

**How Negative Affectivity Moderates the Relationship between
Shocks, Embeddedness and Worker Behaviors**

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How Negative Affectivity Moderates the Relationship between Shocks, Embeddedness and Worker Behaviors

Abstract

We integrated the unfolding model of turnover, job embeddedness theory and affective events theory to build and test a model specifying the relationship between negative shocks, on-the-job embeddedness and important employee behaviors. The results showed that embeddedness mediates the relationship between negative shocks and job search behaviors as well as counterproductive work behaviors. The study further examines the role of dispositional influences on reactions to negative workplace shocks and how these reactions affect organizational citizenship behavior, counterproductive work behavior and job search behavior. Results indicated a moderated-mediation effect of negative affectivity on each of these outcomes.

Key words: turnover, job embeddedness, affective events, organizational citizenship behavior, counterproductive work behavior, job search behavior

Prior research has demonstrated that shocks, or jarring events that cause one to consider quitting, are pervasive in organizational life and may initiate more than half of all voluntary turnover (Holtom, Mitchell, Lee, & Inderrieden, 2005). However, it is also clear that not all people who experience shocks choose to leave (Burton, Holtom, Sablinski, Mitchell, & Lee, 2010). What is not yet understood is what happens in the workplace when people experience shocks but do not leave in response (Donnelly & Quirin, 2006). In the present research, we first integrate the unfolding model of turnover (Lee & Mitchell, 1994) and job embeddedness theory (Mitchell, Holtom, Lee, Sablinski, & Erez, 2001) in order to explore how negative workplace events (shocks) may disrupt employee perceptions of embeddedness and in turn relate to employee responses such as decreased organizational citizenship behavior (OCB) and increased counterproductive work behaviors (CWB) and job-search behaviors (JSB). Further, we extend this integrated model by demonstrating how negative affectivity moderates this mediated relationship.

The unfolding model of turnover introduced the notion of shocks as precipitants of organizational withdrawal behaviors. As defined by Lee and Mitchell (1994: 51), “A shock is a particular, jarring event that initiates the psychological analyses involved in quitting a job.” Such shocks represent “work events” and often lead to affective reactions. A number of empirical studies have demonstrated the prevalence and importance of shocks in the turnover process (Donnelly & Quirin, 2006; Niederman, Sumner & Maertz, 2007).

While shocks may engender thoughts of leaving, another body of research suggests that not all people who think of leaving a job actually do so. Indeed, research on job embeddedness suggests that people can become enmeshed in their jobs due to relationships, obligations, and future expectations. Empirical tests show higher levels of job embeddedness are associated with lower turnover (Crossley, Bennett, Jex & Burnfield, 2007) and absenteeism as well as higher performance and OCBs (Lee, Mitchell, Sablinski, Burton, & Holtom, 2004). However, research on the unfolding

model and on job embeddedness has yet to explore how negative work events may act to disrupt the status quo and act to reduce one's contributions to the organization in cases where the individual does not quit. Further, the association between shocks, job embeddedness, and subsequent reactions may not be uniform for all people. Indeed, Affective Events Theory (AET; Weiss & Cropanzano, 1996) suggests that a person who is high in trait Negative Affect (NA; Watson, Clark, & Tellegen, 1988) may interpret a workplace event very differently than a person low in negative affectivity. Specifically, a key tenet of AET is that people high in NA are predisposed to experience negative emotions and react more strongly to negative workplace events (Larsen & Ketelaar, 1991).

The aim of this study is to integrate key aspects of research on shocks, job embeddedness, and NA to examine the impact of negative shocks on critical workplace behaviors (e.g., JSB, OCB, CWB). In doing so, it makes at least three contributions. First, it provides an understanding of personal factors (e.g., NA) and situational factors (e.g., shocks) that interact to influence levels of job embeddedness. This goes beyond prior research that looks at the consequences of job embeddedness to begin to examine its antecedents. Second, we examine job embeddedness as one possible mediator of the effect of negative shocks on discretionary employee behavior, thus extending research on shocks and integrating principal components of the unfolding model and job embeddedness theory. Third, we identify boundary conditions to job embeddedness theory by examining an individual difference that may qualify the association between embeddedness and subsequent job search and discretionary behaviors. The resulting moderated-mediation model guiding this study is discussed in detail below.

THEORETICAL BACKGROUND

Unfolding Model of Voluntary Turnover and Shocks

One of the primary contributions of the unfolding model is the understanding that not all turnover is precipitated by job dissatisfaction. Evidence suggests shocks, which are distinguishable

events that cause an employee to consider his or her attachment to a job, also play an important role in initiating turnover. Moreover, shocks generate information or provide meaning about a person's job and are interpreted and integrated into the person's system of beliefs and images. Shocks can be personal events like winning the lottery, having a spouse transferred, losing a loved one, or adopting an infant. Organizational shocks include events such as being passed over for promotion, receiving a job offer, having an argument with the boss or earning a large bonus. This category also includes corporate takeovers, scandals, diversification, or downsizing. Note that the shocks described in both of these categories may be positive or negative and they may or may not be expected.

While many types of work events may act as shocks, in this research we focus on negative shocks for three reasons. First, research suggests that negative shocks occur more frequently than do positive shocks. Second, the modal positive shock is an unsolicited job offer (Holtom et al., 2005). While interesting in their own right and meriting attention, unsolicited job offers frequently result in rapid turnover and are unlikely to lead to active job search or long-term performance issues. Third, significant research across economics and psychology suggests that "bad is stronger than good" and that negative events are much more salient and impactful on individual behaviors than are positive events (e.g., Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Larsen & Ketelaar, 1991).

It is important to note that negative shocks are not necessarily equivalent to injustice, stress, or other aversive constructs used to describe negative work conditions. Indeed, not all instances of stress or injustice necessarily elicit thoughts of quitting. Further not all shocks are instances of injustice or stress. Whereas shocks refer to a specific *episode*, justice and stress are often studied as general *conditions* that may have evolved from patterns of negative events involving the victim as well as others. Consistent with prior research (Holtom et al., 2005), shocks are operationally defined in this study as discrete events that explicitly caused one to consider quitting a job. Notwithstanding this distinction, the existing literature on injustice and stress is informative of how people may

respond to negative episodes in the workplace and provides some insight in the present study.

When a person experiences a deleterious “work event” severe enough to consider quitting, it is also likely to impact his or her affective reactions and subsequent attitudes and behaviors. When the person has a negative reaction but does not leave quickly, the displeasure may be displayed in reduced OCB or increased CWB and JSB. Experiencing multiple shocks may have a cumulative effect that acts to increase the intensity of the response. This notion derives from a general withdrawal construct (Hanisch, Hulin, & Roznowski, 1998) which suggests that individuals who experience negative events may withdraw from unfavorable work situations by increasing their tardiness, absenteeism, or lowering their work effort. In developing equity theory, Adams (1965) argued that people do not simply become dissatisfied because of an injustice—they tend to react in some way. Reducing inputs (e.g., effort, time, energy, ideas) is one way employees can directly reduce perceived inequity. The reduction in these key inputs may be manifest over time in lower performance. In a related stream, researchers have demonstrated how mistreatment may be related to decreased OCB (Colquitt, Conlon, Wesson, Porter, & Ng, 2001) as well as increased CWB such as theft (Greenberg 1990). Further, Chen, Hui, and Segó (1998) demonstrated how OCBs are a strong indicator of work withdrawal because individuals may believe they will be punished for reducing their job performance but are unlikely to believe they can be punished for reducing OCBs.

In recent years, scholars have increasingly broadened the focus on discretionary behaviors to study what are known as CWB (Spector & Fox, 2002), deviance (Robinson & Bennett, 1995) retaliation (Skarlicki & Folger, 1997), or revenge (Bies, Tripp & Kramer, 1997). Numerous studies have found evidence of direct effects between work conditions such as unfair procedures, treatment, and/or rewards and CWB (Dalal, 2005). In sum, prior research suggests negative work experiences are related to OCB, CWB and JSB. Using this research as a foundational building block, we next integrate key aspects from job embeddedness theory to explain how shocks may be associated with

OCB, CWB and JSB through loosening one's perceived bond with the organization.

Mediating Role of Job Embeddedness

Job embeddedness represents the accumulated affective and non-affective factors that bind or enmesh people in their jobs (Mitchell et al., 2001). Job embeddedness was originally “conceived as a key mediating construct between specific on-the-job and off-the-job factors and employee retention” (Mitchell et al., 2001, p. 1108). Empirical support for embeddedness is emerging and multiple independent studies have conceptually distinguished this construct and shown unique prediction of turnover, performance and OCB above other well-known constructs such as job satisfaction, organizational commitment and job alternatives.

In addition to the direct effects of job embeddedness on discretionary behavior and organizational withdrawal, we believe that the construct may play an important mediating role in organizational life. In a recent study, Hom and colleagues (2009) demonstrated that job embeddedness may mediate the relationship between mutual- and over-investment employee-organizational relationships and key outcomes including affective commitment and quit intentions. Additionally, Holtom and Inderrieden (2006) provide evidence that suggests job embeddedness may mediate the relationship between shocks and voluntary turnover. Work by Herschi (1969) helps to explain how this mediation might operate for outcomes other than turnover. Specifically, when people have a meaningful social bond with the organization they will be motivated to preserve and promote the relationship, potentially by engaging in pro-social extra-role behaviors that promote the wellbeing of the company and its members. In contrast, as this bond weakens and people become less embedded, there may be less to restrain them from seeking alternative employment, or from engaging in counterproductive behaviors. Indeed, guided by Herschi's social bonding theory, Thau and colleagues (2007) found evidence that weakened employees' bonds with the company can result in greater job search, intentions to quit, and subsequent deviant behavior. Thus, one way

negative shocking events may relate to job search and contextual performance is by weakening a person's bond to the company, thereby resulting in increased JSB and CWB, and decreased OCB.

Job embeddedness may be significantly attenuated by negative shocks that dislodge people from their jobs and thereby engender job search, undermine extra-role performance, and fail to inhibit counterproductive behaviors. When a person experiences a shock that challenges the status quo and causes reflection about leaving, he may recalibrate perceptions of embeddedness. Research on the disruption hypothesis (Wilson & Schooler, 1991) suggests asking someone to deliberately think about a prior choice can lead him to critically question the decision and express less satisfaction.

A similar phenomenon may naturally occur when one experiences a negative shock, engages in reflection, and reevaluates the links, fit, and sacrifices that bind her to the job. For example, a fight with one's boss or coworkers may challenge the value one places on existing social *links* and turn a pull force into a push force if one no longer desires to associate with these people. Being passed up for a promotion may challenge one's *fit* between what she values (e.g., hard work and fairness) and what the organization values (e.g., political ties, nepotism). An illness of a close family member may lead an employee to reevaluate what is important in life, and cause her to reconsider and devalue the perks, sunk costs, or other *sacrifices* she may incur by leaving the job or community.

Having thus loosened their perceived bond to the company, employees may be less inhibited from acting in self-serving ways that are counterproductive to the organization, while being less apt to perform beyond expected job roles in order to help the organization. Instead, employees may focus energies on dealing with the negative shocks, such as taking care of health issues, finding alternative employment or looking for ways to avoid or seek revenge against a coworker or boss with whom they had a disagreement (Crossley, 2009). Thus, we suggest that one mechanism whereby negative shocks relate to OCB, CWB and JSB is through decreased job embeddedness and a weakened bond to the organization. It is noteworthy that focal variables of this study represent

critical constructs that have re-defined voluntary turnover theory over the past decade. Nevertheless, we also recognize that a number of other mediating links may also help explain this relationship, but fall outside of the scope of this study (e.g., perceived alternatives, intentions to quit, Griffeth, Hom & Gaertner, 2000; emotions, Spector & Fox, 2002; reciprocity, Barclay, Skarlicki & Pugh, 2005). Thus, in an effort to make an important and parsimonious contribution to the literature without including all variables previously linked to outcomes, we expect partial mediation.

Hypothesis 1: The relationship between negative shocks and subsequent work outcomes a) JSB b) OCB and c) CWB is partially mediated by the participant's level of job embeddedness following the experience of negative shocks.

Moderating Role of Negative Affect

According to Weiss and Cropanzano (1996), affective events are simply defined as “a change in circumstances...that generate an emotional reaction or mood change in people” (p. 31). Shocks that cause people to consider leaving their employer are significant events that are likely to trigger emotion (Judge, Scott & Ilies, 2006). AET specifically suggests that an individual's affective disposition impacts his emotional reactions to events. These “affective traits appear to act as latent predispositions that help set the stage for individuals to have more or less intense bouts of emotion” (Weiss & Cropanzano, 1996, p. 37). Aside from any main effect of affective disposition on perceiving a negative event (e.g., high negative affective individual being more apt to perceive a neutral event as a negative event), affective dispositions are posited to moderate people's reactions to what they perceive as a positive or negative event. Thus Weiss and Cropanzano further explicate that certain individuals, such as those high in negative affectivity, are “predisposed to react more strongly to negative events when they happen to occur” (p. 37). Thus, an individual who is high in negative affectivity is more likely to interpret a negative event (e.g., a disagreement with his boss) as a shock, and importantly, react to the event by thinking of quitting the organization.

According to AET, affective predispositions also influence subsequent behaviors at work. The behaviors are intended to help people deal with emotions evoked by workplace events. These reactions may shape discretionary behaviors such as OCB and CWB (Spector & Fox, 2002). Returning to the example above, the person high in negative affectivity who interprets the event negatively and experiences a strong affective reaction is more likely to reconsider his or her bond to the organization and subsequently reduce positive contributions and increase negative behaviors. This is consistent with theorizing by Morrell and colleagues (2008) who argue the consequences of shocks depend on both the event itself and the individual's affective reaction to it. Accordingly, we hypothesize that negative affectivity will qualify Hypothesis 1 by moderating the mediated relationships between negative shocks and subsequent perceptions of job embeddedness and subsequent job search and discretionary behavior (i.e., OCB, CWB).

Hypothesis 2: Negative affectivity moderates the relationship between negative shocks and important work outcomes such that the negative relationship between negative shocks and job embeddedness is stronger for individuals with high negative affectivity than for individuals with low negative affectivity.

Method

Participants and procedure

Participants were employees of a state corrections department in the western U.S. working in all types of jobs associated with prison operations (e.g., management, correctional officers, probation officers, maintenance, food service, etc.). Common shocks include events such as arguments or misunderstandings with others and concerns of physical and psychological safety. Data were collected in 2007, during which annual turnover rates were 23.4% and somewhat lower than in neighboring states (45% to 54%; Corrections Compendium, 2007). Given the controlled nature of the work environment, the types of discretionary behaviors were somewhat limited. Accordingly,

and as discussed in more detail below, we asked executives of the organization to identify the more frequently observed OCBs and CWBs. To reduce concerns of same-source bias, surveys were distributed at two points in time. Shocks, job embeddedness and negative affectivity were measured at Time 1; job embeddedness, OCB, CWB and JSB were measured six months later. Three efforts were taken to encourage honest reporting of potentially sensitive data (e.g., CWB). First, all surveys were returned directly to the authors via US mail. Second, surveys were given unique codes known only to researchers that was used to link surveys across administration. Third, questions related to OCB and CWB were included in a ‘research only’ section of the survey and participants assured these responses would not be shared with the organization in *any* form. A total of 403 employees voluntarily participated in the Time 1 survey. At Time 2, six months later, 418 people completed surveys. We were able to match data for 279 employees across the surveys. About half the respondents were female (47.1%). Average age was 42.6 (SD = 11.1) and average tenure was 6.1 years (SD = 6.3). There were no significant differences in the demographic variables or job types for those individuals who completed both surveys and those who only completed the Time 1 survey.

Measures

Negative Shocks (Time 1). Participants in this study were provided with a list of six specific negative shocks identified by Holtom et al. (2005) as the central issues leading to voluntary turnover in the corrections industry (e.g., disagreement with supervisor, encouraged to leave, etc.). Respondents indicated for each shock whether (1) or not (0) they had experienced the event and thought about quitting during the prior six months. Responses to the six items were summed to create a cumulative measure of negative shocks in line with our theorizing.

Negative Affectivity (Time 1). NA was measured with the 10-item trait Negative Affectivity subscale of Watson, Clark, and Tellegen’s (1988) Positive and Negative Affect Schedule (PANAS) (1 = *very slightly*; 5 = *extremely*; alpha = .89).

Job Embeddedness (Time 1 and 2). Respondents answered seven items developed by Crossley et al. (2007) designed to measure perceived job embeddedness. Participants were asked to mentally consider their links, sacrifices and fit issues both at work and in their community, and to respond to questions such as “it would be difficult for me to leave this organization” with these issues in mind. Responses were made on a seven-point agreement scale (1 = *strongly disagree*, 7 = *strongly agree*; time 1 alpha = .91, time 2 alpha = .93).

Job Search Behavior (Time 2). Using the six-item active job search behavior scale developed by Blau (1993), participants indicated the frequency with which they engaged in common job search activities such as contacting potential employers or sending out resumes during the prior 6 months (1 = *0 times*, 5 = *at least 10 times*; alpha = .91).

Organizational Citizenship Behavior (Time 2). OCB was assessed with eight items from Lee and Allen (2002). Because of survey length constraints, we asked three top executives from the organization to help us identify the most relevant and important items for this work context. They selected eight items from the original 16-item scale. Responses were made on a scale ranging from (0) never to (5) daily (alpha = .84).

Counterproductive workplace behaviors (Time 2). Eight items from Fox and Spector’s (1999) original 27-item measure of CWB were used to examine how often (0 = never, 5 = daily) respondent’s engaged in deviant behavior (alpha = .65). When examining the items in the full scale, the executives identified those that were face valid in this specific context. For example, CWB items such as “taking money” or “falsifying receipts” were removed because this type of behavior was not possible for the majority of our sample.

Results

All analyses were checked for violations of the assumptions of the normal error regression model. Two responses (0.7%) were shown to be highly influential for our analyses involving

deviance and therefore were removed. All means, standard deviations, and correlations are reported in Table 1. Hypothesis 1 indicated that the relationship between negative shocks at Time 1 on various dependent variables would be mediated by the participant's level of job embeddedness at Time 2. To test this hypothesis, we utilized the approach suggested by Preacher and Hayes (2004). This approach builds on the traditional approach to mediation but more specifically examines the total and indirect effects specified by the model. This approach has been shown to be superior to other forms of detecting mediation (Preacher & Hayes, 2008). Utilizing this analytical approach, mediation is suggested by a significant total and indirect effect. To test the significance of these indirect and total effects, we utilized 1,000 bootstrapping samples with 95% bias-corrected confidence intervals. Bootstrapping has been shown to be a good method for testing significance in mediation models as it makes no *a priori* assumptions regarding the normality of the distribution of the variables tested (Preacher & Hayes, 2008). This assumption of normality is often violated when examining indirect effects (i.e., the product of the coefficients for path a and path b) in mediation models. To test mediation using this approach, two equations were used:

$$1. \text{ Job Embeddedness at Time 2} = a_0 + a_1(\text{Job Embeddedness at Time 1}) + a_2(\text{Negative Shocks})$$

$$2. \text{ Dependent Variable at Time 2} = b_0 + b_1(\text{Job Embeddedness at Time 1}) + b_2(\text{Job Embeddedness at Time 2}) + b_3(\text{Negative Shocks}).$$

Equation 1 was then used in Equation 2 to calculate the various path coefficients and effects (i.e., indirect and total effect). Table 2 presents the coefficient estimates from Equations 1 and 2.

After controlling for employee perceptions of embeddedness at Time 1, we found that job embeddedness at Time 2 mediates the relationship between negative shocks and JSB and CWB. Specifically, we found a statistically significant total effect (point estimate = .18, $p < .05$) and indirect effect (point estimate = .04, $p < .05$) for JSB. For CWB, we found a significant total (point estimate = .12, $p < .05$) and indirect effect (point estimate = .02, $p < .05$). Figure 1 illustrates these

findings. Hypothesis 1a and 1c are thus supported. We also found partial support for Hypothesis 1b, as findings detected a significant indirect effect for OCB (point estimate = -.04, $p < .05$), although total effects were not significant. In sum, Hypothesis 1 received partial support, as significant indirect effects were found for shocks on JSB, OCB and CWB through job embeddedness.

Hypothesis 2 posits a person's level of negative affectivity would influence the mediating effect of embeddedness on the relationship between negative shocks and the dependent variables. To test for moderated-mediation, we utilized the approach suggested by Edwards and Lambert (2007), which allows us to test how negative affectivity influences the relationship between negative shocks and job embeddedness (i.e., stage 1 moderation). Though this approach allows us to estimate other models (i.e., stage 2 moderation, total effects model, etc.), we examined the stage 1 moderation model as this is consistent with the theories supporting our hypotheses. This approach also allowed us to examine the indirect and total effects for the model using 1,000 boot-strapping samples and 95% bias-corrected confidence intervals. To analyze moderated-mediation using this approach, we calculate the following equations:

$$(1) M = a_0 + a_1X + a_2Z + a_3XZ$$

$$(2) Y = b_0 + b_1M + b_2X.$$

In these equations, M = job embeddedness at Time 2; X = negative shocks at Time 1; Z = negative affectivity; and XZ = the interaction of negative shocks and negative affectivity. The results from Equation 3 are then plugged into Equation 4 to provide the intercept and slope of this moderated-mediation model. In addition, we controlled for the effects of employee perceptions of job embeddedness at Time 1, thus modeling the change in embeddedness that follow shocks captured at Time 1. Table 2 (coefficient estimates from Equations 1 and 2) and Figures 2-3 report the results of the moderated-mediation analyses and provides evidence of a moderated-mediation effect for OCB, CWB and JSB. In addition, we find that differences in individuals with high versus

low negative affectivity are producing the significant indirect and total effects. More specifically, negative shocks acted to dislodge individuals high in negative affectivity, corresponding with greater CWB and JSB and less OCB. On the other hand, the same magnitude of negative shocks did not dislodge individuals low in negative affectivity, whose subsequent behaviors were less likely to adversely impact the organization. This finding supports Hypothesis 2.

Discussion

The unfolding model presents a provocative alternative to the widely tested job satisfaction-induced turnover model that has dominated the voluntary turnover literature for decades. To date most tests of the unfolding model are replications and extensions of the basic descriptive model that looks exclusively at leavers (e.g., Niederman, et al., 2007). In this study, we sought to understand the role that shocks play among stayers: specifically, when negative shocks are more or less likely to reduce OCB or increase CWB or JSB. Integrating critical insights from AET, the unfolding model and job embeddedness theory, we hypothesized and demonstrated that job embeddedness mediates the relationship between negative shocks and discretionary behavior (JSB, OCB, CWB). We further extend the model to examine the moderating role of negative affectivity on the relationship between negative shocks and embeddedness. In sum, the findings suggest that people who are high in negative affectivity who experience shocks are more likely to become dislodged and then are more likely to search for a new job and engage in CWB.

Theoretical Implications

This work expands our understanding of the relationship between the unfolding model and job embeddedness. Specially, whereas Mitchell and colleagues' contend that "low levels of embeddedness may...make employees susceptible to shocks...if they occur, it is easier to search" for another job (2001; p. 1118), the relationship appears to be more complex than the simple moderation they describe. For individuals who are high in negative affectivity, it appears that

negative shocks reduce job embeddedness, which increases job search behaviors. This indirect effect may contribute to job search behaviors in an incremental fashion, over and above the direct effect that negative shocks may have in prompting search. However, for individuals who are low in negative affectivity, this mediation process and associated incremental indirect effects do not seem to relate to subsequent job search. We believe that this finding points to the need to further develop job embeddedness theory to better understand its antecedents (e.g., personality).

A second contribution of this research is a better understanding of the consequences of shocks and job embeddedness by going beyond positive OCBs to examine engagement in CWBs. For researchers interested in a potential “dark side of embeddedness” (e.g., the possibility that a person who is disgruntled stays because he is “stuck” in an organization but then makes poor contributions or engages in deviance) it appears, at least from this test, that being embedded helps to reduce the probability of searching for a new job or engaging in CWB.

Practical Implications

This study has several practical implications for organizations and managers that may be especially relevant in the context of difficult economic conditions where leaving is not easy to accomplish for many people due to the scarcity of alternative jobs or potential economic consequences of leaving a particular organization (Donnelly & Quirin, 2006). First, leaders must anticipate the effects of their decisions and actions and seek to manage negative experiences such as being passed over for a promotion, experiencing disagreements between coworkers, or feeling pressured to leave. Whereas eliminating negative events altogether is unlikely, managers may also be able to anticipate and, where appropriate strategically, manage the interpretation of certain events in an effort to maintain positive attitudes even among difficult times in their organizations. Second, there are a number of relatively stable characteristics of people that can inform how managers might interact with specific employees. A predisposition towards negative affectivity may materially

affect how an individual reacts to organizational events in ways that affect workforce stability and performance. Thus, managers may seek to involve these people in creating solutions may help shore up commitment and strengthen links and fit perceptions, thereby maintaining embeddedness. Third, organizations might proactively develop communication processes for dealing effectively with recurring external events (e.g., market rumors about consolidation activities, downsizing, or outsourcing). Also, efforts to promote fair and transparent compensation procedures and promotion practices may reduce shocks related to perceived injustice (Barclay et al., 2005) and removing organizational constraints may reduce shocks related to workplace stressors (Spector & Fox, 2002).

Limitations and Future Research

We note a number of potential limitations of the study. Some of our results could be inflated due to common method variance, particularly among measures that were assessed by the same source at the same point in time. We tried to mitigate the effects of percept-percept inflation by collecting the information at different points in time based on their theoretically derived causal ordering. Specifically, negative events and negative affect were collected at Time 1. The mediating variable (job embeddedness) and self-assessed outcome variables (OCB, CWB, JSB) were assessed at Time 2. Although trait negative affect may have colored peoples' perceptions of negative shocks, including main effects of negative affect prior to testing for moderation should help to reduce concerns about affective bias. Another limitation to this study is our inability to show direct causal relations or conclusive evidence of mediation, as we did not use an experimental design. Rather, we provide evidence that variables are related and findings that suggest moderated and mediated relationships may exist. Thus, we cannot rule out the possibility that job embeddedness at Time 1 had already been affected by the negative shocks experienced nor can we be sure that job search behaviors did not affect job embeddedness levels at Time 2.

As with any study, replication across industry, cultures and contexts, samples, measures, and

study methodologies are needed before firm conclusions of cause and effect, or of generalizability can be drawn. Further, it is possible that our inferences are biased because we omitted unmeasured variables. Consequently, readers should use caution in interpreting our results. We also note that a balance must be sought between parsimony and inclusion of all variables formerly shown to predict job search, OCB and CWB, and that large and complex models may have practical problems associated with parameter estimation, misspecification, and multicollinearity. An additional limitation was the counterproductivity measure in this study failed to reach conventionally accepted levels of internal reliability (i.e., .70). Notwithstanding this limitation and the associated increased likelihood of a Type II error, the fact that we were able to detect results of statistical and practical significance is encouraging, especially in light of range restriction in this low base-rate behavior.

Additionally, while this study focused on the effects of negative shocks on embeddedness and subsequent withdrawal behavior, we believe future research should examine how positive shocks influence these relationships. For example, if a person becomes pregnant (a non-work shock that causes her to consider leaving her job), the relationship of this shock to embeddedness in the organization may be strong and positive because of an increased sense of sacrifice (i.e., of health benefits) that would be incurred if she left the organization. Accordingly, CWB and JSB would likely be diminished. In sum, we believe that additional research investigating positive shocks might lead to important insights.

Conclusion

The present study contributes to the building body of research assessing the impact of work events or shocks in light of affective traits. The results suggest an important role for job embeddedness in translating the effects of negative shocks. When leaders anticipate the occurrence of potentially negative events, they may be able to proactively undertake activities that will reduce their detrimental impact.

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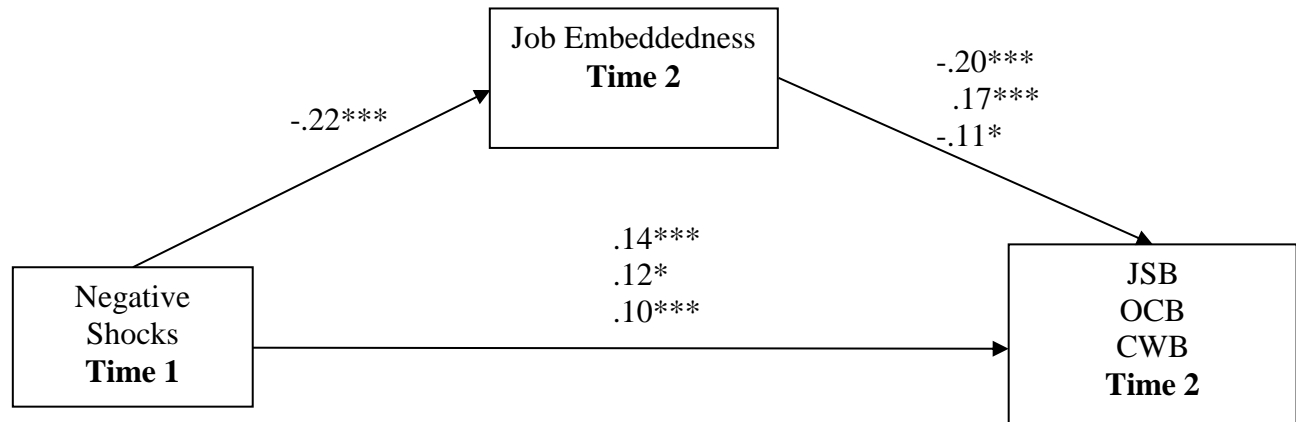
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Figure 1. Path Coefficients and Indirect and Total Effects for the Mediation Model^{a, b}



| | <u>Direct Effect</u> | <u>Indirect Effect (CI^c)</u> | <u>Total Effect (CI^c)</u> |
|------------------------------|----------------------|---|--------------------------------------|
| Job Search Behavior | .14*** | .04* (.02, .08) | .18* (.09, .28) |
| Organizational Citizenship B | .12* | -.04* (-.08, -.01) | .08 (-.01, .19) |
| Counterproductive Work B | .10*** | .02* (.01, .04) | .12* (.08, .18) |

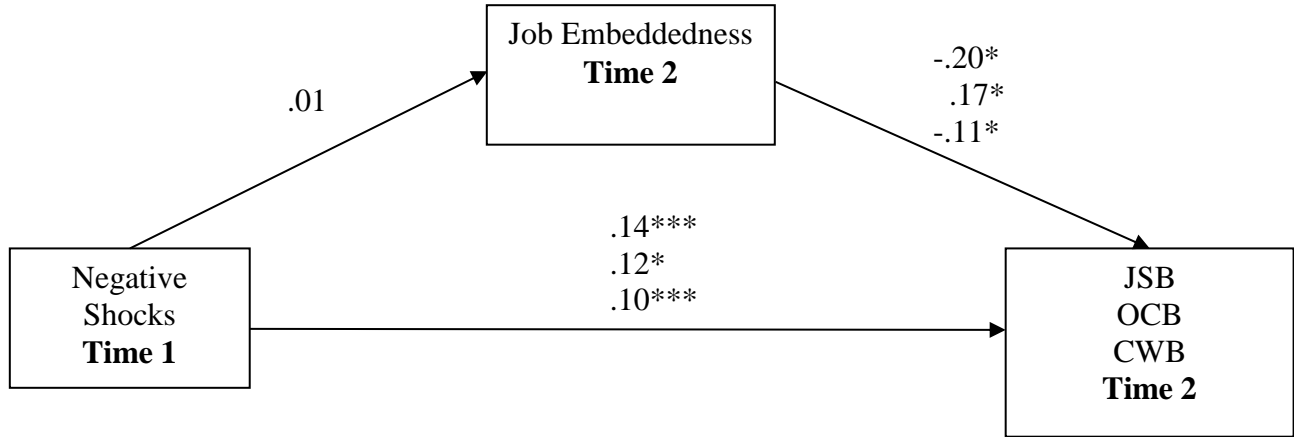
a * $p < .05$, ** $p < .01$, *** $p < .001$

b All analyses controlled for job embeddedness at time 1.

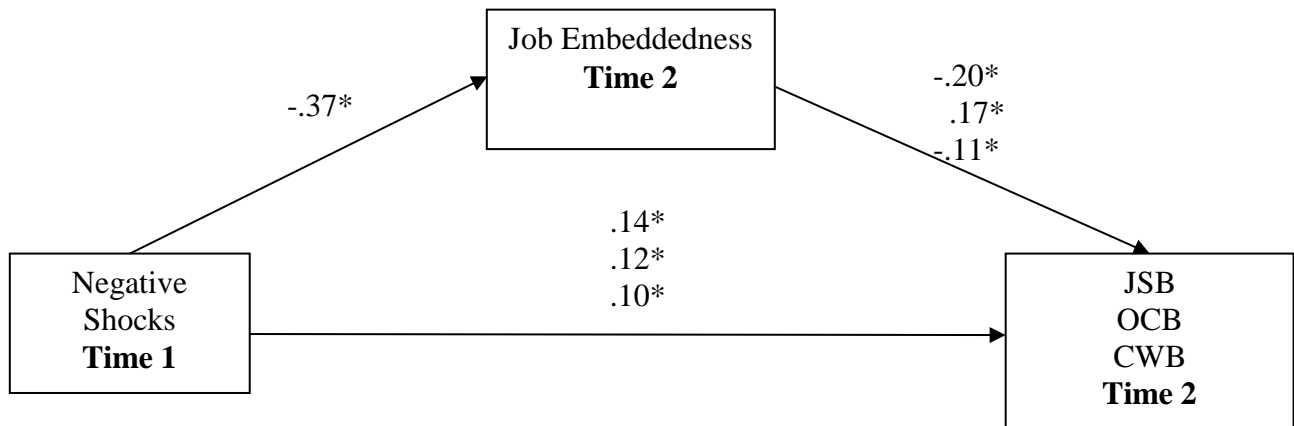
c The significance test for the indirect and total effect was calculated using bias-corrected 95% confidence intervals using 1,000 bootstrap estimates.

Figure 2. Path Coefficients, Indirect and Total Effects for the Moderated-Mediation Models^{a,b}

For Low Negative Affectivity



For High Negative Affectivity



| | <u>Direct Effect</u> | <u>Indirect Effect (CI^c)</u> | <u>Total Effect (CI^c)</u> |
|-----------------|----------------------|---|--------------------------------------|
| Low N.A. (JSB) | .14* | .00 (-.04, .03) | .14* (.04, .23) |
| High N.A. (JSB) | .14* | .07* (.04, .13) | .21* (.11, .32) |
| Low N.A. (OCB) | .12* | .00 (-.02, .04) | .12* (.02, .24) |
| High N.A. (OCB) | .12* | -.06* (-.12, -.03) | .06* (-.04, .16) |
| Low N.A. (CWB) | .10* | .00 (-.02, .02) | .10* (.05, .15) |
| High N.A. (CWB) | .10* | .04* (.02, .07) | .14* (.09, .20) |

^a * $p < .05$, ** $p < .01$, *** $p < .001$

^b All analyses controlled for job embeddedness at time 1.

^c The significance test for the indirect and total effect was calculated using bias-corrected 95% confidence intervals

using 1,000 bootstrap estimates.

Figure 3. Moderation of the Relationship between Negative Shocks and Job Embeddedness

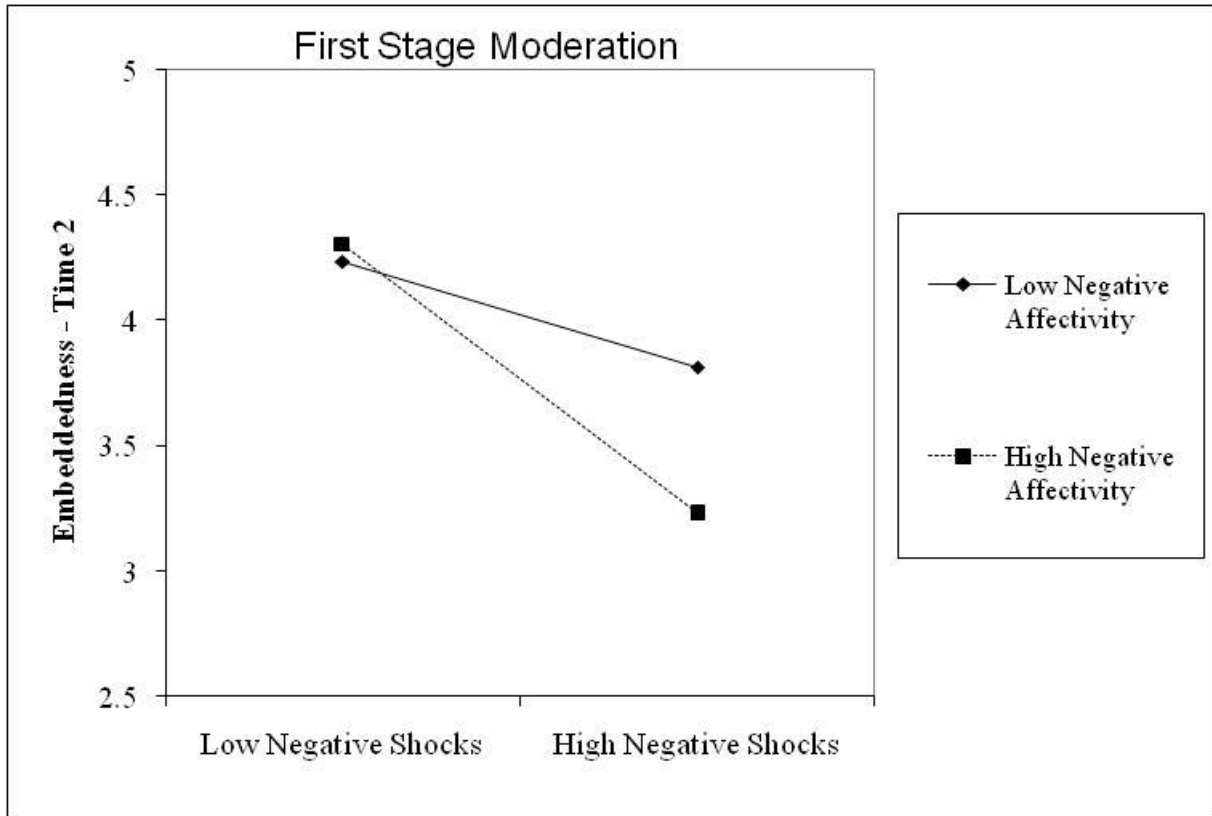


Table 1. Means, Standard Deviations, and Correlations^{a, b}

| Variable | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|-----------------------------------|------|---------|--------|---------|---------|-------|--------|-------|-------|
| 1. Negative Shocks | .70 | .95 | | | | | | | |
| 2. Job Embeddedness (Time 1) 3.73 | 1.50 | -.20*** | (.91) | | | | | | |
| 3. Job Embeddedness (Time 2) 3.89 | 1.46 | -.27*** | .63*** | (.93) | | | | | |
| 4. OCB | 3.24 | .95 | .04 | .17*** | .24*** | (.84) | | | |
| 5. CWB ^c | .38 | .45 | .29*** | -.23*** | -.39*** | -.03 | (.65) | | |
| 6. Job Search | 1.49 | .78 | .25*** | -.24*** | -.39*** | .04 | .28*** | (.91) | |
| 7. Negative Affectivity | 2.36 | 1.12 | .05 | -.11 | -.11 | -.10 | -.01 | .09 | (.89) |

^a * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed)

^b Numbers in parentheses are coefficient alpha.

^c CWB = counterproductive workplace behaviors

Table 2. Coefficient Estimates

Mediation Models^{a,b}

| <u>Variables</u> | <u>Embeddedness</u> <u>Time 2</u> | <u>CWB</u> <u>Time 2</u> | <u>Job Search Behavior</u> <u>Time 2</u> | <u>OCB</u> <u>Time 2</u> |
|----------------------------|--------------------------------------|-----------------------------|---|-----------------------------|
| Job Embeddedness (Time 1) | .59*** | .03 | .01 | .02 |
| Job Embeddedness (Time 2) | -- | -.11*** | -.20*** | .16*** |
| Negative Shocks | -.22*** | .10*** | .14*** | .11 ⁺ |
| Total R² | .42*** | .20*** | .18*** | .07⁺ |

^a + $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

^b Entries under each dependent variable are unstandardized coefficient estimates.

Moderated-Mediation Models^a

| | <u>Embeddedness^b</u> | <u>CWB</u> | <u>JSB</u> | <u>OCB</u> |
|--|---------------------------------|---------------|---------------|------------------------|
| Embeddedness (Time 1) | .58*** | .03 | .01 | .02 |
| Negative Shocks | -.18** | .10*** | .14*** | .11 ⁺ |
| Negative Affectivity | -.05 | -- | -- | -- |
| N.S. x Negative Affectivity ^c | -.17** | -- | -- | -- |
| Embeddedness (Time 2) | -- | -.11** | -.20*** | .16*** |
| Total R² | .44** | .20*** | .18*** | .07⁺ |

^a + $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed)

^b Entries under each dependent variable are unstandardized coefficient estimates

^c N.S. x Negative Affectivity = the interaction of negative shocks and negative affectivity