explain the correlations among the self-report data items. Goldberg's (1978) measure of wellbeing was used (e.g., "I don't lose sleep over work-related issues") because it has demonstrated high levels of reliability and validity.

Results

Descriptive Statistics

Scale reliabilities, means and standard deviations, and inter-scale correlations for all variables are presented in Table 1.

.....
Insert Table 1 about here
.....

We examined whether the participants who completed the first survey ($n=284$) reported substantially different levels of POS and engagement versus those who completed both surveys ($n=175$). Engagement and POS were examined using ANOVA as a function of a dummy variable reflecting survey 2 participation. There was no significant difference between respondents who only completed the first survey ($M=4.21$, $SD=1.47$) versus those who completed both surveys ($M=4.68$, $SD=1.43$) in terms of POS ($F=1.18$, $p=n.s.$). Although the effect size is very small ($\eta^2=.03$), those who did not complete the second survey ($M=4.42$, $SD=1.21$) reported lower levels of engagement than those who responded to both surveys ($M=4.88$, $SD=1.42$).

We also examined whether the control variables differed between those who only completed the first survey versus those who completed both surveys. Again, there was no significant difference between those who only completed the first survey ($M=38.82$, $SD=13.03$) and those who completed both surveys ($M=41.36$, $SD=10.0$) in terms of age.

However, those who completed both surveys ($M=7.65$, $SD=5.91$) had higher levels of tenure, albeit with a small effect size, than those who completed the first survey only ($M=6.09$, $SD=4.75$, $\eta^2=.02$). A cross-tabulation analysis showed that there was no statistically significant difference in the number of men versus women who only completed the first survey versus those who completed both surveys ($\chi^2=.57$, $p = n.s.$).

Measurement Models

Because the measures of work engagement, POS, turnover intentions and deviant behavior were collected from a single source, a series of confirmatory factor analyses were conducted to establish the discriminant validity of these scales. Specifically, a full measurement model was tested. The three facets of work engagement loaded onto a general engagement factor, and all indicators for POS, turnover intentions, and deviant behavior were allowed to load on their respective factors. All factors were allowed to correlate. Six fit indices were calculated to determine how well the model fit the data (Hair, Black, Babin, Anderson, & Tatham, 2005). For the χ^2/df values, less than 2.5 indicates a good fit (Arbuckle, 2006). For the goodness of fit index (GFI), comparative fit index (CFI), and normed fit index (NFI), values greater than .95 represent a good model fit (Bentler, 1990; Bentler & Bonett, 1980). For the Root Mean Square Error of Approximation (RMSEA) and the Standardized Root Mean Square Residual (SRMR), values less than .05 indicate a good model fit (Browne & Cudeck, 1993; Hu & Bentler, 1998).

The four-factor model showed a good model fit ($\chi^2= 60$; $df = 59$; $GFI = .95$; $CFI= 1.00$; $NFI= .96$; $RMSEA = .01$; $SRMR = .04$). Next, sequential χ^2 difference tests were conducted. Specifically, the full measurement model was compared to six alternative nested models, as shown in Table 2. Results of the measurement model comparison reveal that the model fit of the alternative models was significantly worse compared to the full measurement model (all at $p < .001$). This suggests that the variables in this study are distinct.

.....
Insert Table 2 about here
.....

Hypotheses Testing

Hypotheses 1 and 2 predicted that engagement is negatively related to turnover intentions and deviant behavior, respectively. Correlations presented in Table 1 show support for these hypotheses. Table 3 presents the results of regression analyses. The relationships among engagement, turnover intentions and deviant behavior are significant and negative, after controlling for the control variables. Therefore, hypothesis 1 and 2 are supported.

Hypotheses 3 and 4 focused on the effect of POS at relatively low levels of engagement. To reduce multicollinearity among the predictor variables and the interaction terms, all variables were standardized before entering them in the analyses (Aiken & West, 1991). In order to test the hypotheses, we ran hierarchical regressions including an interaction term between POS and engagement on the two outcome measures (see Table 3). The presence of a significant interaction means that there is significant moderation (i.e., that the association between the predictor and criterion variables is significantly different across levels of the moderator, or that the association is conditional on values of the moderator). However, the interaction term does not specify the conditions that dictate how the predictor is specifically related to the outcome, which is at question in the present study. Therefore, to examine those with low versus high levels of engagement, simple slopes tests were conducted whereby we examined whether the interaction was significant for those who reported a relatively low level of engagement (one standard deviation below the mean) versus those who reported a relatively high level of engagement (one standard deviation above the mean).

In order to show support for the hypotheses, the results must show significant interaction effects, and the simple slope results must show that the slope of the line for those who report low levels of engagement is significantly different from zero. For those who report relatively high levels of engagement, the slope of the line should not be significantly

different from zero. Interaction effects were interpreted consistent with both Aiken and West (1991) and Field (2013).

Hypothesis 3 stated that there is an interaction between engagement and POS on turnover intentions, and that POS compensates for relatively low levels of engagement. The results, shown in Table 3, revealed that the interaction term was significant. Therefore, a simple slopes analysis was conducted. The results showed that POS moderated the relationship between employee engagement and turnover intentions for those with lower ($t=2.11$, $p < .05$), but not higher levels ($t=-0.07$, n.s.) of POS. Thus, hypothesis 3 was supported.

Hypothesis 4 predicted an interaction between engagement and POS on deviant behavior, such that POS compensates for relatively low levels of engagement. As shown in Table 3, the interaction term is significant for deviant behavior. The simple slopes analysis revealed that POS was significant for low ($t=-2.64$, $p < .05$), but not high ($t=-.18$, n.s.) levels of POS. Thus, support was obtained for hypothesis 4.

.....
Insert Table 3 about here
.....

The plots for the significant interactions are shown in Figures 1 and 2.

.....
Insert Figures 1 and 2 about here
.....

Discussion

The main findings from the present study indicate that POS compensates for relatively low levels of work engagement. Employees who were relatively disengaged were no more likely to report intentions to leave the organization, or to engage in deviant behavior than those who were engaged *if* they perceived that their work environment was supportive. In other words, a low level of work engagement was associated with a higher level of turnover

intentions and deviance only when those employees did not perceive that they were supported by their organization.

These findings lend support to conservation of resources theory and the substitution hypothesis in particular. The theory states, and the present data suggest, that seeking ways to replace a depleted resource is a direct way to offset the loss of another resource (Hobfoll et al., 1990). Although employees who are relatively disengaged are lacking in work-related energy resources (Gorgievski-Duijvesteijn & Hobfoll, 2008), the results of the present study suggest that they are able to recoup their loss with the support they perceive they receive from the organization.

The present findings are also consistent with Caplan's (1974) buffering hypothesis. Despite the fact that the hypothesis was developed to explain the effect of support on the outcomes of stress, the results of the prior empirical work in support of the buffering hypothesis shows a strikingly similar resemblance to the pattern of results found in the current study. Indeed, our results confirmed the applicability of Caplan's hypothesis to explaining the relationships among engagement, POS and employee outcomes in that we found that POS appears to compensate for a low level of employee engagement.

The contributions to engagement theory are at least two-fold. First, prior research has focused on the interactive effect of job demands and resources on work engagement and burnout. For example, several studies have shown that job, personal and social resources buffer the impact of job demands on stress-reactions (e.g., Hakanen et al., 2005; Hakanen & Lindbohm, 2008; Xanthopoulou et al., 2007). In addition, research has revealed that job resources in particular have motivational potential when job demands are high (e.g., Bakker et al., 2007). No research, to our knowledge, has examined moderators in the subsequent stages of the JD-R model, that is, between work engagement and its subsequent outcomes. Hence, our first contribution to engagement theory is the identification of a boundary

condition on a hypothesized relationship within the JD-R model. As the JD-R model continues to develop, an important line of research involves the identification of additional moderators that either amplify or attenuate the relationship between engagement and its outcomes.

Our second contribution to engagement theory lies in the manner in which we conceptualized engagement using conservation of resources theory. A number of researchers have begun to use the JD-R model and conservation of resources theory concomitantly to explain the correlates of work engagement (e.g., Hakanen et al., 2011). However, in these studies, job resources, as posited in the JD-R model, are treated as analogous to ‘resources’ as posited by the conservation of resources model. In particular, it has been argued that engagement is most likely to occur when employees have high levels of work-related resources (Bakker et al., 2007; Halbesleben et al., 2009; Schaufeli & Salanova, 2007). In the present study, we conceptualized engagement both as a positive work-related state, and as an energetic resource in and of itself (Gorgievski-Duijvesteijn & Hobfoll, 2008). These descriptions of engagement – as a state and resource – are compatible in that a positive state can serve as an energetic resource (Mauno, Kinnunen, & Ruokolainen, 2007). Much like Xanthopoulou, Bakker, Demerouti and Schaufeli (2009a) who have added to the JD-R model by arguing that self-efficacy, organization-based self-esteem, and optimism are “personal resources,” engagement may also be considered an “energetic resource” that is interchangeable with other job and personal resources. More empirical work is needed to fully delineate how the two theories work together to explain engagement in work settings.

Although POS is a central construct in social exchange theory, the present study joins a small collection of studies that have conceptualized POS as an important resource that can buffer the negative consequences of work-related attitudes and states (e.g., Hochwarter et al., 2006; Panaccio & Vandenberghe, 2009; Witt & Carlson, 2006). The two theoretical

frameworks used in the present study are compatible in that social exchange theory suggests that at low levels of POS, employees experience negative outcomes; conservation of resources theory, however, is complementary in the addendum that low levels of POS may cause employees to replace that lost resource with a different resource. The result of such replacement is a reduction of negative outcomes. Hence the present study suggests the versatility of POS in that it can be seen not only as the basis of social exchange relationships, but also as an organization-based resource that employers can provide to employees.

Fourth, the results of this study contribute to the literatures on turnover intentions and deviance. Although meta-analyses have demonstrated a positive relationship between engagement and positive job attitudes and behaviors (Christian et al., 2011; Halbesleben, 2010), there are far fewer studies that have examined the relationships between engagement, turnover intentions, and deviant behavior. Moreover, we used lagged outcome measures. Doing so reduces the effect of transient mood on survey response (Podsakoff & Organ, 1986). In addition, the present findings contribute to these two literatures by examining how this combination of job and organization-related resources can explain the variability of turnover intentions and deviant behaviors.

Practical Implications

The findings from the present study show that there is indeed a direct relationship between work engagement, turnover intentions, and deviant behavior. Hence, HR managers are well advised to monitor engagement levels via employee surveys. HR managers may benefit from knowing that a number of studies conducted at different times and in different settings find the same relationship between work engagement and sundry employee outcomes. This is because HR managers are often asked to demonstrate the value of HR practices on outcomes such as turnover intentions and deviant behavior.

However, HR managers should not focus solely on employee engagement scores.

Employees who are relatively disengaged with work will likely report lower turnover intentions and engage in fewer deviant acts *if* they believe they are supported by the organization. HR managers should therefore take steps to ensure there is a supportive work environment because this is an effective way of getting relatively disengaged employees to maintain positive intentions towards their organization.

In order to increase employees' POS, HR managers can take a three-pronged approach. First, the policies and practices concerning resource distribution should be procedurally fair (Shore & Shore, 1995). For instance, employees should be provided with adequate notice before decisions that affect them are implemented, receive accurate and timely information, and they should be provided with an opportunity to voice concerns and provide input into decisions (Cropanzano & Greenberg, 1997).

Second, HR managers should take steps to ensure that employees have access to a high-quality employee assistance program, child-care facilities, and other methods to assist working parents to manage the work-home interface. These programs likely foster employee expectations that their organization is supportive of their personal needs in that they symbolize an organization's concern for employee welfare (Grover & Crooker, 1995). HR managers can also host Health and Wellness Days, or provide employees with "duvet-days" in order to facilitate a friendly work-home organizational culture thereby promoting the perception among employees that their organization cares about their well-being.

Third, HR practices showing recognition of employee contributions likely foster POS (Shore & Shore, 1995). For instance, employee recognition programs, pay-for-performance schemes, promotions, autonomy and training may be perceived as initiatives that the employer values employees and cares about their wellbeing (Rhoades & Eisenberger, 2002).

An additional practical implication relates to the relationship of the control variables with the performance criteria presented in Table 1. It appears that age and tenure are

negatively related to deviance. This finding suggests that employers should re-think encouraging older employees with a relatively long employment record with the organization to take early retirement.

Limitations and Directions for Future Research

An arguable limitation of this study is the measures of turnover intentions and deviant behavior. Although the employees in this study reported the extent to which they had turnover intentions and engaged in deviant behavior 12 months after the first survey, self-report data were used in both time periods. However, it is difficult for supervisors to observe employees behaving deviantly because employees typically engage in this behavior surreptitiously. Nevertheless, objective measures of workplace deviance are desirable. Moreover, future research should control for time 1 levels of turnover intentions and deviance in order to partial out the stable effects that are associated with the criterion (Sturman, 2007), thereby reducing the influence of same-source variance (Richardson, Simmering, & Sturman, 2009; Siemsen, Roth, & Oliveira, 2010).

Despite these limitations, the present study suggests a new avenue of research in the engagement literature by examining the role of a theoretically derived boundary condition of the relationship between relatively low levels of work engagement with turnover intentions, and deviant behavior. Future research should explore other potential moderating variables, with different foci, such as the moderating effect of team dynamics, supervisor support, or co-worker support in relation to work engagement and team performance. In this regard, future research should consider stressor-support specificity theory (Cohen & McKay, 1984). This theory states that buffer effects are likely to occur when there is a match between the proposed buffer and the outcomes under study.

Finally, researchers may also wish to explore whether all employees can or wish to be engaged with their work. It is reasonable to assume that just as some individuals are

predisposed to relatively higher or lower levels of job satisfaction (Arvey, Bouchard Jr., Segal, & Abraham, 1989; Song, Li, & Arvey, 2011) so too there may be employees who are predisposed to higher or lower levels of work engagement.

Conclusion

The purpose of the present study was to examine a boundary condition of the relationships between engagement with turnover intentions and deviant behavior. The results from this study reveal that although low levels of work engagement is indeed related to high levels of turnover intentions and deviant behavior, high levels of POS buffer the relationship between engagement and these two outcome measures. The present findings suggest that emphasizing ways to heighten levels of work engagement is laudable, but it is not a sole or necessary condition for low turnover intentions and deviant behavior. HR managers should also focus on ways to increase POS in the eyes of an organization's employees.

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park: Sage.
- Airila, A., Hakanen, J., Punakallio, A., Lusa, S., & Luukkonen, R. (2012). Is work engagement related to work ability beyond working conditions and lifestyle factors? *International Archives of Occupational and Environmental Health*, 85(8), 915-925.
- Arbuckle, J. L. (2006). *Amos (version 7.0) [computer program]*. Chicago: SPSS.
- Arvey, R. D., Bouchard Jr., T. J., Segal, N., & Abraham, L. M. (1989). Job satisfaction: Environmental and genetic components. *Journal of Applied Psychology*, 74(2), 187-192.
- Avey, J. B., Wernsing, T. S., & Luthans, F. (2008). Can positive employees help positive organizational change? Impact of psychological capital and emotions on relevant attitudes and behaviors. *The Journal of Applied Behavioral Science*, 44(1), 48-70.
- Bakker, A., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1), 83-104.
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20(4), 265-269.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.
- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274-284.

- Bennett, R. J., & Robinson, S. L. (2000). Development of a measure of workplace deviance. *Journal of Applied Psychology, 85*(3), 349-360.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*(2), 238-246.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88*(3), 588-606.
- Berry, C. M., Ones, D. S., & Sackett, P. R. (2007). Interpersonal deviance, organizational deviance, and their common correlates: A review and meta-analysis. *Journal of Applied Psychology, 92*(2), 410-424.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: Wiley.
- Boroff, K. E., & Lewin, D. (1997). Loyalty, voice, and intent to exit a union firm. A conceptual and empirical analysis. *Industrial & Labor Relations Review, 51*(1), 50-63.
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park: Sage.
- Byrne, Z. S., & Hochwarter, W. A. (2006). I get by with a little help from my friends: The interaction of chronic pain and organizational support on performance. *Journal of Occupational Health Psychology, 11*(3), 215-227.
- Caplan, G. (1974). *Support systems and community mental health: Lectures on concept development*. New York: Behavioral Publications.

- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement. A quantitative review and test of its relation with task and contextual performance. *Personnel Psychology, 64*(1), 89-136.
- Cohen, S., & McKay, G. (1984). Social support, stress, and the buffering hypothesis an empirical review. In A. Baum, J. E. Singer, & S. E. Taylor (Eds.), *Handbook of psychology and health* (Vol. 4, pp. 253-267). Hillsdale: NJ Erlbaum.
- Colbert, A. E., Mount, M. K., Harter, J. K., Witt, L. A., & Barrick, M. R. (2004). Interactive effects of personality and perceptions of the work situation on workplace deviance. *Journal of Applied Psychology, 89*(4), 599-609.
- Colquitt, J. A., & Zapata-Phelan, C. P. (2007). Trends in theory building and theory testing. A five-decade study of the academy of management journal. *Academy of Management Journal, 50*(6), 1281-1303.
- Cropanzano, R., & Greenberg, J. (1997). Progress in organizational justice: Tunneling through the maze. In C. Cooper & I. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 317-372). New York: Wiley.
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management, 31*(6), 874-900.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499-512.
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*(3), 500-507.

- Fairlie, P. (2011). Meaningful work, employee engagement, and other key employee outcomes: Implications for human resource development. *Advances in Developing Human Resources*, 13(4), 508-525.
- Field, A. (2013). *Discovering statistics using spss (4 ed.)*. London: Sage.
- Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behavior (cwb) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior*, 59(3), 291-309.
- Goldberg, D. P. (1978). *General health questionnaire. Ghq12*. Windsor: NFER Publishing.
- Gorgievski-Duijvesteijn, M. J., & Hobfoll, S. E. (2008). Work can burn us out or fire us up: Conservation of resources in burnout and engagement. In J. R. B. Halbesleben (Ed.), *Handbook of stress and burnout in healthcare* (pp. 7-22). New York: Nova Science Publishers.
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, 26(3), 463-488.
- Grover, S. L., & Crooker, K. J. (1995). Who appreciates family-responsive human resource policies. The impact of family-friendly policies on the organizational attachment of parents and non-parents. *Personnel Psychology*, 48(2), 271-288.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2005). *Multivariate data analysis (6 ed.)*. New Jersey: Pearson Prentice Hall.

- Hakanen, J. J., Bakker, A. B., & Demerouti, E. (2005). How dentists cope with their job demands and stay engaged: The moderating role of job resources. *European Journal of Oral Sciences*, 113(6), 479–487.
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495-513.
- Hakanen, J. J., & Lindbohm, M. L. (2008). Work engagement among breast cancer survivors and the referents: The importance of optimism and social resources at work. *Journal of Cancer Survivorship. Research and Practice*, 2(4), 283-295.
- Hakanen, J. J., Peeters, M. C. W., & Perhoniemi, R. (2011). Enrichment processes and gain spirals at work and at home: A 3-year cross-lagged panel study. *Journal of Occupational and Organizational Psychology*, 84(1), 8-30.
- Hakanen, J. J., & Schaufeli, W. B. (2012). Do burnout and work engagement predict depressive symptoms and life satisfaction? A three-wave seven-year prospective study. *Journal of affective disorders*, 141(2), 415-424.
- Halbesleben, J. R. B. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In *Work engagement: A handbook of essential theory and research* (pp. 102-117). New York, NY, US: Psychology Press.
- Halbesleben, J. R. B., Jaron Harvey, J., & Bolino, M. C. (2009). Too engaged? A conservation of resources view of the relationship between work engagement and work interference with family. *Journal of Applied Psychology*, 94(6), 1452-1465.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524.

- Hobfoll, S. E. (2001). The influence of culture, community, and the nested-self in the stress process: Advancing conservation of resources theory. *Applied Psychology: An International Review*, 50(3), 337-421.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6(4), 307-324.
- Hobfoll, S. E., Freedy, J., Lane, C., & Geller, P. (1990). Conservation of social resources: Social support resource theory. *Journal of Social and Personal Relationships*, 7(4), 465-478.
- Hobfoll, S. E., & Leiberhan, J. R. (1987). Personality and social resources in immediate and continued stress resistance among women. *Journal of Personality and Social Psychology*, 52(1), 18-26.
- Hochwarter, W. A., Witt, L. A., Treadway, D. C., & Ferris, G. R. (2006). The interaction of social skill and organizational support on job performance. *Journal of Applied Psychology*, 91(2), 482-489.
- Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3(4), 424-453.
- Kinnunen, U., Feldt, T., & Makikangas, A. (2008). Testing the effort-reward imbalance model among Finnish managers: The role of perceived organizational support. *Journal of Occupational Health Psychology*, 13(2), 114-127.
- Kraimer, M. L., Wayne, S. J., & Jaworski, R. A. (2001). Sources of support and expatriate performance. The mediating role of expatriate adjustment. *Personnel Psychology*, 54(1), 71-99.

- Mauno, S., Kinnunen, U., & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior, 70*(1), 149–171.
- Miner, K. N., Settles, I. H., Pratt-Hyatt, J. S., & Brady, C. C. (2012). Experiencing incivility in organizations: The buffering effects of emotional and organizational support. *Journal of Applied Social Psychology, 42*(2), 340-372.
- Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied Psychology, 63*(4), 408-414.
- Murphy, S. M., Wayne, S. J., Liden, R. C., & Erdogan, B. (2003). Understanding social loafing: The role of justice perceptions and exchange relationships. *Human Relations, 56*(1), 61-84.
- Panaccio, A., & Vandenberghe, C. (2009). Perceived organizational support, organizational commitment and wellbeing. A longitudinal study. *Academy of Management Annual Meeting Proceedings, 1-5*.
- Parker, S., & Griffin, M. (2011). Understanding active psychological states: Embedding engagement in a wider nomological net and closer attention to performance. *European Journal of Work and Organizational Psychology, 20*(1), 60-67.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research. Problems and prospects. *Journal of Management, 12*(4), 531-544.
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*(4), 698-714.

- Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment of the organization: The contribution of perceived organizational support. *Journal of Applied Psychology, 86*(5), 825-836.
- Richardson, H. A., Simmering, M. J., & Sturman, M. C. (2009). A tale of three perspectives. *Organizational Research Methods, 12*(4), 762-800.
- Robinson, S. L., & Bennett, R. J. (1995). A typology of deviant workplace behaviors: A multidimensional scaling study. *Academy of Management Journal, 38*, 555–572.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology, 21*(7), 600-619.
- Schat, A. C., & Kelloway, E. K. (2003). Reducing the adverse consequences of workplace aggression and violence: The buffering effects of organizational support. *Journal of Occupational Health Psychology, 8*(2), 110-122.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior, 25*(3), 293-315.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006a). The measurement of work engagement with a short questionnaire: A cross-national study. *Education and Psychological Measurement, 66*(4), 701-716.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006b). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*(4), 701-716.

- 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(7), 893–917.
- Schaufeli, W. B., & Salanova, M. (2007). Work engagement: An emerging psychological concept and its implications for organizations. In S.W. Gilliland, D. D. Steiner, & D. P. Skarlicki (Eds.), *Research in social issues in management: Managing social and ethical issues in organizations* (pp. 135-177). Greenwich, CT: Information Age Publishers.
- Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states. *Journal of Personality and Social Psychology*, 54, 513-523.
- Schwarz, N., & Strack, F. (1999). Reports of subjective well-being: Judgmental processes and their methodological implications. In D. Kahneman, E. Diener, & N. Schwarz (Eds.), *Well-being: The foundations of hedonic psychology* (pp. 61–84). New York: Russell-Sage.
- Seppälä, P., Mauno, S., Feldt, T., Hakanen, J., Kinnunen, U., Tolvanen, A., et al. (2009). The construct validity of the utrecht work engagement scale: Multisample and longitudinal evidence. *Journal of Happiness Studies*, 10(4), 459-481.
- Seppala, P., Mauno, S., Feldt, T., Hakanen, J. J., Kinnunen, U., Tolvanen, A., et al. (2009). The construct validity of the utrecht work engagement scale: Multisample and longitudinal evidence. *Journal of Happiness Studies*, 10, 459-481.
- Shantz, A., Alfes, K., Truss, C., & Soane, E. C. (2013). The role of employee engagement in the relationship between job design and task performance, citizenship and deviant

behaviours. *International Journal of Human Resource Management* (early view online), 24(13), 2608-2627.

Shore, L. M., & Shore, T. H. (1995). Perceived organizational support and organizational justice. In R. S. Cropanzano & K. M. Kacmar (Eds.), *Organizational politics, justice, and support: Managing the social climate of the workplace* (pp. 149-164). Westport, CT: Quorum.

Siemsen, E., Roth, A., & Oliveira, P. (2010). Common method bias in regression models with linear, quadratic, and interaction effects. *Organizational Research Methods*, 13(3), 456-476.

Soane, E. C., Shantz, A., Alfes, K., Truss, C., Rees, C., & Gatenby, M. (2013). The association of meaningfulness, wellbeing and engagement with absenteeism: A moderated mediation model. *Human Resource Management*, 52(3), 441-456.

Song, Z., Li, W., & Arvey, R. D. (2011). Associations between dopamine and serotonin genes and job satisfaction: Preliminary evidence from the add health study. *Journal of Applied Psychology*, 96(6), 1223-1233.

Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between nonwork and work. *Journal of Applied Psychology*, 88(3), 518-528.

Sturman, M. C. (2007). The past, present, and future of dynamic performance research. *Research in Personnel and Human Resources Management*, 26, 49-100.

- Sulea, C., Virga, D., Maricutoiu, L. P., Schaufeli, W., Dumitru, C. Z., & Sava, F. A. (2012). Work engagement as mediator between job characteristics and positive and negative extra-role behaviors. *Career Development International*, 17(3), 188 - 207.
- Whetten, D. A. (1989). What constitutes a theoretical contribution? *Academy of Management Review*, 14(4), 490-495.
- Witt, L. A., & Carlson, D. S. (2006). The work-family interface and job performance: Moderating effects of conscientiousness and perceived organizational support. *Journal of Occupational Health Psychology*, 11(4), 343-357.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009a). Reciprocal relationships between job resources, personal resources, and work engagement. *Journal of Vocational Behavior*, 74(3), 235-244.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2009b). Work engagement and financial returns: A diary study on the role of job and personal resources. *Journal of Occupational and Organizational Psychology*, 82, 183-200.
- Xanthopoulou, D., Bakker, A. B., Dollard, M. F., Demerouti, E., Schaufeli, W. B., Taris, T. W., et al. (2007). When do job demands particularly predict burnout?: The moderating role of job resources. *Journal of Managerial Psychology*, 22(8), 766-786.

Tables and Figures
Table 1
Descriptive Statistics, Correlations and Scale Reliabilities

	Alpha	Mean	SD	1	2	3	4	5	6	7
1 Age	-	40.45	10.59							
2 Gender	-	0.12	0.32	-.03						
3 Tenure	-	7.07	5.55	.49**	-.13					
4 Wellbeing	.77	5.54	.97	.03	.08	-.01				
5 Engagement	.92	4.77	1.08	.25**	.27**	.01	.45**			
6 POS ^a	.95	4.61	1.47	.16	.23**	.36**	-.08	.61**		
7 Turnover Intentions	.91	3.20	1.85	-.22**	.01	-.23**	-.21*	-.31**	-.29**	
8 Deviant Behavior	.73	2.14	1.03	-.33**	-.15	-.26**	-.20*	-.32**	-.24**	.33**

^aPOS=Perceived organizational support

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

Table 2
Fit Statistics from Measurement Model Comparison

Models	$\chi^2(df)$	GFI	CFI	NFI	RMSEA	SRMR	χ^2_{diff}	df_{diff}
Full measurement model	60 (59)	.951	.999	.963	.010	.035		
Model A ^a	187 (62)	.844	.919	.884	.107	.073	127	3**
Model B ^b	482 (64)	.745	.728	.701	.193	.122	422	5**
Model C ^c	329 (64)	.730	.827	.796	.153	.129	269	5**
Model D ^d	187 (62)	.834	.918	.884	.107	.114	127	3**
Model E ^e	309 (64)	.752	.840	.808	.147	.129	249	5**
Model F ^f (Harman's Single Factor Test)	609 (65)	.657	.646	.622	.218	.153	549	6**

Notes: **p<.001; χ^2 =chi-square discrepancy, df=degrees of freedom; GFI=Goodness of Fit Index; CFI=Comparative Fit Index; NFI=Normed Fit Index; RMSEA=Root Mean Square Error of Approximation; SRMR= Standardized Root Mean Square Residual; χ^2_{diff} =difference in chi-square, df_{diff} =difference in degrees of freedom. All models are compared to the full measurement model

^a=Engagement and POS combined into a single factor

^b=Engagement, POS and turnover intentions combined into a single factor

^c=Engagement, POS and deviant behavior combined into a single factor

^d=Deviant behavior and turnover intentions combined into a single factor

^e=Engagement and POS combined into one factor, turnover intentions and deviant behavior combined into a second factor

^f=Engagement, POS, turnover intentions and deviant behavior combined into a single factor

Table 3
Results of Hierarchical Moderated Regression Analyses

	Turnover Intentions				Deviant Behavior			
	β (SE) ^a	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)
Gender	.02(.46)	.05(.45)	.08(.45)	.07(.44)	-.13(.23)	-.10(.23)	-.09(.23)	-.09(.25)
Age	-.11(.02)	-.02(.02)	-.02(.02)	.03(.02)	.30**(.01)	-.25**(.01)	.24**(.01)	.25**(.01)
Tenure	-.20*(.03)	-.24**(.03)	-.25**(.03)	.24**(.03)	-.12(.01)	-.13(.01)	-.15(.01)	-.14(.01)
Wellbeing	-.28**(.15)	-.14(.17)	-.12(.17)	-.11(.17)	-.23(.08)	-.12(.08)	-.12(.08)	-.10(.08)
Engagement		-.30(.17)*	-.20(.22)	-.22(.22)		-.22(.08)*	-.12(.11)	-.14(.11)
POS ^b			-.18(.20)	-.17(.20)			-.15(.10)	-.15(.10)
EngagementxPOS				.15*(.14)				.17*(.07)
Adj. R ² (change)	.12	.17*	.19**	.21*	.18	.20*	.22*	.24*
F-statistic	5.51**	6.84**	6.06**	6.80**	8.53**	8.01**	7.19**	7.11**

Notes: ^a β =standardized regression coefficient (SE = standard error)
^bPOS=Perceived organizational support
 ** $p < .01$, * $p < .05$
 n=175

Figure 1

The Interaction of Perceived Organizational Support (POS) and Engagement on Turnover Intentions

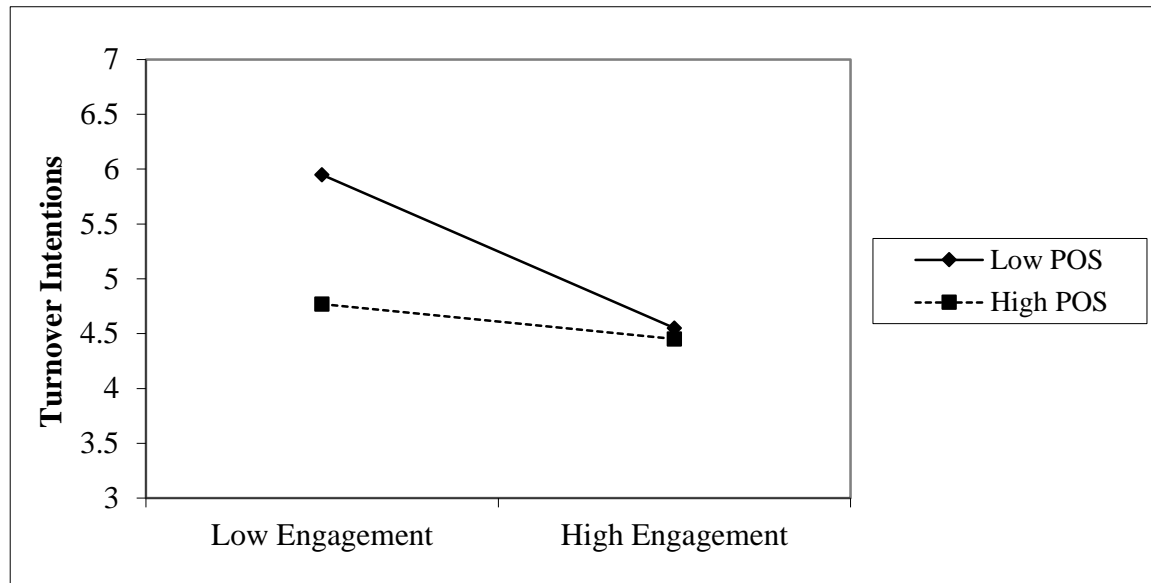
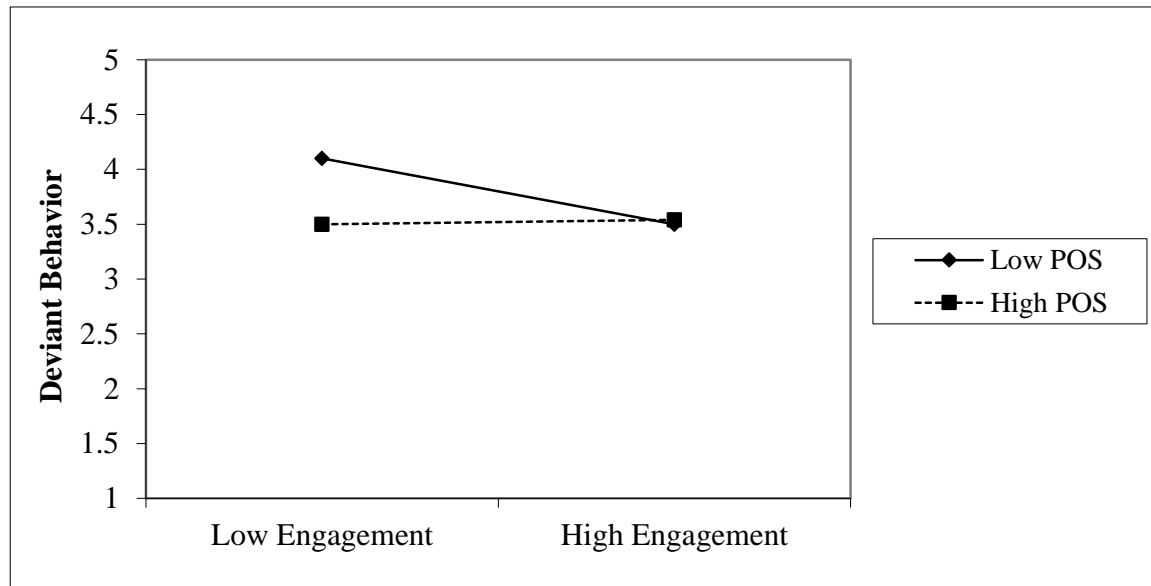


Figure 2

The Interaction of Perceived Organizational Support (POS) and Engagement on Deviant Behavior



¹ Corresponding author